Our Philosophy & Guiding Principles

Park Road Montessori Philosophy Document

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Purpose, Context, Agreement

The Montessori system of education is both a philosophy of child growth and a rationale for guiding such growth. This approach involves a dynamic interplay between the children, the adults and the environment. This document will outline the role and work of the child, adult and the environment and how they relate to each other based on the words of Dr. Maria Montessori and her collaborators.

The process of writing this document has been one of careful collaboration and deliberation by the Park Road Montessori faculty achieved by rereading, discussing, reflecting and coming to a mutual understanding of Montessori's writing and vision for humanity. All information contained in this document is based on Montessori sources and is devoid of personal opinion.
This document is to be used as the basis to which our school refers when making all decisions that affect the school (mission/vision statements, long range planning, fundraising, etc.). It describes how each child, parent, teacher, support person, and administrator plays a vital part in the success of the school. This document contains the fundamental tenants of Montessori education and includes the role we play as adults in this community to support the child.

Preamble

We the community of Park Road Montessori School, in order to prepare children for life will provide the most authentic Montessori educational experience possible, and agree to follow the pedagogical principles set forth by Dr. Maria Montessori - specifically freedom of choice within a prepared environment - and we support the following document as the touchstone for school policy, practice and vision.

Mission Statement

Our mission at Park Road Montessori School is to facilitate the process that Dr. Montessori called normalization (inner discipline, self-assurance and preference for purposeful activity) in order to allow the child to self-construct the true human personality and possess "clarity of vision that will allow [the child] to be able to direct and to mould the future of humankind." (Montessori, M.,1988, The Absorbent Mind, pg.8)

Vision Statement

Park Road Montessori School's vision is to apply the principles developed by Dr. Maria Montessori to create and sustain a safe, supportive environment that offers rich opportunities to meet the academic, emotional, physical, spiritual, and social needs of each child, and in which our children can become independent, responsible, contributing members of the world community while giving them the freedom to explore, cooperate, create, and become lifelong learners.

Beliefs

The mission of Park Road Montessori is based on the belief that:

- Children have an innate love of learning
- Children have the ability to reach their full potential through their own efforts
- Children develop a vision of the universe in order to understand the unity that is in all things

The implementation of our mission depends upon a prepared environment which encourages:

- Time for exploration
- Opportunities for responsibility
- Love for our world and its diverse inhabitants
- A sense of gratitude for the special gifts which have been provided by others
- An awareness for gifts that they themselves may share with others

What is Montessori?

Description of Montessori

Montessori education is often described as "education for life." It is an individualized, hands-on approach to learning that allows children to explore and progress at their own pace, through direct experience and through the process of investigation and discovery. The child is presented lessons with concrete, self-correcting learning materials that are ordered and displayed on shelves from the simple to the complex, in a carefully prepared environment designed for their particular stage of development. This process is facilitated by a specially trained Montessori teacher.

Historical Background

Striving for world peace was always a motivating factor in Dr. Montessori's work with children. One reason for this motivation was due to the historical period in which she lived. During her lifetime, Maria Montessori experienced much strife and discontent not only within her birth country of Italy, but also throughout the world.

Maria Montessori did not often experience peace firsthand during her lifetime; however, she saw the importance of the world coming together in harmony. She also realized that the only way to achieve a peaceful world was through children. Thus, she placed all of her hopes in the child.

Core principles of Montessori philosophy and practice (as described by Lillard, A. S., *The Science Behind the Genius*, 2005)

Movement and Cognition Are Closely Aligned: Montessori wrote at length of the close connection between hand and mind, action and thought. A wealth of research in psychology today supports this idea. Montessori education is imbued with movement that is aligned with cognition. Letters are learned by tracing sandpaper letters while uttering the sounds, rather than merely by visual recognition; mathematical concepts are always introduced with materials that clearly show how the mathematical operations work; geography is learned by making maps oneself.

Choice and Control Assist Learning and Well-being: Montessori education is unique among educational programs in the degree of choice and control it gives children. Children are not free to misbehave or avoid parts of the curriculum, but each day they arrive in the morning and choose what to work on, with whom to work on it, and how long to work with it. Psychology research strongly confirms Montessori's insight that a sense of choice is beneficial. Among other benefits, choice enhances creativity, well-being, and problem solving speed and ability.

Interest Improves Learning: Research has shown that learner interest significantly impacts the quality of one's learning. Montessori education begins with learner interest and is structured to allow individuals to pursue their personal interests. Dr. Montessori designed specific materials and lessons to provoke interest in the child.

Intrinsic Rewards Inspire Sustained Interest and Learning: Montessori said, "The prize and the punishment are incentives towards unnatural or forced effort. The system of prizes may turn an individual aside from [their true] vocation." This has clear support in the literature: when one expects to be rewarded for something one already likes to do, after getting the reward one subsequently loses interest in the activity. People also choose easier tasks when they expect to be evaluated or rewarded. Montessori education keeps rewards intrinsic, and monitors performance with self-correcting materials, peer correction, and teacher observation. There are no grades or tests.

Learning with Peers is Effective: Developmental psychology shows that young children are not particularly social and often engage in parallel play. By elementary school, however, children become very social. Before the age of six, children tend to work alone; after age six, they almost always work collaboratively. Research has shown children not only learn well in collaborative circumstances, but they learn to get along better with peers in such learning situations resulting in a more positive classroom social climate. Montessori education capitalizes on peer tutoring which benefits the tutor just as much as the one being tutored.

Meaningful Contexts Assist Learning: Knowledge is best accessed when the meaning and application of that knowledge is understood. Montessori's hands-on materials show children quite clearly what their learning applies to and why different procedures work. Mathematical concepts, the study of literature, the sciences, etc. are all presented in their historical context. A great deal of research suggests Montessori education is well aligned with how humans naturally learn and develop. A well-implemented Montessori education positively and profoundly impacts children's intellectual, social, and personal development. Several of today's most notable entrepreneurs give credit to their Montessori education. Published studies indicate that Montessori students in general perform better than their peers socially and academically.

Montessori Vocabulary

Absorbent Mind: The ability and ease with which young children ages 0-6 learns unconsciously from their environment.

Reasoning Mind: The emerging ability of the child in the elementary years to learn through abstraction and imagination.

The Control of Error: The possibility inherent in the Montessori materials of making apparent the mistakes made by children, thereby allowing them to see their errors and to correct them. This "friendliness with error" promotes self-discipline and increases motivation for learning.

Cosmic Education: Dr. Montessori's plan for education appropriate to the developmental needs of the elementary aged child. It is characterized by a multi-cultural, interdisciplinary, and interdependent approach.

Cycle of Activity: Periods of concentration on a particular task that should be worked to completion.

Deviated Child: The child who has not yet found him or herself and thus is restless and difficult to control. This child finds adjustment difficult and may often escape into a fantasy world.

Didactic Materials: The instructive, hands-on materials, which allow for auto-education.

Discovery of the Child: Dr. Montessori's awareness and realization of the young child's abilities and the spontaneous love of work and learning.

Freedom: The child's free movements and experiences in an environment that provides discipline through liberty and respect for his or her rights. Individual liberty: The child must act by oneself for oneself, act without unnecessary help or interruption, act within limits that are determined by the environment and the group, in order to construct one's own potential by one's own efforts.

Normalized Child: The child who adapts easily and who has acquired the self-discipline and control necessary for a healthy life.

Prepared Environment: An atmosphere created to enable the child to be free to learn through activity in peaceful and ordered surroundings adapted to the child's size and interests.

Spontaneous Activity: Students learn by doing, based on a variety of materials and experiences chosen freely.

Uninterrupted Work: Cycles of uninterrupted work where the child is able to choose work freely, work with materials and complete the work cycle by putting each work away before choosing another must last 3 or more hours to allow the child to develop work habits, concentration and understanding.

Montessori: A Paradigm Shift in Education

Traditional Classroom	Montessori Environment
Textbooks, pencil and paper, worksheets and dittos	Prepared kinesthetic materials with incorporated control of error, specially developed reference materials
Working and learning without emphasis on social development	Working and learning matched to the social development of the child
Narrow, unit-driven curriculum	Unified, internationally developed curriculum
Individual subjects	Integrated subjects and learning based on developmental psychology
Block time, period lessons	Uninterrupted work cycles
Single-graded classrooms	Multi-age classrooms
Students passive, quiet, in desks	Students active, talking, with periods of spontaneous quiet, freedom to move
Students fit mold of school	School meets needs of students
Product-focused report cards	Process-focused assessment, skills checklists, mastery benchmarks

*(*NAMTA: North American Montessori Teachers Association)*

The Child

The Montessori Method is rooted in a deep understanding, belief in and respect for the child. Montessori identified specific planes of human development. Additionally, she isolated a list of universal human tendencies that all humans possess as a way to satisfy their fundamental needs.
The Human Tendencies and Fundamental Needs

Needs of Humans

Montessori believed that all humans, regardless of time and location, share common basic needs that, when met, allow for human freedom, respect, cooperation and environmental accountability, which are crucial for survival.
Fundamental needs are divided into two areas: material and spiritual. Nutrition, clothing, shelter, protection and other factors contribute to a secure and comfortable existence. The second area of fundamental need is spiritual in nature, the quest for understanding what cannot be seen; the sense of wonder that needs to be nurtured; the urge to express our deepest longing through our creative efforts. When all the material needs are provided, humans have an intrinsic need for artistic, cultural, social, philosophical and religious expression and interaction.

The Human Tendencies

All humans have certain tendencies or behavior patterns that drive the fulfillment of the fundamental needs. No matter the location, culture, or ethnicity, all humans follow the same natural laws that lead to actions and interactions with the environment and each other.

All humans are driven:

- To Explore- to know
- To Orient - to find one's place in the world where one feels loved and wanted
- To Order - to put things in their place, physically and mentally
- To Communicate - to express oneself, to be understood, which leads to sharing, cooperation, and preservation of our knowledge, skills and achievements

Intellectual Tendencies

- To Know, Reason, and Understand
- To Abstract - taking the essence of something and applying it to other situations
- To Imagine - the ability to visualize what has never been done or seen before, to call up something from our own experience, to picture something that is not present. Imagination is based on fact. Reality is the base upon which the imagination can be launched.
- To have a Mathematical Mind - to organize and put things in order, to perfect and organize one's ability to think abstractly, to think in mathematical terms, to order one's mind to think clearly and logically, to reason.

Creative Tendencies

- To Work - humans create themselves through purposeful work
- To Repetition – experiences are repeated in order to understand
- To Exactness - to do things correctly; to be exact and precise in order to be accurate
- To Persevere - to continue until something is completed, or corrected
- To Perfection - the urge to strive to be the best one can be

The tendencies are ways in which all humans are similar, unifying the species. These tendencies are present at all ages of life but some are stronger than others during different developmental periods. The tendencies also vary in the way and strength in which they appear in different people but they all exist in some form in every person. It is these tendencies that guide human development as humans seek to have their fundamental needs, both material and spiritual, met.

In the child, all of these tendencies can be readily witnessed. These tendencies are not simply part of the young child; they control the child's actions. They drive the child to learn, to improve, and to master knowledge.

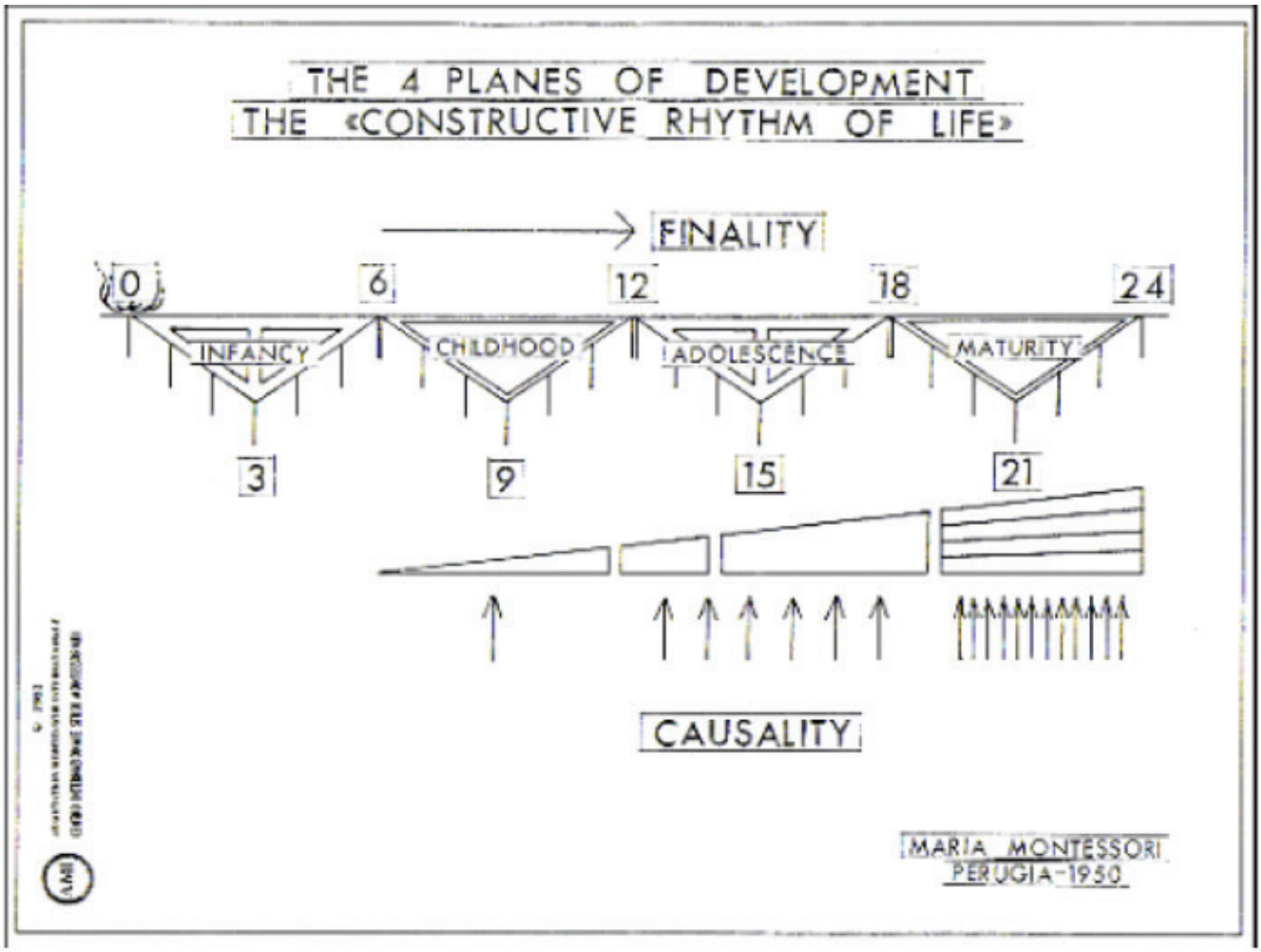
When the basic human tendencies of human behavior are understood and respected, children become what Dr. Montessori called "normalized." They have a sense of internal peace, joy, tranquility, and happiness. They can concentrate. They can choose and complete the work. They can handle frustration and make rational choices. They can adapt. They have self-discipline/self-control, are independent, and are secure within themselves. They have a positive, balanced self-image, have healthy self-esteem, and are aware and considerate of others.

Intrinsic sources of motivation are honored in the child. Coercion through external rewards and punishments are unnecessary and are detrimental because they rob the child of the pleasure of the natural rewards of learning.

When the human tendencies are blocked or somehow prevented from manifesting, children will exhibit negative behaviors like temper tantrums, anger, an inability to concentrate, excessive violence or excessive shyness. A child who is constantly interrupted will be less able to develop personal powers of concentration. When a child is exhibiting upsetting behaviors, the obstacles need to be identified and removed.

The Four Planes of Development:

The four planes of development illustrate an overall vision of Montessori's developmental psychology. It shows the cyclical and non-repeatable nature of human development as opposed to the traditional view that development is linear. Montessori's view of human development is holistic in two aspects. First, Montessori considers all levels of development (physical, intellectual, emotional, etc.) and secondly, Montessori considers all the phases of developing life. The four planes of development are identified as infancy, childhood, adolescence and maturity. Dr. Montessori believed that certain psychological characteristics are inherent in all children throughout the world during identified age spans. Adults can best support the child by observing, understanding and nurturing these characteristics in order for natural development to unfold without obstacles.



(From first lecture (with illustrative chart) July, 10th 1950. In *Lectures for the (Italian) National Montessori Course*. Unpublished transcript, Perugia, Italy. This course was held under the auspices of the International Center for Pedagogical Studies... (which) was founded for the purpose of promoting and propagating a deeper understanding of the educational problems and methods of the time...)

The transformation of children from birth to adulthood occurs through a series of developmental periods. The focus of Montessori education continually changes in scope and manner to meet the child's changing needs and interests.

The first plane of development occurs form birth to age six. At this age, children are sensorial explorers, studying every aspect of their environment, their language, and culture.

From six to twelve years of age, children become conceptual explorers. They develop new powers of abstraction and imagination and apply their knowledge to further discover and expand their world.

The years between twelve and eighteen see the children become humanistic explorers, seeking to understand their place in society and their opportunity to contribute to it.

From eighteen to twenty four years, as young adults, they become specialized explorers, preparing to take command of their own lives.

The Montessori classrooms prepare children for each successive developmental plane. It allows them to take responsibility for their own education, giving them the opportunity to make choices and become unique human beings.

The Psychological Characteristics of Each Plane of Development

Each plane of development brings with it particular "psychological characteristics" resulting in a heightened sensitivity to, and interaction with, certain aspects of our cultural environment.

First Plane: Early Childhood (0-6 years of age)

The younger children are operating with what Montessori termed "an absorbent mind," enabling them to easily, automatically take in information and sensations from the environment using their senses. From 0-3 this is an unconscious absorption and from 3-6 it is a conscious absorption.

The younger children are guided by what Montessori termed "sensitive periods" which are defined time frames when a child has a heightened sensitivity or proclivity to acquire certain skills or learning, naturally and effortlessly. Some of the most dominant characteristics of this plane include a sense of order, language acquisition and movement. These sensitive periods are to be recognized and honored.

Second Plane: Childhood (6-12 years of age)

The elementary aged children are operating on what Montessori termed "a reasoning mind", seeking to answer the questions why, how and what is the relationship between things. The child is no longer learning through a mere absorption of his or her environment, but through "great work" that moves from the concrete to the abstract, aided by the development of the child's imagination. The child's mathematical mind leads to an interest of working with large numbers and patterns. Additionally, this is an intense period of moral, physical and social development which is evidenced in group and collaborative work.

A comparison of the Social and Mental Characteristics of the Child in the First and Second Planes of Development according to Maria Montessori:

Children in the First Plane (0-6 years)	**Children in the Second Plane (6-12 years)**
Social Characteristics:	
This child aims to become independent within the home (a small, secure, orderly environment with simple opportunities now to explore).	This child, having established a degree of independence within the environment of home and school, wishes to build themselves as an independent, functioning member of society.
This child works primarily alone, thereby constructing the self.	This child shows a preference for working in groups with others who have similar interests.
This child plays primarily alone, even when playing with another.	This child forms mini-societies while exploring what is fair/just (clubs, scouts, gangs).
This child is egocentric. Issues are considered only from their own point of view.	This child has a deep sense of morality and justice, often testing adults to find out what is acceptable and what will not be allowed. This concern with justice is what leads to "tattling" at this age, to discern if rules apply to all fairly.
Self-evaluation is based primarily on adult approval.	Self-evaluation is based on group evaluation. This child is sensitive to peer pressure.
Mental Characteristics:	
This is the period of the "absorbent mind." Child takes in everything indiscriminately from the environment.	This child learns by his own discoveries; exploration is through research.
This child is a sensorial explorer who works primarily with concrete materials and learns via the senses.	This child's exploration moves from the concrete to the abstract with age/ability. This is aided by the development of the "imagination." The child's mind can now grasp the reality of what is experienced beyond the impressions received (envisioning what cannot be literally seen).
This child is a factual explorer and asks the question, "What?"	This child begins to relate and integrate knowledge, asking the questions, "Why?" and "How?"
This child learns by practicing the same activity repeatedly. Repetition is key.	This child learns by repeating and elaborating on an activity. Repetition comes by practicing with a variety of activities with similar emphasis. This is the time of "Great Work."

Third Plane: Adolescence (12-18 years of age)

The adolescent is no longer a child and responds to unique developmental characteristics of his or her age.

"With the plane of adolescence, 12 to 18, we come to another plane of creation. This time we are not witnessing the creation of the being as a complete and distinctly human being, but the creation of the adult of the species, with the power to procreate and give rise to the new generations that permit the continuation of … the human species. This is the plane when the individual leaves behind the state of childhood and enters the state of adulthood, becoming a member of society in his or her own right. Physically speaking, the transition … is given by puberty; psychologically speaking, there is a transition from the child who has to live in a family to the adult who has to live in society. This is the time, says Montessori, 'When the social man is created but has not yet reached full development'. 'This is the time, the 'sensitive period,' when there should develop the most noble characteristics that would prepare a man to be social, that is to say, a sense of justice and a sense of personal dignity.' (From Childhood to Adolescence) However, (she) points out that 'the period of life in which physical maturity is attained is a delicate and difficult time, because of the rapid development and change which the organism must go through.' As a result, the (person) becomes prone to certain diseases and certain forms of weakness. 'From the psychological point of view this is also a critical age. There are doubts and hesitations, violent emotions, discouragement and an unexpected decrease of intellectual capacity.' The twin problems of protecting the adolescent during the time of the difficult physical transition and helping the adolescent for his entry into society led to Montessori's proposal of the Erdkinder (the 'Landchildren') for the period of secondary education. This proposal includes various experiences of productive work, which contribute to economic independence and thereby strengthen the adolescent's self-confidence…" (Grazzini, C., *The Four Phases of Development*, NAMTA Journal, Spring 1996, 21:2, p. 208-241)

Who is the Adolescent?

An appropriately prepared environment must meet the needs of the child (no longer a child) and respond to the developmental characteristics of the age - David Kahn

Characteristics:	**How needs may be met:**
Physical	**Physical**
Tremendous growth Sexual maturation Boundless energy	Physical activity, movement Relaxation and contemplation Healthful eating and sleeping habits
Emotional	**Emotional**
Developing self-awareness Uncertainty Emotional unevenness Self-critical age	Meaningful work Opportunity to contribute to society A chance to plan activities, make decisions, be leaders & make mistakes
Social	**Social**
Solidarity with peers	Build a community, reliable and close relationships with peers and with at least one adult
Identification by gender and ethnicity Critical of each other and adults Humanistic age Moral and ethical age Seek increased independence	To feel psychologically safe To become socially competent
Cognitive Thinking and critical age	**Cognitive** Opportunities to creatively express their new interests, thought and emotions
Capable of mature thought if framed within a personal context	To learn new frameworks for thinking To acquire flexible and inquiring habits of mind
Creative age	To develop a personal vision

Fourth Plane: Adulthood: (18-24 years of age)

"The plane of maturity, 18 to 24, corresponds more or less to university life, the period of university studies. The individual who arrives at university is already 'formed,' but this is a time of life (if all has gone well before) when the individual can develop the spiritual strength and independence for a personal mission in life. This individual can become a human being whose aspirations have transcended the temptation of personal advantages in the way of power and possessions, a human being who has attained a high level of moral conscience and responsibility and can work for the good of humanity. (Montessori also makes it very clear that this individual would work while studying for the sake of economic independence and a sound moral equilibrium.)" (Grazzini, C., *The Four Phases of Development*, NAMTA Journal, Spring 1996, 21:2, p. 208-241)

The Normalized Child

Normalization
Maria Montessori first identified normalization during her work with children in Rome in 1907. "Normalization is a technical word borrowed from the field of anthropology. It means becoming a contributing member of society. Dr. Montessori used the term normalization to distinguish one of the processes that she saw in her work with the children at San Lorenzo in Rome. The process of normalization occurs when development is proceeding normally. She used the word normalization so people would think that these qualities belong to all children and were not something special, just for a few." (Dr. Rita Shaefer Zener, lecture, April, 2006) Normalization of the child is nurtured through freely chosen work within a prepared environment.

In The Absorbent Mind, Montessori cites normalization as "the most important single result of our whole work" It is the basic process by which the human being is "spiritually regenerated"; by which the deviations of growing up (in environments which are not conducive to the development of a whole or consolidated personality) fall away and what emerges is truly 'normal' life." (Montessori, 1934, The Spiritual Regeneration of Man. London, reprinted in NAMTA Journal, Spring 1997, 22, #2, 58-166)

Montessori Outcomes for Normalized Children (From Spokane Public Schools):

Social:

- Shows respect for others
- Respects materials and environments
- Uses good manners and shows courtesy
- Participates and works appropriately in a group
- Displays leadership

Personal:

- Expresses needs and feelings appropriately
- Copes with transitions and challenges
- Exhibits self-control
- Show responsibility for own actions
- Displays self-confidence

Work Habits:

- Chooses appropriate and challenging work
- Works independently
- Listens to and follows directions
- Organizes work and materials
- Works with concentration
- Completes tasks efficiently
- Completes work with care and pride
- Demonstrates persistence
- Displays a strong interest in learning and working
- Demonstrates responsibility for own learning

Support for the Child: The Prepared Environment:

According to Dr. Montessori, the way to help the child become "normalized" is to provide them with "freedom of choice" in a "prepared environment." It is vital that we understand what Dr. Montessori meant by both "freedom of choice" and "prepared environment."

Why is a prepared environment necessary?

Montessori's answer to this question is that the environment of the usual home is made for adults, and therefore adapted to the adult's needs and mode of living and not the child's. The general arrangements of the home, the daily program, its "tempo or rhythm" are largely in conformity with adult needs and habits. The more complicated the civilization in which the adult is compelled to live the more necessary is it for children to have a prepared environment.

"The idea is not to reproduce the adult world in miniature, or to distort reality into a make-believe paradise in which children's wishes and fantasies are the only things considered. Rather, the prepared environment should bring the world at large, and thus the adult world, within reach of the child at whatever stage of development it is at a given moment." (Montessori Jr., Mario *Education for Human Development: Understanding Montessori*, 1992, p.83)

While the contents of the prepared environment for each "plane of development" will differ as it responds to the particular social, intellectual, emotional and spiritual needs of the children at a particular "plane of development," there are some "essential characteristics" that should guide us in the construction of all appropriately "prepared environments" whether in the home or the school.

According to Montessori, the Prepared Environment should:

- promote INDEPENDENCE
- provide BEAUTY and SIMPLICITY
- provide ORDER
- provide NATURE and REALITY
- promote FREEDOM of CHOICE

The Prepared Environment must promote Independence

Whether at home or at school the "prepared environment" should be designed, as far as it is possible, to render the growing child independent of the adult. It should be a place where the children can do things for themselves - live their own lives - without the immediate help of adults. As the child is guided to "help themselves" they grow in self confidence and responsibility. Each time an adult does something for a child, that they could be shown how to do for themselves, they are robbing the child of an opportunity to grow and feel better about themselves. The child should always be encouraged to direct more and more of their own activities.

The adult's role, in this process, is the initial "preparation" of the prepared environment and the subsequent alterations based on continued observation of the children's interaction with it. The adult is also the "link" between the child and its environment. This involves showing the child how to interact successfully with the environment and, especially with the older child, inspiring his/her imagination so the child wants to engage with it. It is essential to remember that the children must not only "do for themselves" but also "think for themselves."

The Prepared Environment must be characterized by Beauty and Simplicity

Dr. Montessori stressed the importance of "beauty" in calling forth the child's power to respond to life. Providing the children with the right kind of activities should always over-ride any purely aesthetic considerations.

True beauty is based upon simplicity so the classroom need not be an elaborate place; but everything within it must be of good design and quality, and as carefully and attractively displayed as a well-planned exhibit. The atmosphere of the room must be relaxing and warm, and invite participation.

A properly prepared environment should contain only those activities that are necessary for the child's self-construction. For the older child these support the "key" lessons. Through constant observation of the child's interaction with the environment the role of the adult is to keep only those activities that meaningfully engage the child.

The Prepared Environment must provide Order

Montessori believed that a child comes to internal order through external order. The child has a need to learn to classify, categorize all the objects he sees, learn their names and their uses. Order should pervade the Montessori classroom down to the smallest detail. When this principle of preserving the order in the environment is understood and regularly practiced by the children, there springs up what Montessori calls a "rapport between the children and their environment." So much has this love of order become part of them that if anything upsets it, the children immediately take steps to put it right.

The Prepared Environment must provide Reality and Nature
Another component of the Montessori environment is its emphasis on reality and nature. The child must have the opportunity to internalize the wonder of nature and the limits of reality. Only in this way can he develop the self-discipline and security he needs to explore his external and internal worlds and to become an acute and appreciative observer of life. Montessori encourages opportunities for authentic experiences rather than virtual ones, particularly for the child under the age of six, in the first plane of development.

The child must be grounded in reality – given authentic hand-to-mind activities in order for the healthy development of the brain. According to Montessori, reality and truth should be the starting point for the imagination from which springs creativity. Creativity then will be based not in fantasy, but in truth, for as Montessori says, "The more perfect the approximation to truth, the more perfect is art." (Montessori, M., *The Advanced Montessori Method I*, 1991, p. 195)

Montessori emphasized the importance of contact with nature for the development of the body and spirit of the child.

"Montessori was aware that, with the spread of urban life, it would be increasingly difficult to satisfy this deep need of the child. She was, however, insistent: 'There must be provision for the child to have contact with Nature; to understand and appreciate the order, the harmony, and the beauty in Nature; and also to master the natural laws which are the basis of all sciences and arts, so that the child may better understand and participate in the marvelous things which civilization creates." (Lillard, P.P. p.58)

"The equipment in the classroom, therefore, is geared to bringing the child into closer contact with reality. A refrigerator, stove, sink, and telephone are all authentic. The silver to be polished is tarnished. Nourishing food is prepared and served. Not only is the equipment realistic, it is designed to allow children to experience the effects of their own errors." (Lillard, P.P. p.58) These errors or mistakes provide a good opportunity for learning and for moral development.

"Also, in keeping with the real world, where everyone cannot have the same thing at once, there is only one piece of each type of equipment in the Montessori classroom. Because he has no alternative, the child learns to wait until another is finished." (p.58)

"The child comes to see that he must respect the work of others, not because someone has said he must, but because this is a reality he meets in his daily experience." (Montessori, M. The Absorbent Mind, 1988, p.203)

The Montessori environment aims to support a free flow of movement between the indoor and outdoor environment where, at any given time, the child has a choice. In a Montessori environment the outside environment is prepared following the same principles as the inside environment, with activities set up so as to encourage the child's independent activity and exploration. Many of these activities will be real and practical ways of tending and caring for the outside space or garden. Inside, lessons are given as a model for the expected behavior outside which lays the foundation for larger "going out" experiences in the elementary.

The Prepared Environment must promote Freedom of Choice

Freedom is the most essential element in a Montessori environment. It is only in an atmosphere of freedom that the child can construct himself. If the child possesses within himself the pattern for his own development, this inner guide must be allowed to direct the child's growth.

"The child must be aided in developing his will by being encouraged to coordinate his actions toward a given end and to achieve something he himself has chosen to do. Adults must be on their guard against tyrannizing him and substituting their wills for his." (Lillard, P. P. *Montessori A Modern Approach*, 1972, p.53)

The children are therefore free to choose their own activities in the classroom. This protection of the child's choice is a key element in the Montessori Method, and it must not be violated. Because they momentarily impose on the child's freedom, lessons should be brief. It is in the subsequent free choice and the repetition of the exercise that the child should spend most of his time. In order to have a choice of activities, the child must be presented with a variety of exercises designed for his auto-education.

"To be thus helpful it is necessary, [sic] rigorously to avoid the arrest of spontaneous movements and the imposition of arbitrary tasks." (Montessori, M., *The Montessori Method*, 1964, p.88)

The children are given as much freedom to work out their own social relations with each other as possible. Montessori felt that, for the most part, children like to solve their social problems, and that adults cause harm by too early and frequent interference. This includes interference in all aspects of a child's life.

In *The Secret of Childhood* (1936/1966), Montessori describes the "deviated" child who suffers from "attachment, a lack of vital energy and indolence." She diagnoses the cause: "Without realizing, an adult with his useless assistance and

hypnotic influence has substituted himself for a child and impeded his psychic growth." She describes another set of characteristics, "timidity, a hesitancy in making decisions, a withdrawal before difficulties or criticism, frequent tears, an appearance of despair." She attributes the cause again to an adult "constantly interrupting the child and breaking into his environment." This powerful being directs the child's life without ever consulting the child himself. This lack of consideration makes the child think his own activities are of no value.

The children are free to speak to each other and initiate activities whenever they like. They are not forced, subtly or otherwise, to join in any group activities or to share themselves with others when they are not ready or interested. Because they are not forced to compete with each other, the natural desire to help others develops spontaneously. This phenomenon is particularly interesting to watch between the older and younger children in the classroom, whose age differential may be as much as four years.

Through the freedom he is given, in a Montessori environment, the child has a unique opportunity to reflect upon his own actions, to determine their consequences both for himself and for others, to test himself against the limits of reality, to learn what gives him a sense of fulfillment and what leaves him feeling empty and dissatisfied, and to discover both his capabilities and his shortcomings. The opportunity to develop self-knowledge is one of the most important results of freedom in a Montessori classroom.

Freedom of Choice must be accompanied by Responsibility

While "freedom" is naturally essential for self- construction it is important that we understand what Dr. Montessori considered to be "appropriate freedom." Montessori described a classroom that had achieved her concept of free operation as "a room in which all the children move about usefully, intelligently, and voluntarily, without committing any rough or rude act." (Montessori, M. *The Montessori Method*, 1964, p. 93)

"To use Dr. Montessori's own words-'The directress should never be afraid of destroying what is evil; it is what is good she must fear to destroy - good being interpreted as any activity which leads to order, harmony, self-development and therefore to discipline; evil, being anything which leads to the dissipation of the child's creative energies, and therefore to disorder." (Standing, p. 285)

Limitations: Freedom of Choice always has "limits"

Limitation One: The Collective Interest

"The liberty of the child should have as its limit the collective interest; as its form what we universally consider good breeding. We must, therefore, check in the child whatever offends or annoys others, or whatever tends toward rough or ill-bred acts." (Montessori, M., *The Montessori Method*, p.87)

Limitation Two: Knowledge Must Precede Choice

The child may not choose any piece of material unless he already knows how to use it.

Limitation Three: Correct Use of Materials

"The child is allowed to occupy himself with any material only so long as he keeps on using it in the right way...Each of the Montessori occupations consists of a definite material, precisely determined to a particular use, the purpose of which is the child's development; and this development comes through a progress towards perfection which is attained precisely through this correct use of the materials. If the materials were vague and indeterminate in their aim and structure, they would not lead to development. It is just their scientific precision, which makes all the difference." (Standing, E.M. *Maria Montessori, Her Life and Work*, 1998, p.286-287)

"This precision makes something like a circle round the child who is doing these exercises. He cannot do anything by chance. Anything he can do in any place; but here we give him a help, through this limitation, which he cannot find elsewhere. We enclose him therefore in a circle which is necessary for his needs." (p.289)

Limitation Four: Number of Materials in the Environment

"There is one other limitation set to the free choice of the children which should be mentioned, especially as it is not a very obvious one. We refer to the fact that only certain occupations are allowed to find their way into the prepared environment. This involves a selection or choice made before the child comes to school at all. Yet in a sense, this choice is also made by the children themselves; for only those materials remain in the schoolroom that have previously stood the test of other children's interest and approval. They are occupations which by experience have been shown to correspond to some activity the germ of which is in the child. A material might be prepared with much effort and good will and yet not be chosen by the children. It should therefore be eliminated. Those only are retained which bring about that concentrated self-activity which is the basis of all auto-education." (p. 292)

Pedagogical Materials (isolation of difficulty, points of interest, self correcting, etc.)

Many concrete materials in a Montessori environment in the areas of: sensorial, mathematics, geography, language, history, music, science, geometry, botany and zoology have been scientifically designed by Maria Montessori, her son, Mario Montessori and Montessori trainers who worked under the direction of and collaborated with Dr. and Mario Montessori.

Some Montessori materials in sensorial, mathematics, geography, language, history, music, science, geometry, botany and zoology have been carefully crafted by the trained Montessori teacher, under the direction of the Montessori training program from which the diploma was obtained.
Materials are presented by trained Montessori teachers. The lessons contain points of interest that draw the child to want to work with the material. Additionally, the lessons isolate one aspect of difficulty in the work, and the material is usually self-correcting.

Limitation Five: Freedom comes with Responsibility

Finally, students will be given the opportunity to exercise choice, in widening circles of freedom, as they demonstrate the ability to make responsible choices that show sound judgments. Some students may, therefore, not be accorded the same amount of freedom as others.

Freedom with responsibility is one of Montessori's core values, instilling independence, accountability and resilience. Children learn that they have choices in how they act and learn, and they learn by making mistakes.

Freedom and Responsibility: A Montessori Approach

Freedom	Responsibility
Choice of Daily Work	Making appropriate and varied work choices; staying with work until completion; working cooperatively
Amount of time spent on an activity	Staying on task and interested throughout activity
Use of glass, knives in food preparation	Proper care, handling and clean up
Eating snack when hungry	Proper food handling, and clean up
Using the bathroom	Good hygiene and proper use of facility
Resolving own conflicts	Stating needs, no physical contact, seeking adult help when necessary
Teaching other children	Appropriate interaction, making key points, modeling proper use of materials
Movement in the classroom	Walking, maneuvering between student work areas without disrupting others
Choosing place to work	Finding and using appropriate space for activity without interfering with another's workspace
Working outdoors	Staying within sight of windows and having appropriate behavior
Traveling throughout the buildings	Walking in hallways quietly, knowing how to get to a destination safely, using appropriate behavior at all times
Receiving lessons individually, in groups	Paying attention, not disrupting the lesson, participating positively

**(from Spokane Public Schools)*

The Montessori Environments

The Primary Program (Ages 3-6)
"The first aim of the prepared environment is, as far as it is possible, to render the growing child independent of the adult." (Montessori, M. *The Secret of Childhood*, 1966, p. 267)

Montessori's idea of the prepared environment was that everything the child came in contact with would facilitate and maximize independent learning and exploration. This calm, well-ordered environment has a lot of movement and activity. Children are free to choose and work on activities at their own pace. Here, they experience a combination of freedom and self-discipline, as guided by the environment. In addition to small tables, chairs and shelves, the environment contains: the materials necessary for carrying out of the exercises of practical life; the sensorial materials; the materials for acquisition of culture-reading, writing, mathematics and cultural subjects.

There are generally six principles to the Prepared Environment: Freedom; Structure and Order; Beauty; Nature and Reality; Social Environment; Intellectual Environment.

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

Structure and Order
While Structure and Order seem counter-intuitive to freedom, nothing could be further from the truth. Structure and Order in the Montessori classroom accurately reflect the sense of structure and order in the universe. By using the Montessori classroom environment as a microcosm of the universe, the child begins to internalize the order surrounding him, thus making sense of the world in which he lives. Montessori stated that there is a sensitive period for order, which occurs between the ages of one and three years of age. This is when the child begins to draw conclusions of the world around him. If there is not order to his environment, the child's sense of reason may be upset since he will not be able to validate his findings. This is not to say that routines or classroom set-up or ways of doing things cannot change. However, it does mean that change should be carefully considered. Is this change for the good of the children? If so, it should be done carefully and its after-effects should be observed to ensure that it is of benefit to the children.

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

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

It is here where child-size *real* objects come into play. Furniture should be child-size so the child is not dependent on the adult for his movement. Rakes, hoes, pitchers, tongs, shovels should all fit children's hands and height so that the work is made easier, thus ensuring proper use and completion of the work without frustration.

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

If the above aspects are not recognized, the intellectual environment will not reach its purpose. The purpose of the Montessori environment is to develop the whole personality of the child, not merely his intellect. By guiding the child through the five areas of the Montessori curriculum (Practical Life, Sensorial, Language, Mathematics, and Cultural subjects), the child has the structure, which is at the forefront of the creative work in a Montessori classroom.
Much time and effort is involved in creating a prepared Montessori classroom that is designed to meet the individual needs of all children. Through developmentally appropriate, sensorial material that moves hierarchically from simple to complex and concrete to abstract, children are given the freedom to fully develop their unique potential through a carefully prepared learning environment.

Critical Areas of the Primary Prepared Environment

Practical Life - Practical life exercises instill care for oneself, for others, and for the environment. These activities include many of the tasks children see as part of the daily life in their home such as washing, ironing, doing the dishes, arranging flowers, polishing, and preparing food. Elements of human social skills are introduced with the exercises of grace and courtesy. Through these and other activities, children develop muscular coordination, enabling movement and the exploration of their surroundings. They learn to work at a task from beginning to end, and develop their will, (defined by Dr. Montessori as the intelligent direction of movement) their self-discipline and their capacity for total concentration.

Sensorial - Sensorial Materials are tools for development. Children build cognitive abilities and learn to order and classify impressions. They do this by touching, seeing, smelling, tasting, listening and exploring the physical properties of their environment through the specially designed materials.

Language - Language is vital to human existence. The Montessori environment provides rich and precise language. When the children enter the classroom at the age of three years, they are given the opportunity to enrich the language they have acquired from birth and to use it intelligently. They become aware of its properties by being allowed to discover and explore themselves. If children are not hurried, they will learn to write and then naturally learn to read.

Cultural Extensions - Geography, History, Biology, Zoology, Art and Music are presented as extensions of the sensorial and language activities. Children learn about other cultures, past and present, which allows for their innate respect and love for their environment and a desire for it to flourish, creating a sense of unity with the world and its habitat.

Mathematics - The mathematics materials help the child learn and understand mathematical concepts by working with concrete materials. This work provides the child with solid groundwork for traditional mathematical principles, providing a capacity for abstract reasoning.

The Prepared Environment - The Montessori classroom provides a prepared environment where children are free to respond to their natural tendency to work. The prepared environment offers the essential elements for optimal development.

The characteristics of the prepared environment include: Beauty, order, reality, simplicity and accessibility. Children must be given freedom to work and move around within guidelines that enable them to act as part of a social group.

Children should be provided specially designed materials which help them to explore their world and to develop es-

sential cognitive skills. Mixed age groups encourage all children to develop their personalities socially and intellectually at their own pace.

Montessori Teacher - The Montessori teacher is an observer whose ultimate goal is to intervene less and less as the child develops. The teacher creates an atmosphere of calm, order, and joy. The teacher is there to help and encourage the children in all efforts, allowing them to develop self-confidence and inner discipline. The teacher demonstrates the use of the materials and presents activities based on the child's requirements. Knowing how to observe and when and how much to intervene is one of the most important talents the Montessori teacher acquires through a rigorous course of training.

Grace and Courtesy: walking carefully, carrying things, opening and closing a door, tucking in a chair when finishing work, rolling up a floor mat, offering food, saying "please" and "thank you" and so on. It is in learning to do such seemingly mundane activities as dressing, dusting, sweeping, preparing and serving food, and fixing or building, work that the child sees going on around her all day long, that she learns to use her body and mind for a purpose, to concentrate, to complete cycles of activity, to finish what she started, and most importantly to contribute to the important work of the family, the social group.

The Montessori primary classroom, sometimes called children's house, is a "living room" for children. Children choose their work from among the self-correcting materials displayed on open shelves (and they work in a specific work area, over a period of time, the children develop into a "normalized community," working with high concentration and few interruptions. Normalization is the process whereby a child moves from being undisciplined to self-disciplined, from disordered to ordered, from distracted to focused, through work in the environment. The process occurs through repeated work with materials that captivate the child's attention.

The Elementary Program

Lower Elementary (Ages 6 - 9) and Upper Elementary (Ages 9 -12)

The Elementary program extends the opportunity of Montessori education to children aged 6-12 and offers a warm supportive atmosphere that incorporates a high level of expectation for the quality of thought, work and mastery of content and skill. Continuing to follow a three-year cycle, the Elementary Programs may be divided into two groupings. The Lower Elementary is a three year program for children ages 6-9 or first through third grades; the Upper Elementary is a three year program for children ages 9-12 or fourth through sixth grades. The entire Elementary Program overlaps, extends and complements the activities presented in the Primary Program.

The Montessori elementary environment is designed to develop basic skills as well as spark the elementary child's active imagination and encourage creativity. The unique Montessori curriculum challenges the child to find answers to the questions and interests already emerging at age six - how, why and wherefore? At least as important as the "facts" about the world that are learned, is the development of a rigorous questioning and investigative process within the child. Students learn not only answers to their questions, but also are encouraged to wonder, discover what questions must be asked, think through problems, analyze situations and find answers for themselves.

Cosmic education is the central focus of the curriculum throughout the elementary experience; integrating history, language and literature, mathematics, geometry, science, geography, art, music, botany, zoology and physical education. These areas of study provide experiences for the child that enable him to understand the keys to who we are, where we came from and why we are here. The classroom environments are arranged for small group lessons and work is often collaborative, incorporating intriguing Montessori learning materials and models, maps, charts, historical artifacts, computers, scientific specimens and apparatus, and animals and plants for which the children are responsible.

Interdisciplinary studies combine language, mathematics, sciences, geography, history, and the arts. Mastery of math-

ematical and analytical processes, writing and communications skills, and reading comprehension are the disciplines emphasized at these levels. The elementary program helps develop young people who are naturally fascinated by the universe. Science is an integral element of the curriculum and includes botany, zoology, chemistry, physics, geology, and astronomy. Computer skills are developed as students prepare presentations of research projects, and utilize the collection of educational software available for classroom use.

The trained and certified Montessori teachers are specialists in the child at this stage of development, and their work is that of a guide and a generalist, providing positive reinforcement for the child's exploration of knowledge. This discovery approach toward learning allows each child to actively be involved in his own education. Emphasis is placed on a love of learning, self-discipline, respect and community cooperation.

The Elementary classroom is a mini society where children actively seek to find and create a place in the group. Students share the responsibility of managing their community; they learn to respect and care for themselves, others, and the environment. In the Elementary Program, children are encouraged to go out beyond the classroom to extend their learning. Research field trips, as well as community service projects, are utilized as appropriate for the ages and interests of each group.

The elementary aged child is encouraged at all times to take responsibility for his actions. He thereby develops a strong sense of independence, personal awareness and respect for himself and his society. Montessori graduates are cooperative, responsible people who have had ample opportunities to work in cooperative learning situations both in and outside the classroom environment. They are self-confident learners and have reached a high level of academic achievement. They are eager to initiate and complete their own work and education. They are well prepared for the academic and personal challenges of their future education.

The Adolescent Program

"The need that is so keenly felt for a reform of secondary schools is not only an educational but also a human and social problem. This can be summed up in one sentence: Schools as they are today are adapted neither to the needs of adolescence nor to the time in which we live." (Montessori, M., *From Childhood to Adolescence*, 1994, p.59)

The Montessori program for children aged 12 to 18 years is based on the recognition of the special characteristics of adolescence. Adolescence is an age of great social development, an age of critical thinking and re-evaluation, and a period of self-concern and self-assessment. It is a transition from childhood to adulthood with the corresponding physical, mental and sexual maturation. In early puberty the adolescent finds it hard to concentrate on academic and structured learning. Above all, adolescence is like an odyssey - an arduous yet exciting adventure - where the adolescent tries to find his or her place in the world. Dr. Montessori recommended that the adolescent (12-15) should spend a period of time in the country away from the environment of the family. This would provide an opportunity to study civilization through its origin in agriculture. She outlined a general plan for their studies and work, but believed that the program which she called "Erdkinder" (German for "land children") could only be developed from real life experience.

Maria Montessori called her syllabus for ages 12-18 a "Preparation for Adult Life," implying that the student must make a connection between learning and living a purposeful adult life. This connection is made through a blend of study and experience which prepares the student for the transition to adulthood.

**(Compiled from AMI website)*

Support for the Child: The Adults

The Role of the Teacher

"The first step an intending Montessori teacher must take is to prepare herself. For one thing, she must keep her imagination alive; for while, in the traditional schools, the teacher sees the immediate behavior of her pupils, knowing that she must look after them and what she has to teach, the Montessori teacher is constantly looking for a child who is not yet there. This is the main point of difference. The teacher, when she begins work in our schools, must have a kind of faith that the child will reveal himself through work. She must free herself from all preconceived ideas concerning the levels at which the children may be. The many different types of children (meaning they are more or less deviated) must not worry her. In her imagination, she sees that single normalized type, which lives in a world of the spirit. The teacher must believe that this child before her will show his true nature when he finds a piece of work that attracts him. So, what must she look out for? That one child or another will begin to concentrate." (Montessori, M., The Absorbent Mind, 1988, p. 252)

"The teacher's first duty is therefore to watch over the environment, and this takes precedence over all the rest. Its influence is indirect, but unless it is well done there will be not effective and permanent results of any kind, physical, intellectual or spiritual. (p. 253)

Responsibilities of the Teacher

Creator and Caretaker —"This involves the selection, placement and upkeep of everything in the classroom. Careful thought and effort are put into the environment's initial preparation and its modification and re-creation every day...All people who interact with the learners are also a part of the environment. Give careful consideration to appearance and behavior. Adult appearance, behavior, attitude and mood can have an impact on what happens in the environment. Finding a manner and a 'look' that is comfortable and sincere as well as calm, clean, attractive and unobtrusive is likely to have a positive effect on others." (Gordon, C. *Together With Montessori*, 2007, p. 52-53)

Exemplar —"Adults constantly serve as models and examples to the youngsters with whom they live and work. Adult behavior has a profound impact in the classroom... Teachers should constantly try to exhibit the kinds of behavior they expect and desire from students... In Montessori schools equality of all group members is encouraged. Students are expected to be leaders and active participants in learning and in group decision-making. Through modeling and good examples, values and habits of democracy and respect for others are fostered." (p.54)

Observer —"Careful observation and record keeping are important in planning for individual needs and curriculum. Every Montessori teacher has some way of recording observations and student activity. Older students take increasing responsibility for record keeping and will usually maintain work records or diaries...Observation skills include an awareness of the entire environment...Skills of self-observation are also important. It takes a great deal of perceptive self-awareness to see how one's own attitudes and behaviors affect others...It is also important to step back, observe and not intervene so that student may practice, discover and solve problems on their own...

'In the advanced (elementary) as in the primary stage, the first step to take in order to become a Montessori teacher is to shed omnipotence and to become a joyous observer. If the teacher can really enter into the joy of seeing things, being born and growing under his own eyes, and can clothe himself in the garment of humility, many delights are reserved for him that are denied to those who assume infallibility and authority in front of a class.' (Maria Montessori, *To Educate the Human Potential*, 1989, pp.83-84)

Stimulator —To emphasize the importance of internal over external motivation, the teacher is more of a stimulator, a "sower of seeds," than a motivator of students in the traditional sense of the word. The teacher plays a role in motivation by inspiring it." (Gordon, C. pp. 54-56)

Instructor —"The main way students are introduced to materials is through careful demonstration, or presentation. In a presentation, the teacher slowly and precisely uses the material in its intended way while a learner or group of learners watch. During such presentations, unnecessary words and movements are avoided and actions are broken into discernible steps to increase understanding and the chance of success when the materials are used by the student later. At times, the teacher provides direct instruction or lessons. The decision to do a particular lesson or presentation often results directly from observations and assessments of other work. A common technique is called the three-period lesson." (p.57)

Supporter—"As much as nonintervention, self-teaching and liberty must be stressed, the adult's role as supporter and helper should not be neglected. When a student needs help and requests it, that help must be there. Part of the role in supporter, however, is found in holding back... *'[The teacher] must always be calm, always ready to run when she is called to show her love and sympathy. To be always ready, this is all that is required.' Maria Montessori, The Child"* (p.58)

Protector and Respecter —"Respect for oneself, others, the environment and for life in general is fundamental and essential to the Montessori approach to education. Adults must:

- Protect each learner from physical or psychological danger to health and well-being
- Respect and protect all people's basic right to learn and grow in their unique ways and at their own unique paces
- Respect and protect every learner's right to make mistakes and correct them without adult intervention
- Respect and protect all learners' rights and abilities to take responsibility for their own actions and deal with their own problems
- Respect and protect every learner's right to choose his or her own activity or no activity
- Respect and protect each learner's need to have secure and consistent limits for behavior." (p.58-59)

Managing Disruptive, Dangerous and Destructive Behavior —Establish genuine, secure, involved and supportive relationships with each learner and a relaxed, comfortable, warm atmosphere in general. Involve children in forming rules, resolving conflicts and solving problems so that they better understand classroom expectations. Model appropriate behaviors. Anticipate problems and redirect youngsters into appropriate activity before a conflict arises. Observe carefully to discover when and why problems occur and how they might be prevented... Express appreciation when it is sincerely felt and acknowledge effort and appropriate behavior." (pp.59-60) Make sure that consequences are natural and logical.

The Role of the Parent(s)

"Parents can help him by making his home environment as orderly as possible, not constantly shifting things about, and by giving him an opportunity to keep his own possessions in order. When he has toys, there should not be so many of them that he cannot possibly arrange them or care for them. The toy box is not very helpful along this line because it encourages the child to throw in the doll on top of the truck and the stuffed rabbit on top of both of them and the ball on top of all that, without regard for the preservation of their individual beauty and repair. Low shelves can be constructed and a place designated for each toy. Clothes rods can be set down where he can reach them to put away his clothes. A place can be set aside where he may work with crayons or paints. It should be possible for him to keep this place in order by himself if we provide tools that fit his small hand and that he is capable of using without help." (Futrell, K., *The Normalized Child, A Publication of the Aquinas Montessori School*, 1971)

<u>Practices of Conscious Parenting</u> (The following is a summary of The Power of Conscious Parenting: Interconnecting Home and School by Mary Ann White Dunlap)
Parents should use observation to gain understanding: Understanding behavior is the single most important aspect of being a conscious parent. To observe well we need to be in the here and now, not only on intellectual level, but intuitive level. Decide to be more present to our children.

Allow children to move freely: Help the child to feel welcome and respected in the home while respecting the needs of other family members. It may be appropriate to make some rooms and areas off limits. The home environment provides opportunities for age appropriate movement and independence—particularly contributing to the family community with simple chores and meeting one's self needs: hygiene, fixing food, etc. This freedom within limits is important for the progress of children at school.

Simplify and organize the home: The rooms where children spend most of their time need to be simplified and uncluttered, particularly when the children are under six, making it possible for them to care for and organize their own things. Toys should be carefully chosen and grounded in reality. Toys can be an unnecessary encumbrance for parents, home and the budget. Whenever a child is given the notion that s/he needs to be entertained either with toys or electronic media, learning comes to a halt. By limiting the number of toys in the home, children develop two internal characteristics: concentration and order—characteristics that will help them at school and in life. Give brief lessons on appropriate use of appliances, knives, clearing tables, putting things away, folding clothes, etc. Repeat lessons gently when necessary in order to help build confidence and self esteem.

Leave children alone when they are engaged in an activity: As a general rule, help only when needed. The art of parenting is to know when needs are authentic. Interfering teaches self-doubt; interrupting teaches distractibility, unnecessary help teaches dependency—qualities that will be liabilities at school and in life.

Be friendly about mistakes and best efforts: Mistakes or accidents usually mean that children are practicing new skills and testing their limits. This is the time for children to have the freedom to take safe risks and make mistakes so that they can learn from the consequences of their actions. Friendliness toward mistakes encourages children to keep trying. Parents should model how to accept mistakes, allowing our children to see them as part of life. If we expect perfection for our children or ourselves, we set up children for a lifetime of unrealistic expectations.

Best efforts should be encouraged and appreciated: Initiative can be dulled if parents redo a child's efforts. Instead skill building should be encouraged, but not required. At home and school, adults should help children perfect their skills and behavior. Ultimately, the work and effort needed to accomplish the child's work belongs to the child.
Stop carelessness & rudeness: If children do not respond to loving limits, their activities should be stopped immediately. Carelessness and rudeness are unfocused states—signs that too much freedom has been given. We want children to be thoughtfully and purposely engaged at work and play. Modeling correct language and behavior is the most effective way to teach. Direct means can be used with older children. Moreover, parents must realize that children, who witness carelessness and rudeness in the home, will likely take on these behaviors. Have firm, but logical, consequences. Teach manners, kindness, courtesy, and have a high expectation of appropriate behavior so that the child can distinguish right from wrong. Help them to be pleasant company.

Meet spiritual needs: Cultivate a high degree of respect and tolerance for others with your child. Expectations for your child should be high with regard to their moral character. Teach them about your family beliefs and values both religious and cultural.

Let the child know he/she is loved often: Through words, touch, gentle kindness, firm but loving, consistent discipline, setting appropriate limits and giving freedom when the child can handle it all show children that they are loved. Make the environment safe emotionally and physically for the child's developing psyche.

Teach collaboration: Respect the children's work and offer to assistance if they want it, when tasks are difficult or new. Siblings are encouraged to help each other when they see this respect offered in the home. Sometimes children simply want to be with us, even though the activity is within their capability. It is best to find balance with having enjoyable time with children, while not allowing children to dominate the family time and life.

Encourage a sense of wonder: Information is secondary to a sense of wonder and excitement about learning. It's better not to give all the answers but begin sentences with "I wonder". It is important to remember that the process is more important than the answer. Take time to encourage curiosity. Promote life-long learning. Be aware of the teachable moment. For the younger child, build on the moment. For the older child, build on the experience. It is in asking the questions that learning can become a part of the child's life. Let the child discover the answer. The adult should not be an encyclopedia.

Be consistent so that the child can become secure: Plan daily lives so that routines are reasonably predictable. Beware to not overload the child's schedule. When the schedule must adjust, prepare children for the changes by letting them know ahead of time. When we are consistent at home, our children can adjust easily to the consistency at school. They are more peaceful and centered.

Build trust with challenging activities: Give children opportunities for testing their limits as they grow older. The risks do get greater, yet when children have challenging activities starting in infancy, they not only learn to respect their limits, they also learn to appreciate their abilities. They are less apt to get into trouble as they grow older because they have learned practices that they can apply to a wide variety of situations. Children are empowered when they are given opportunities to internalize basic principles of living well. They develop habits and behaviors that will make constant guidance unnecessary. Expect them to keep track of their own belongings etc. If they do not remember, allow them to experience the consequences of their forgetfulness. Allow them to learn from their mistakes. They grow stronger and earn higher levels of freedom and trust from us.

Communicate: The window of opportunity for language starts before birth and lasts into the middle elementary years. The most sensitive period for the development of language is during the first six years. Infants respond to spoken language, not only as a teaching method, but as a link to psychological and emotional dimensions of relationships. Children learn languages effortlessly by taking part in the daily lives of families. Learning how to listen is important and can be compared to observing as an ability to focus and stay in the moment. Taking time to listen to children is a wonderful gift. Family conversations allow primary children to put thoughts into words. Elementary children with reasoning minds gain confidence through debates and discussions as they learn to defend opinions. At school, written language will flow from the richness of spoken language experiences given in the home.

Read to children and let them read to you: Begin reading to your children at an early age and practice into adulthood. Read from good literature. Nonreaders can tell the stories from books. Giving them a turn to "read" develops pre-reading skills and is fun. Reading above the child's level enables thought process and vocabulary, which will benefit writing and analytical thinking.

Choose books very carefully: Evaluate books carefully for true, unprejudiced content, rich language and quality illustrations. Stories should be grounded in reality for young children and should strike the imagination for older ones. Imagination and fantasy are not the same. Limit fantasy to our rich heritage of folk and fairy tales. Select the best contemporary children's books. Good books support moral development and prepare them for language work at school by enriching vocabulary and stimulating imagination.

Listen to and make music: Enrich the spirit, by creating a musical atmosphere in the home by listening and dancing to music. It enriches the spirit and creates neurological links to language.

Allow time for silence and reflection: Silence encourages children to do internal work but also allows for the integration of things learned and opportunities for reflection on their experiences. One of Dr. Montessori's most important discoveries was that the greatest work is internal work. Respect private time for children by creating opportunities for silence.

Provide activities that encourage first hand experiences: Discourage too much passive activity such as watching television and playing video games. What would our children become if we provided a whole-body upbringing? Diverse toys and physical challenges, colors and textures, music, art and permission to get dirty should be part of a child's life.

Look toward adolescence: Young adults need opportunities for creative expression, personal reflection, and social practices in the community. They need practice with economic independence by finding purposeful work. Adolescents manifest a different set of characteristics when they are in environments that allow for these activities.

The Role of the Other Supporting Adults:

The Role of the Assistant

Dr. Montessori made no specific references to the assistant in the classroom. The accounts of the early "casas" included cooks, gardeners, janitors, caretakers and other adults that had significance in the life of the children and to the functioning of the classroom. All staff, including assistants in the Montessori school, collaborates toward a single purpose: to assist the development of the child.

A classroom assistant is an assistant to the teacher - not an assistant to the children. The distinction here is not to make the assistant a "slave" of the teacher, but to correct a common misconception about the assistant's relationship to the children. If we define the tasks specific to the teacher, then we have a starting point in defining the assistant's role in supporting those tasks. It is a partnership, where each partner performs work that is dignified and validated by its service to the children.

The relationship of teacher and assistant is not superior/inferior but of partnership. Each party commits to engage on a basis of equality and mutual respect. All tasks that can be shared should be shared and there must be clarity in how each party will support the other in his or her tasks.

Communication with parents is one of the exclusive tasks of the trained Montessori teacher. Of course, this does not mean that assistants go mute if they encounter a parent. Assistants might interact with parents several times a day. The assistant's accountability should be defined. Together in advance, (the adults) work out the assistant's response to the parent who asks about the lessons a child received that day; to the parent who wants to talk about his child's behavior; to the parent who thoughtlessly discusses her child in the child's presence; or to the parent ... who has a complaint about a school policy.

The Teaching Support Staff

"Ideally, lessons in areas such as art, music, dance, physical education, and foreign language should be taught by the classroom teacher and integrated completely into the Montessori curriculum. Lessons should be taught when children are ready and interested, not when the clock says it is time to go. If it is not possible to have the classroom teachers present all areas of the curriculum, Montessori schools should avoid scheduling children to leave the class for additional instruction in the morning.

The ideal Montessori classroom staff should be able to integrate all subjects effectively and with high quality into the classroom. It is also assumed that specialists are certainly not necessary in programs for three to six year olds. Whenever it is possible, specialist teachers should have Montessori training. If specialists are not Montessori trained, it is recommended that the school provide a program of professional development a) within the school, where specialists would be encouraged to visit and observe in the classroom during core curriculum time, b) by visiting other schools, c) through CAMT and other workshops, e.g. Audrey Sillick or Grace Kidney, "Cycle of Seasons","Musik Garten" and d) in liaison with training colleges, to ensure that specialist teachers understand the philosophy of Montessori education and can complement the general program with their expertise in specific areas.

Specialist teachers should be timetabled, as far as possible, to take children at the beginning or end of an extended work period. Over the course of a week, all children will have the opportunity to experience some unbroken morning and afternoon work-times.

Specialist teachers, in addition to any timetabled class work they have with the children, might also work with small groups within the main class framework. This would promote integration of the specialist subject with the core curriculum.

Timetabled communication between specialists and core teachers would help to integrate the specialists and enrich the core curriculum. The emphasis would be on having teachers support the classroom teacher in her curriculum goals for a term e.g. specific project work would be supported by art and music from the specialist classes. The French class would address the same subject matter in French and give vocabulary and conversation to support the topic. All teachers should work as a team, with the Montessori teacher identifying the project and the specialists tailoring their work to match. Where teamwork is promoted and expected, each member of the teaching team, specialist and generalist, would input and the result would be a cohesive, enriched curriculum for the students. Montessori teachers, as far as possible, would be encouraged to continue the work of the specialist in the regular timetable. To this end it is recommended that some materials, which are used by the specialist, would remain in the regular classroom e.g. every classroom should have an equipped art area with supplies, which the class teacher will encourage the children to use outside a timetabled art period. The Montessori tone bars and notation material should be used by the specialist and by the classroom teacher. Projects such as researching the lives of artists or musicians, identifying and classifying specific art work and music compositions, creating models, musical instruments, etc. should all be initiated in specialist classes and continued in regular class time.

In essence, the Montessori teacher is the central figure in the child's learning environment. Specialist input should be a support for the Montessori curriculum and not a fragmentation of the school day into isolated periods of learning. Montessori teachers should be encouraged to integrate specialist programs and to enjoy and explore their own expertise in these areas.

In today's world, the generalist may feel overwhelmed by the amount and quality of work which students are expected to accomplish. The Montessori elementary curriculum is a phenomenally rich one and makes serious demands on a teacher. It is reasonable, therefore, to contract specialist teachers who have specific areas of expertise. These teachers should enhance the curriculum goals of the Montessori teacher, challenge the children to their fullest potential and reassure parents that a Montessori elementary program meets all their child's needs. It is important to recognize that specialists are not replacements for classroom teachers. They are complementary to the classroom teacher. A successful school should have specialists who are well informed of the Montessori philosophy and approach to education, and faculty who are committed to offering an integrated curriculum."

(http://www.montessori.org/imc/index.php?option=com_content&view=article&id=266:the)

The Role of the Administration

Administrators and Policymakers

The administrator's and policymaker's focus must be more varied and sometimes more global than the focus of the teacher or the parent. Administrators need to see the program from the perspectives of all involved stakeholders. They must be aware of the history, goals and mission of the program.

Ideally, the administrator has strong Montessori experience-either Montessori teacher training or extensive knowledge about and involvement with Montessori education.

A Montessori-trained administrator can help teacher in many ways: in finding consensus about their goals and objectives, in prioritizing materials for purchasing, in making decisions concerning their classrooms, in conveying Montessori principles to parents. An administrator with Montessori training is also more likely to evaluate teachers not only for their effectiveness with children but for authentic Montessori classroom practices. Trained Montessori leadership can also insure that teachers are properly Montessori-trained at the levels they are assigned to teach.

A Montessori leader with a vision is advantageous to the direction and inspiration of the whole school community. School leadership is best supported by a visionary with good communication skills, self-assurance and maturity, an understanding of Montessori education, and a willingness and patience in working with people. (Adapted from *The Whole School Montessori Handbook*, Kahn, Dubble and Pendleton, 1999)

The Role of the Non-Teaching Support Staff and Volunteers

The Custodial Staff

The custodial staff is vital to maintaining the cleanliness and orderliness of the whole school environment. It is particularly vital that the classroom floors, sinks and bathrooms be clean, sanitized and kept pristine each day as children and adults need a healthy environment in which to work. Since both children and adults sit and work on the floors, and use the sinks for cooking, art, and for bathroom hygiene, custodians play a vital role in helping with the daily care of the environment.

It is extremely important that custodians look for, pick up and secure any tiny objects or parts of materials they may find on the classroom floors so that the teachers can replace them in the materials. Keeping the school in good repair, refilling items regularly, noticing when leaks or malfunctions occur and working diligently to help resolve any problem quickly is very important for the smooth functioning of the classroom and the school.

The custodial staff is helpful when a hand is needed to help carry or transport large objects or furniture. Custodians are very much appreciated as a vital part of the school community.

The Cafeteria Staff

The cafeteria staff plays a vital role in the nourishment and health of the children. Preparing and serving a variety of healthy foods, maintaining a friendly demeanor, a clean, calm environment and offering a willingness to be helpful to children and adults makes for a comfortable dining experience in the cafeteria.

Community Building

At Park Road Montessori School, we understand and recognize that our school is a community of which children and adults are vital members. This school community has a significant impact on our students' capacity to learn, grow, create, develop, incorporate values and relate peacefully and respectfully to others and to the world. Therefore, we strive to build a constructive partnership between the family and school in support of each child's educational development.

- We expect all members of our school community to respect and show support for the principles and values established in this document.
- There is a critical need to provide continuing education and support for our families. We strongly advise parents/guardians to participate in programs that they can better facilitate the development of independence, responsibility, self-confidence and self-respect in their children. Participation in Parent Education events is expected.
- We value input from all of our community members in our decision making processes. To facilitate open communication and support for the Montessori Program, Park Road Montessori does have a School Leadership

Team, a Parent Teacher Organization and an Advocacy Council which is comprised of administration, staff members and parents.

The School Leadership Team (SLT)

The functions of the SLT are to:

- Facilitate the involvement of the school community in designing and implementing the School Improvement Plan.
- Encourage, support find create opportunities for involvement from parents of the school community.
- Coordinate the activities associated with the design and implementation of the School Improvement Plan.

Although the SLT is not directly involved in the day-to-day operations of the school, it is involved in a number of tasks that affect the operation of the school. SLT is charged with supporting district/state mandates within the boundaries of Montessori philosophy and practice.

The Parent Teacher Organization (PTO)

The purpose of the PTO is to aid students, teachers, staff and administrators in a manner which supports the Montessori philosophy and school mission and vision. The PTO pledges to nurture a community of peaceful lifelong learners; respectful and independent people who value their individual differences. The Park Road Montessori PTO strives to provide support for educational, recreational and cultural needs. Fundraising activities will never involve door-to-door solicitation, competitions or prize incentives. Park Road Montessori PTO strives to build community among students, parents, guardians, staff and administration; and to promote open communication between administration, teachers and parents.

Community Outreach

All activities associated with community outreach, including but not limited to, charity and service, recruitment of families/teachers, marketing, communication, mentoring and parent education will support Park Road Montessori's mission and vision statements.

The following document was drafted and endorsed in the late 1990s by several Montessori organizations wishing to help guide the growth of public school Montessori. It has been presented at a number of Montessori conferences since then and used by school districts preparing to offer a Montessori option.*

**The American Montessori Society, the Association Montessori Internationale, the North American Montessori Teachers' Association, Montessori Educational Programs International, and the Southwestern Montessori Training Center.*

Montessori Teachers

- Employ Montessori teachers who have Montessori credentials for the levels they teach.
- Maintain an active and open recruitment for Montessori credentialed teachers.
- Budget for future Montessori teacher education for non Montessori-credentialed teachers.
- Provide professional Montessori in-service by experienced credentialed Montessori educators.
- Contract for on-going internal and periodic external Montessori consultation and/or professional support as a follow up to Montessori teacher education.
- Employ one paraprofessional per classroom, each having received Montessori orientation for that role.

Administration

- Employ an experienced Montessori teacher to serve as curriculum coordinator.
- Employ a building principal/educational leader who has knowledge of Montessori principles and curriculum through Montessori coursework, Montessori Administrator Credential and/or annual conference exposure.
- Maintain commitment to the core Montessori curriculum and instruction even with changes in administrative staff.
- Sustain the support of the central administration through high profile communications about program development.
- Recognize that the best implementation process is to begin with the 2.5-6 age group and add one age at a time for a gradual progression.

Recruitment/Parent Education

- Provide Montessori parent education programs that promote understanding of Montessori principles and curriculum.
- Develop an admission process that informs parents about the nature of Montessori and seeks the necessary commitment to the program.

Curriculum/Environment

- Offer a full complement of Montessori materials purchased from Montessori dealers.
- Develop a classroom design that is compatible with Montessori "prepared environment" principles.
- Create uninterrupted daily work periods of 90 minutes to 3-hours, considering the 3-hour work cycle as ideal.
- Integrate specialty programs (music, art, physical education, etc.) around the uninterrupted work periods.
- Apply the appropriate multi-age groupings: 2.5-6, 6-9, 9-12, 12-15, 15-18 necessary for the diversity, flexibility, and reduced competition integral to Montessori.

Assessment

- Use a process of reporting student progress that is compatible with Montessori and includes parent conferences and authentic assessment tools such as observation, portfolio, performance assessment with rubric, etc.
- Implement state mandated assessments in such a way that the character of the Montessori program is not compromised.

Professional Development

- Budget for continuing education through Montessori workshops and conferences.
- Maintain membership with one or more of the professional Montessori organizations and seek Montessori accreditation to assure consistent quality.

Montessori bibliography/booklist Recommended Reading

Books about the Montessori Method:

Montessori: The Science Behind The Genius
by: Angeline Lillard, PhD; Oxford University Press, 2005

Montessori Today: A Comprehensive Approach to Education from Birth to Adulthood
by: Paula Polk Lillard; Schocken Books,1996

Montessori: A Modern Approach
by: Paula Polk Lillard; Schocken Books, 1972

Children of the Universe: Cosmic Education in The Montessori Elementary Classroom
by: Michael and D'Neil Duffy; Parent Child Press, 2002

The Element: How Finding Your Passion Changes Everything
by: Sir Ken Robinson; Penguin Books, 2009

Out of Our Minds: Learning to Be Creative
by Sir Ken Robinson; Capstone, 2011

Books by Maria Montessori:

Published in a newer edition by Clio Press, Oxford, England
(The dates below are when the books were first published)

- The Advanced Montessori Method I and II, 1900
- The Montessori Method, 1909 - revised 1948
- Dr. Montessori's own Handbook, 1911
- The Discovery of the Child, 1913
- Spontaneous Activity in Education, 1917
- From Childhood to adolescence, including Erdkinder and the Function of the University, 1923
- The Secret of Childhood, 1936
- Childhood Education, 1949
- The Absorbent Mind, 1949
- The Child in the Family, 1956
- Education For A New World, 1946
- To Educate The Human Potential, 1948
- The Formation of Man, 1955
- What You Should Know About Your Child, 1948
- The Child In The Family
- Education For Human Development
- Education and Peace

Books and DVD's about Parenting:

Many of these titles can be ordered through NAMTA:
http://www.montessori-namta.org/Print-Publications/Parent-Education

What is the Montessori Toddler Community?

What is Montessori Preschool?
What is Montessori Elementary?
Understanding the Human Being
The Normalized Child
Montessori Talks to Parents
Montessori From the Start
Montessori Read and Write: A Parent's Guide To Literacy For Children
In A Montessori Home (Infant/Toddler)
At Home With Montessori (3-6)

What's Going On In There? How the Brain and Mind Develop in the First Five Years of Life
by: Lise Eliot, Ph.D; Bantam Books, 1999

Transforming the Difficult Child: The Nurtured Heart Approach
by: Howard Glasser, MA, and Jennifer Easley, MA; Nurtured Heart Publications, 1998

Positive Discipline A-Z (1001 Solutions to Everyday Parenting Problems)
by: Jane Nelsen, Lynn Lott, and H. Stephen Glenn Prima Publishing, 1993

Oneness and Separateness: From Infant to Individual
by: Louise J. Kaplan, Ph.D; Simon and Schuster, 1978

Magical Child
by: Joseph Chilton Pearce, Penguin Books, 1977

The Crack in the Cosmic Egg
by: Joseph Chilton Pearce

Appendix I

Ten Steps to Montessori Implementation in Public Schools

by David Kahn, Executive Director, NAMTA

1. Do a total Montessori program: Montessori cannot be done piecemeal; it is a total curriculum approach that is integrated and sequential. Full benefits can be achieved only if the dynamic of the total program is understood by a Montessori-trained teaching staff that shares a common educational philosophy. Montessori programming should be implemented in its entirety with minimal interruption from auxiliary classes or services.

2. Provide Montessori-trained teachers and quality teacher assistants: The name "Montessori" is not copyrighted, and there are many independent Montessori training programs with differing standards. A 1988 NAMTA survey of public Montessori programs indicates that the majority require the credentials of either the Association Montessori Internationale (AMI) or the American Montessori Society (AMS). Sponsorship of trainees to national institutes in good standing may be accomplished using sabbaticals and with foundation grants and parent fundraising in addition to district funds. Sponsorships usually cost between $5,000 and $10,000 per trainee for tuition and related expenses. There is a limited availability of experienced Montessori-trained teachers; therefore strategies for recruitment of staff or staff sponsorship require advance planning. It is suggested that school administrations recruit well in advance for trainees, and that funds be set aside for sponsorship. Also, school representation at national Montessori conferences builds national visibility and connections necessary for good recruitment.

The 1988 NAMTA survey indicates that Montessori public schools usually maintain one teacher and one paraprofessional assistant per classroom for preschool levels. Elementary classes, on the average, work with one teacher and a part-time assistant. Class numbers range from twenty-five to thirty students.

Montessori training is intensive and imparts an attitude as well as information. The training includes Montessori child psychology, educational theory, material demonstrations, supervised practice with Montessori apparatus, observation of Montessori classrooms, supervised practice teaching, and extensive written and oral exams.

Montessori training is recognized by selected colleges and universities at both the graduate and undergraduate levels. Generally the academic phases require either two summers plus an additional two months or one full academic year to complete. Many districts send existing faculty for Montessori training.
Short, in-service workshop sessions cannot substitute for recognized pre-service training.

3. Progress slowly and phase in each progressive level: Montessori programs conventionally start at age three with multi-aged groups of three-, four-, and five-year-old children. The elementary curriculum builds as the children move through the program one year at a time. Though it is optimal for programs to start at the preschool level, some schools have successfully begun programs at the kindergarten level. In this situation, private Montessori schools may provide some Montessori-prepared students for the public kindergarten. With parent lobbying and financial support, the three- and four-year-old levels should be added as soon as possible.
Orientation of new students at the beginning of each academic year should include the gradual integration of small groups over several weeks—never all at once.
Admission of children over age four without Montessori background should be limited.

4. Use multi-aged groupings, which are an essential part of Montessori education: Montessori programs group children as follows:
Preschool: Ages 3-6+
Elementary I: Ages 6-9
Elementary II: Ages 9-12

Multi-aged clusters enhance the Montessori dynamic by reducing competition, maximizing curriculum options available to any one child, providing a family atmosphere that plays a vital role in socialization, and permitting older children to model advanced work for younger children. Because one set of materials suffices for three grades, multi-aged clusters are cost effective.

5. Purchase the full complement of Montessori materials for each classroom from authorized manufacturers: The costs of funding an ongoing Montessori program will not exceed costs associated with the operation of any other elementary school program, apart from the initial set-up costs for each emerging level. Each Montessori classroom has the following start-up costs and general maintenance expenses:

Montessori materials: $17,000-$25,000
Shelving, small tables, chairs: $4,000-$6,000
Misc. equipment and books: $1,000-$2,000
Annual maintenance (consumables): $800

Materials include practical life set-ups, handmade materials, Montessori apparatus, consumable supplies, and a small classroom library. Montessori materials may seem expensive, but they should be seen as textbook and workbook substitutes that will not have to be replaced, provided the teacher encourages their proper use. View a list of suppliers. Special budgetary considerations must be made for the start-up and initial implementation of the Montessori program. For example, the special Montessori environments will need two weeks of set-up time prior to the first year of the program. Personnel costs should be set aside for the principal, main teachers and office staff for this purpose.

6. Hire a Montessori coordinator with curriculum knowledge and authority: Someone in a position of program leadership, whether administrator or "teacher on special assignment," must have experience and Montessori training, ideally at both the preschool and elementary levels. The Montessori specialist is often hired to supervise ordering and preparation of Montessori materials, parent education, expanding levels of Montessori, staff development, program evaluation, and curriculum implementation. It is also important that the district be made fully aware of correlations between Montessori and district curriculum expectations.

7. Build a consensus among staff regarding curriculum goals in relation to pupil progress: Teachers of various Montessori persuasions in the same school need to come to common understanding of their lesson planning and curriculum scope and pace. Expected levels of student achievement should be developed school-wide. The budget should allow teachers to attend at least two local continuing education events and one national conference per year. (Estimated cost: $1000 per teacher per year.)

8. Use Montessori-specific progress reporting mechanisms: The Montessori program utilizes a unique approach to education that defines specific skill objectives differently than does district curriculum. Parents and teachers need a reporting and record keeping system that accurately reflects the child's progress within a Montessori environment. Grades and number scores on report cards are not compatible with Montessori philosophy.

9. Involve parents and the community: Community forums that deal with aspects of Montessori parent education are recurring events for increasing public awareness and keeping parents informed of ways to bring Montessori into their homes. Parent volunteerism is vital to school fundraising and other school-related projects. Research confirms that academic achievement is directly proportional to parent involvement in the Montessori program.
The Montessori private sector should be consulted for its Montessori expertise and guidance. Long-term success of the public school program is based on a policy of mutual respect between private and public Montessori institutions from the start.

10. Align assessment techniques with Montessori curriculum: Although Montessori children have historically tended to score well on standardized tests, too often the increased emphasis on state and district competency-based testing may permanently alter Montessori attitude and content.

With the increasing availability of alternative assessment instruments, better alignment of assessment and Montessori curriculum can be attained. It is important that Montessori goals and standards be assessed so that newly trained Montessori teachers are given incentives to practice Montessori education.

Assessment should seek to measure external conditions such as parent satisfaction, parent participation, and desegregation, as well as intrinsic Montessori standards and values. Follow-up studies will play a critical role in future recognition of Montessori effectiveness.