

Montessori Curriculum: Overview

Introduction

In 1907 Dr Maria Montessori established a classroom in Rome for children left unattended while their parents worked as day laborers. Within a very short time this classroom became famous around the world because these children, with apparently so few prospects, very quickly became socially and intellectually independent, not through adult coercion, but through their own activity, interest and effort. The learning environment designed by Dr Montessori to enable these children to achieve their potential in such a joyful way was the culmination of years of study and innovation in the fields of medicine, psychology and anthropology. Building on the success of that first classroom, over the last hundred years Montessori educators all over the world have continued to observe and study children and young people, and to design learning materials and environments carefully tailored to their developing interests and needs. The breadth and depth of accumulated knowledge shared by Montessori educators across time and space is perhaps unique in the field of education. Significantly, in recent years, research in the fields of psychology and neuroscience has confirmed many of Dr Montessori's insights (Elliot 2006: 30; Lillard & Else-Quest 2006; OECD CERI 2007).

In the Montessori view, the drive to become independent propels human development. Montessori education aims to provide children and young people, from birth to maturity, with learning environments designed to support the development of social, intellectual and ethical independence. For this reason, Montessori education is often described as 'education for life'. The foundation principle of the Montessori approach is that children learn best when they learn through their own freely chosen activity. Evidence gathered in Montessori schools throughout the world over the last century confirms that children who have the opportunity to learn in this way become self-confident, self-reliant and self-disciplined, with a life-long love of learning and the desire and capacity to contribute to the well-being of their social group. They also develop the ability to move with coordination and precision, and the ability to concentrate and to complete tasks independently with both perseverance and creativity.

While the Montessori curriculum is international, the curriculum presented in this document has been finetuned where necessary to adapt it to the **Lumin Bachman Lake Community School Program**. This curriculum provides toddlers with everyday social skills and accomplishments, trains sensory perception and movement systematically, and provides a strong foundation in literacy.

The Montessori curriculum is shaped by three key concepts central to Montessori education. These include *the tendencies shared by all humans*, *the planes of development* and *the prepared environment*.

Human Tendencies

In the Montessori view all humans share a set of innate tendencies that operate throughout life, guiding both human development and human behaviour. These include the drive shared by all humans to explore and investigate the environment and the need humans have to orient themselves to the environment in an ordered way. Throughout history and in all parts of the world, humans have communicated with each other, and they have measured their world and calculated quantities. Humans need to be active and to work. This work often involves repetition, which leads to exactness, precision and self-perfection. Humans also tend to imagine things not immediately present to the

senses. To feed their imagination, humans build a mental inventory of ordered ideas they have abstracted from their environment. Abstract ideas are the basis of human reasoning and judgement.

Because these tendencies are found in all human beings, regardless of their age, and the place and time in which they live, Dr Montessori called them 'human tendencies'. To optimize learning and development, Montessori educators take these tendencies into account as they design learning environments for each plane of development.

Planes of Development

Dr Montessori outlined four consecutive planes, or stages, of development from birth to maturity, each plane spanning approximately six-years. At each plane of development children and young people display intellectual powers, social orientations and creative potential unique to that stage. Each plane is characterized by the way children in that plane learn, building on the achievements of the plane before and preparing for the one to follow. The timing and nature of the transition between planes vary from individual to individual.

- The first plane of development is the period from birth to, approximately, age six. During this stage children are sensory explorers, learning to become functionally independent in their immediate environment and community. Children at this stage construct their own intellect by absorbing every aspect of their environment, language and culture.
- The second plane of development is the period from, approximately, six to twelve years. The developmental focus of this period is intellectual independence, hand in hand with the development of ethics and social responsibility. During this stage children become conceptual explorers. They use reasoning, abstract thought and imagination to explore and develop their understanding of the world.
- From age twelve to eighteen young people become humanistic explorers seeking to understand their place in society, and to contribute to society. They have a huge capacity for creative expression, and their style of learning becomes more practical and experiential, an approach they use to explore previously introduced concepts in more depth and in real-life contexts.
- From eighteen to twenty-four young adults develop specialist knowledge and skills, preparing them to take their place in the world and to establish social and economic independence.

For each plane of development there is a specific Montessori learning environment. Montessori environments for each plane maintain distinctive Montessori characteristics, including freedom of choice and movement, and an emphasis on independent exploration and self-directed learning. At the same time the design of each environment is customised to the specific needs, interests and potential of each developmental stage.

Within each plane of development there are periods during which children and young people display intense interest in a particular activity or aspect of the environment. These periods were called by Dr Montessori *sensitive periods* for learning, especially in the context of early childhood. The sensitive period for language, for example, is active during the first plane of development from birth to six years. This sensitive period provides a window of opportunity that enables children to learn language with ease and enjoyment. If, for any reason, a child does not learn to speak during this time, the sensitive period disappears and the learning of language requires much greater effort. The particular learning sensitivities and needs of children at each stage of development are reflected in the design of the Montessori environment and in the resources and activities prepared for that stage of development.

The Prepared Environment

Montessori learning environments are prepared to enable infants, children and young people to learn through their own activity. As much freedom and independence as possible is given for their age and stage, in other words a level of freedom matched to their ability to regulate and discipline themselves. They are also provided with resources and activities that capture their interest and initiate cycles of purposeful activity requiring concentration and judgement.

In the Montessori view the development of infants, children and young people is stimulated by action, and interaction, within their environment. What is offered in the environment will, thus, largely determine how children develop intellectually, emotionally and spiritually. Educational research in recent decades, drawing on theories of place developed by cultural geographers, resonates with the significance Montessori educators over the last century have given to the role of the environment in human development (Ellis 2005; Tuan 1977).

The essential components of a Montessori learning environment are:

- the infants, children or young people
- the trained adults
- the physical surroundings, including the specially designed Montessori educational material.

Montessori learning environments are prepared to nurture children's natural tendency to work and their love of learning. They provide opportunities for children to engage in spontaneous, purposeful activities under the guidance of a trained adult. The design of a Montessori learning environment has four dimensions.

- The physical environment is characterised by furniture and implements, matched to the size and strength of the children, and by distinctive educational materials designed to precise specifications and matched to developmental stage.
- The social environment comprises a multi-age peer group, a trained teacher and trained teaching assistants as required. This dimension of the environment is designed so infants, children and young people can develop both as individuals and as social beings. It includes real-life activities that link them in meaningful ways to their home, community and culture, as well as activities that develop a concept of their place in the world and the wider Universe.
- The time environment is designed to give children the time they need to develop. Wherever possible the school day is made up of unbroken three-hour work periods, so children are able to follow their interests and to achieve their learning goals without being interrupted.
- The emotional environment is prepared so children always feel safe, secure and confident enough to follow their interests and to engage in deep concentration.

Preparation of the learning environment is a fundamental task of the Montessori teacher. This task is summarized by Mooney (2000: 29) in the following way:

Montessori urged teachers not to interfere with the child's patterns and pace of learning. She thought it was the teacher's job to prepare the environment, provide appropriate materials, and then step back and allow time and space to experiment. Open ended scheduling, with large blocks of time for free work and play, is part of Montessori's legacy.

Developmental Opportunities in the Prepared Environment

A Montessori prepared environment provides a range of developmental opportunities incorporating movement, challenging work, concentration and freedom.

Movement

Montessori environments are prepared to reflect the understanding that movement is necessary for learning. From birth children strive to construct and refine two types of movement:

whole body movement and gross motor equilibrium

refinement of movement of the hand and fine motor hand-eye coordination.

The goal for young children is to bring both types of movement gradually under the control of the mind. Bringing movement under control of the mind is the foundation stone of the independence children and young people continue to develop throughout their formative years.

Work

Montessori educators describe the spontaneous activity of infants, children and young people as work. When their activity is freely chosen and purposeful, children focus their attention on the activity in order to repeat and perfect what they are doing. As they work, they build their powers of concentration and judgement. Work of this type does not result from external direction; instead it arises out of children's interest, often linked to a sensitive period. This type of activity was described by Dr Montessori as 'work' in recognition of the sense of purpose infants, children and young people display during the activity and to lend dignity to the enormous task of creative self-construction that infants, children and young people are undertaking as they work. Montessori learning environments provide motives for purposeful work that engages and supports development.

Concentration

When children concentrate, they are integrating all elements of their personality - movement, attention and judgement. They also build confidence in themselves and their ability to act on the world. In the Montessori view, concentration is a natural state of childhood, and, therefore, attainable by all children. The ability to concentrate learned in early childhood becomes a valuable attribute that greatly enhances the educational experience of older children and adolescents. Deep concentration, at all ages and stages, is more likely to occur when interest reflecting developmental need guides the choice of activity.

Freedom

From birth children are deeply interested in everything around them. They are driven to explore their world in the service of their own development. If they are to respond to this drive, children need the freedom to explore and discover their environment independently, and to engage their full attention on what interests them with a minimum of interference and interruption.

When infants, children and young people are given freedom in Montessori educational environments, they are free to think for themselves, to make judgements, and to manage the consequences of those judgements. They are free to expand their independence and to take responsibility commensurate with their level of independence.

In Montessori environments infants, children and young people are free to:

- choose activities from among those previously introduced
- work with activities for as long as their interest dictates and until an internal satisfaction is achieved

- choose their place of work and the people they work with
- communicate with others
- work without interruption
- develop their own individual work pattern.

Clear and unambiguous limits to children's freedom are also necessary to ensure their safety and the harmonious functioning of the learning environment, as well as their family and community. Infants, children and young people in Montessori environments are not free to disturb or harm others.

Features of the Prepared Environment

Montessori prepared environments have two key features. They are beautiful and ordered, and they are designed for multi-age groupings.

Beauty and Order

Montessori environments are prepared to be both beautiful and ordered.

The beauty of a Montessori environment arises from a combination of elements. Ideally, the room is light-filled, spacious and without clutter so children can move around the room with ease. The outdoor area is as attractive as the indoor area, and available to the children at all times. The design of the furniture is elegant and simple, and light enough for children to move around and arrange by themselves if they wish. The use of color, fabric, decoration and music is simple and artistic, reflecting the aesthetic values of the children's cultural backgrounds, rather than the mass-produced culture of childhood promoted by media and commercial interests. In the Montessori view, an artistically beautiful environment inspires and uplifts children and helps them to concentrate.

Order and stability are also vital to children's sense of well-being. In early childhood, children depend a great deal on external order in the environment to support the construction of an emerging internal mental order. For this reason, during early childhood, children need an ordered, predictable environment from which they can derive meaning and in which they are able to build knowledge and understanding of the world and their place in it. An ordered environment in early childhood helps children construct a stable, internal order.

Multi-age Groupings

Montessori environments are prepared for multi-age groupings of children. These groupings operate very like family environments, providing key learning and development opportunities in two ways. First, multi-age groupings encourage children to aspire to the achievements of older peers. New students enter an established and mature environment with effective models of both work and social interaction. Second, multi-age groupings enable older children to learn to treat younger ones with care and respect, providing them with opportunities to reinforce their own learning and understanding through 'peer teaching'. In multi-age groupings children are able to work through the curriculum at their own pace without being limited to one year of the curriculum only.

There are Montessori environments prepared for the following multi-age groupings:

- the Nido (early childhood setting for children from birth to children who are walking independently, approximately 15-18 months)
- the Infant Community (early childhood setting for children who are walking independently i.e. from 15-18 months to 3 years)

- the Children's House (preschool, and/or long day setting for children from 3 to 6 years)
- the primary school (a classroom for children aged from 6 to 9 years and a classroom for children aged 9 to 12 years, or one classroom for children aged from 6 to 12 years)
- the secondary school (a learning environment for students aged from 12 to 15 and a learning environment for students aged from 15 to 18 years)

The advantages of multi-age grouping include the following:

- the opportunity to experience three roles i.e. being the youngest, in the middle and the oldest, and the time to develop appropriate behaviors for all three roles
- experiences that stimulate a sense of caring and responsibility for others and the continuation from year to year of the culture of the class as a caring community
- experience of social cohesion and a sense of place gained from being in the same environment for three years
- exposure to a diversity of talents, aptitudes and interests, and a wide curriculum beyond a single year
- participation in peer teaching
- experience of appropriate behavior and teaching and learning modelled from a broad age range of their peers
- development of self-esteem and a greater understanding of community responsibility from roles as leaders in the group
- groupings of similar interests and learning needs from across the age groups working together at their own pace
- work in the environment prepared for a broad age range, so students can see the whole progression of the curriculum for their group, progress independently in areas of strength and also revisit areas of knowledge comfortably as required
- experience of stability and social cohesion with the same teacher within a stable community for three years (two years for the infant community)
- new students join a community that is already formed, and the teacher builds a solid relationship with each one.
- individual learning is more effectively supported because there is more opportunity for teachers to know the students well
- younger children observe materials and procedures used by older children, so they already have some familiarity with the materials, procedures and knowledge before the teacher gives them the lesson directly

Contemporary studies in neuroscience support the value of multi-age groupings in educational settings, as argued by Geake (2009: 184) in the following way:

A school of the future will be structured around multi-age classes within a vertical curriculum structure that has children moving between academic levels for different subjects as needs be. Since brain development is driven by life experiences, rather than chronological age *per se*, individual children's learning needs are best addressed by having them engage in appropriate curriculum for their stage of learning readiness, ...

Elements of the Prepared Environment

The Montessori prepared environment has three main elements:

- the infants, children or young people
- the Montessori teacher (and trained assistant/s as required)

- the Montessori materials.

The Children

The principles and practice of the Montessori approach have emerged from observing the activity of communities of children in prepared environments. At each stage of development the physical, emotional, psychological, social and intellectual needs of the children govern the preparation of the environment, as well as the design of the materials placed in the environment and the activities offered to the children. Each stage of development offers children a unique opportunity for self-construction. In the Montessori view, if children are able to achieve the promise and potential of their present stage of development, their chance of fulfilling their future potential becomes far more assured.

The 'essential condition' for child development is, in the words of Dr Montessori (1973/1948: 24), 'freedom to act in a prepared environment where the child can be intelligently active'. Children's self-chosen activity is the catalyst for learning in a Montessori environment; in other words, learning is a function of children's active choices motivated by interest.

Montessori environments are prepared for *communities* of children. In other words, they are prepared to encourage children to be responsible and caring citizens able to be a part of a community of peers in preparation for becoming active and contributing members of the wider community. The community of children also provides what, in an era of falling birth rate and single child families, might be called 'pseudo siblings'.

Montessori environments adapt easily to meet the needs of children from diverse cultural and socio-economic contexts, as well as children with special needs and gifts. Montessori educators believe that all children in the community benefit from an inclusive approach. The curriculum is child-centred and customized in ways that create an individual learning pathway for each child.

The starting point for learning is always what individual children know and can do. Learning is then broken down into clear, incremental steps, scaffolded by the Montessori materials and exercises. In each content area individual children are given as much opportunity as they need for repetition, consolidation, application and extension. In this way children become confident learners, willing to take on intellectual challenges, to solve problems and to persevere until they have mastered elements of the curriculum.

The Montessori Teacher

The Montessori teacher's role is to connect the children with the Montessori prepared environment. In general terms the teacher's role includes:

- preparing the learning environment
- linking the children to appropriate and challenging activities
- leaving children free to engage in an activity until their interest is satisfied, only assisting where required.
- coordinating the dynamic balance between freedom and discipline
- recording children's progress and achievement

Montessori teachers develop warm and supportive relationships with children, marked by respect for the children's abilities and individual developmental needs. While children in the Montessori environment are not given unfettered freedom, they are free to choose their own work. The teacher

respects children's work choices; ensuring individual choice does not become secondary to group activities.

Montessori teachers are trained to observe children's interests and activity carefully. The way Montessori teachers observe children's activity can be compared to the 'fluid rather than static' approach to observation advocated by Fler and Surman (2006: 145) for teachers working in early childhood settings. Knowing how to observe constructively and when, and how much, or how little, to intervene, is one of the most important talents the Montessori teacher acquires during a rigorous course of training. Close observation provides the evidence teachers use to make decisions about how to foster children's interests and meet children's learning needs. Observation is also used to monitor children's progress.

On the basis of their observations Montessori teachers introduce developmentally appropriate challenges by showing children how to work with Montessori materials matched to their current needs and interests. For this reason, Montessori teachers must know the scope, sequence and use of the Montessori materials in sufficient detail to be able to select and present lessons effectively at point of need. The repertoire of Montessori activities and exercises across the curriculum for each stage of development is extensive. Montessori teachers draw on this repertoire as they strive to offer just the right lesson or activity to each child at just the right moment.

In the context of literacy education Snow, Burns and Griffin (1998 executive summary, cited in Freebody 2007: 59) point out that 'the identical mix of instructional materials and strategies' do not 'work for each and every child'. Drawing on their research findings, they argue that 'effective teachers are able to craft a special mix of instructional ingredients for every child they work with' chosen from 'a common menu of materials, strategies and environments'. This is the approach used by Montessori teachers in all content areas for children and young people at all stages of development.

Montessori teachers consult regularly with parents throughout each three-year stage. When necessary, Montessori teachers also work closely with other professionals, including, for example, speech pathologists, occupational therapists and specialist curriculum consultants.

Montessori teachers have Montessori qualifications for one, or more, developmental phases (birth to three, three to six, six to twelve) as well as teaching qualifications recognized by state educational authorities. Each Montessori teacher-training course comprises a full academic year, or equivalent, of a study of the Montessori method as well as Montessori professional experience through practicum.

The Montessori Materials

The preparation of each Montessori environment includes the careful preparation of the Montessori developmental materials appropriate to that environment. The Montessori materials are sets of objects, each set designed to exacting specifications. In general the materials are designed to:

- capture interest
- invite interaction and manipulation
- encourage precise use
- extend concentration
- challenge the intellect act as an indirect preparation for future experiences.

Children are shown how to use the materials in concise, but very precise lessons, called presentations. Once children have had a presentation and know how to use a set of materials, they are then free to

work with the activities and exercises aligned with those materials as often and for as long as they wish. Many of the materials have an inbuilt control of error, thus enabling children to learn independently with a minimum of adult help. As a result, from an early age, children in Montessori settings build confidence in their own abilities and learn to take responsibility for their own learning.

While many of the presentations used in Montessori environments show children how to use the materials, there are also Montessori presentations that show children how to build skills and knowledge without using materials, for example, lessons in movement, social relations or singing.

The Montessori materials are on constant display on open shelves. The materials of each content area are displayed in the sequence they are presented to the children. For this reason, a fully equipped Montessori environment can be said to embody the scope and sequence of the Montessori curriculum for that stage. The children choose from the shelf, at any time, the materials they know how to use. When children are shown how to use the materials, they are also shown how to handle the materials carefully and how to return them to their place once they have finished. Many, though not all, of the materials are designed for individual use, and a common sight in a Montessori early childhood environment is a number of children working with great absorption on individual activities they have chosen themselves, their space and concentration respected by others in their group.

Lumin Bachman Lake Community School – Classroom: Introduction

The First Plane of Development

From *birth to three years* of age the physical development of infants is remarkable, inspiring the attention and care of both family and community. In tandem with their physical development, infants are developing psychologically, socially, intellectually and spiritually. During this time they acquire the culture and language of the community into which they are born. This multi-faceted development is accommodated in the Montessori environments prepared for children of this age. Specifically, Montessori learning environments for this age group are designed to foster independence, psycho-sensory-motor development and language development.

From the age of three children become conscious of what they are learning through their own freely chosen activity, especially activity with their hands. Montessori environments prepared for this age group provide children with *motives for activity* through which they refine their perception, movement and language, and become independent in everyday life. The extensive repertoire of meticulously designed Montessori materials and exercises offered to the children represent a learning program organized as an incremental progression of activities. Within this framework children are free to choose their own work, once they have been shown how to use the materials and how to do the exercises.

The advantage of the distinctive features of Montessori early childhood settings are supported by evidence emerging in the research literature. For example, children at age seven show improved language development and cognitive outcomes if they have participated in early childhood settings where activities are child-initiated and selected from a wide variety of available equipment and materials, and where free choice predominates over whole group activities (Montie, Xiang and Schweinhart 2006). Furthermore, the incremental repertoire of Montessori materials and activities addresses some of the concerns raised by researchers in early childhood education in relation to the difficulties teachers can experience in implementing a play-based curriculum (Bennett, Wood and Rogers 1997; Wood and Bennett 2000).

Characteristics of the First Plane of Development

The *first plane of development* spans the period from birth to approximately age six. During this stage children become functionally independent; they learn to control their movement, to communicate and to work with their hands. Children during this period are also sensory explorers. They use their senses to absorb every aspect of the environment, their language and culture, in the process constructing their own intellects.

Development during this plane is shaped by the special capacity children of this age have for learning and absorbing vast amounts of information, a capacity described by Montessori educators as the *absorbent mind*. The way young children learn is unique to this stage of life. During this plane of development, without being conscious they are learning, children 'absorb' impressions from the environment, impressions that construct their mind and intellect and enable them to adapt to their time and place in history.

Throughout this plane of development children experience periods during which they display heightened sensitivity to, or interest in, particular aspects of the environment. These periods, named *sensitive periods* by Montessori educators, represent windows of opportunity during which children's intense interest, and the spontaneous activity this interest generates, enable children to learn the corresponding knowledge and skill with ease and enjoyment. Montessori educators observe children closely for signs of sensitive periods. They use these observations as a guide to help them choose the optimum time for offering children lessons and activities in, for example, social skills, the refinement of movement and sensory perception, language and mathematics.

The first plane of development is a time of enormous *physical development*. By the age of six children have gained a *functional independence*; they can talk and communicate their needs; they can walk, climb, run and jump by themselves, feed and dress themselves and manage their own toileting. They move with balance and coordination, and are refining the precision and dexterity with which they use their hands. Children's hands, Dr Montessori (1982/1949: 23) argued, are the 'instruments' of their intelligence. In other words, as children refine control of their hand, they are also refining the development of their minds. The importance of having activities in the environment that interest children and that involve the use of their hands is described by Dr Montessori in the following way:

The ability of a thing to attract the interest of the child does not depend so much upon the quality of the thing itself as upon the opportunity it affords the child for action ... it is not enough that a thing should be interesting in itself but that it must lend itself to the motor activity of the child if it is to be interesting to him. There must be, for example, small objects that can be moved from their places. It is then that a child begins to move his hand rather than the objects. A child is delighted to make and unmake something, to place and replace things many times over and continue the process for a long time. A very beautiful toy, an attractive picture, a wonderful story, can, without doubt, rouse a child's interest, but if he may simply look at or listen to, or touch an object but dares not move it, his interest will be superficial and pass from object to object. That is why the environment is so arranged that it lends itself to a child's desire to be active (1967/1948: 104).

Aligned with physical development is *social and emotional development*, development that is enhanced by nurturing, secure environments at home and in early childhood settings. Learning how to be social emerges naturally and spontaneously in the multi-age, mini-communities found in Montessori environments. In these communities older children have the opportunity to be sensitive to the needs of others, while younger children feel able to seek help at any time. In addition, lessons in *grace and courtesy* provide opportunities for young children to practice appropriate social behaviour in a fun and instructive way without public reprimand.

Children from birth to the age of six learn through their senses. Using their senses, they gain first impressions and understandings of the world, impressions and understandings that become woven into the fabric of their minds. This principle, first proposed by Aristotle, is traditionally summarized in the following way: 'There is nothing in the mind that is not first in the senses.'

The first six years of life is a time of rapidly expanding *mental development* where the first half is a period of acquisition of knowledge and the second a period of crystallization of acquired knowledge. In recent times neuroscientists have begun to describe the development of neurological networks in young children (OECD CERl 2007) and to emphasize the importance of favorable social and physical environments to support this development. Montessori prepared environments provide children with an environment that enhances the construction of the mind and the intellect, for example, by

providing concrete materials through which children begin to classify the world around them while learning language for talking about these early classification systems. This work becomes the foundation for learning during the primary school years when ordered systems of abstract knowledge and the imagination become the tools children use for thinking.

Babies are born with a strong urge to *communicate* and to express themselves. By age three children have acquired language, and by age six, they also have acquired the fundamental skills of writing and reading. At the same time children are using a *mathematical mind* as evidenced by their need for order and sequence and the drive for precision and accuracy. During the first six years of life children construct a foundation for later studies in arithmetic and geometry.

In summary, during the first three years of life young children begin to learn to function independently, to move with control, to communicate and to concentrate. At no other time in children's lives will they be able to develop in so many significant ways so easily and well. By the age of six, children have become socially adapted to their time and place in human history and culture.

Montessori Prepared Environments for the Early Years

Beautiful, orderly, child-sized environments and sensory play are part of Montessori's legacy... Montessori thought that early childhood teachers should: provide real tools that work; keep materials and equipment accessible to the children so they can find and put away what they need; and create beauty and order in the classroom (Mooney 2000: 25).

The Nido and Infants Community.

Environments Prepared for Infants and Toddlers under Three

Montessori environments for infants and toddlers are prepared to be as homelike as possible, and to involve small children in a round of daily activities including quiet times and rest periods. The characteristics of these environments include:

- continuity of care
- an ordered physical environment
- consistency of activity and expectation.

In environments with these characteristics infants build a sense of security, a sense of order and a sense of time.

Continuity of care lays the foundation for emotional and social well-being. If infants interact with the same people day after day, they feel secure, and they have the opportunity to build lasting relationships and social bonds they can depend on.

An ordered physical environment lays the foundation of an ordered mind. If infants find things in the same place day after day, they learn to recognize those things and where they belong. In such an environment children grow confident in their ability to know and memorize things, in other words, they become confident in their own intellectual capacity.

Similarly, consistency of activity contributes to children's security and intellectual confidence. A daily routine develops in infants an understanding of the passing of time. If, day after day, infants follow the same routines at the same time and the same places, they have further opportunity to discover that they know something when they recognize familiar things and events. If infants take part in the same

activities, in the same order day after day, they further consolidate their sense of security, order and time.

There are two prepared environments for infants and toddlers under the age of three years:

- The *Nido*, or *nest*, is a nurturing home-like environment for infants from 2 to 3 months until they are walking independently (around 15/18 months).
- The *Infant Community* is an educational environment prepared for toddlers from the time they are walking independently until they are approximately three years of age. It is a nurturing environment where very young children experience their first structured contact with other children. The focus of the environment is to offer children activity that supports the development of voluntary, controlled movement, spoken language and independence in daily life.

Both these environments are organized and directed by a Montessori trained adult called an *Assistant to Infancy*. *Nidos* and *Infant Communities* can be prepared so children can attend on their own (for example, in sessional or long day care) or so parents can accompany the children. When parents accompany children to the *Nido*, the group is often called a 'parent-infant group'. When parents accompany children to the *Infant Community*, the group is often called a 'parent-toddler group'. The accompanying parents gain information about ways to interact with children based on the modelling of this behavior provided by the staff. In addition, in this environment parent and child experience a protected time in which their relationship to each other can deepen and grow.

Activities in Montessori environments for children under the age of three are related to real life. They provide children with opportunities to develop voluntary, controlled movement, independence in daily life and spoken language.

Order is a feature of all Montessori early childhood environments. The ability of the child to create order from the stimuli of the environment is an essential factor in normal development from birth to three years.

In addition, parent information sessions and literature also provide an essential component of Montessori early childhood environments prepared for infants and toddlers.

18 Months to Three Years: *The Infant Community*

The Montessori Lumin Bachman Lake Community School Program from 18 months to three years focuses on the development of movement, language and independence. Attention is also paid to parent education, family support and community outreach. Structured language activities and activities to promote independence and continued development of movement are a feature of the *Infant Community*, the Montessori environment prepared for toddlers. Development of movement is very important in the *Infant Community*, particularly in the outdoor activities. There is also a focus on continued refinement of hand skills.

Overall the Montessori Lumin Bachman Lake Community School Program aims to provide toddlers with learning environments in which they are valued and contributing members of a mini-community. Within this nurturing community they have the opportunity to develop confidence and a love of learning. In addition, the environment provides many opportunities for children to learn how to communicate with others in spoken language, and for early explorations of the wider natural, social and cultural world.

Development of Movement

Montessori environments prepared for toddlers emphasize the development and refinement of voluntary movement. Activities are designed to help toddlers bring their movement under the control of the mind, at the same time as they increase their independence in the environment. These activities include exercises for building whole body coordination, control of the hand and hand-eye coordination.

Montessori toddler settings include activities designed to support *psycho-sensory-motor development*. The term *psycho-sensory-motor development* refers to the changes in the infant’s brain brought about by sensory-motor experiences. As toddlers build motor skills, and use their senses to explore the environment, there are corresponding changes in the developing brain. Repetition of movement and the use of the senses help to strengthen neuro-pathways, thus, enhancing the toddler’s potential in all areas of development.

Content Strand	Knowledge, Skills and Understanding	Material/Activity
	<i>Typically children will:</i>	
Control and coordination of body movement	Learn to control and coordinate movement of body: IT-PMP3 IT- C9 Stand IT-PMP3 Walk IT-PMP3 Sit on a chair IT-PMP3	Resources include: - punch ball IT-PMP1 - cylinder with ball IT-PMP1 - ottoman IT-PMP1 - bar and mirror IT-PMP1 - low heavy table IT-PMP1 - kiosk with bars IT-PMP1 - push cart IT-PMP1 - pull cart IT-PMP1 - stairs IT-PMP1 - weaning chair IT-PMP1 - low slatted chair IT-PMP1
	Develop and consolidate skills including: IT-C9 - Running IT-PM-P4 - Jumping IT-PM-P4 - Climbing IT-PM-P4 - Swinging from arm to arm (brachiation) IT-PM-P4	Resources include: - Ramps IT-PMP4 - climbing frames IT- PMP4 - ropes IT-PMP4 - swings IT-PMP4 - ladders IT-PMP4 - beams IT-PMP4 - balls IT-PMP4 - wagons IT-PMP4 - wheelbarrows IT-PMP4 - brachiation bars IT-PMP4 - pulley lifters and weighted bags IT-PMP4 - Implements for sweeping, mopping, IT-PMP4 - Raking and gardening. IT-PMP4

<p>Development of the hand grasp</p>	<p>Explore and develop the capacities of the hand leading to development of the hand grasp and fine motor control IT-PMP8</p>	<p>Resources include: - containers to open and close - peg box IT-PMP8 - balls IT-PMP8 - preparing food IT –PMP8 - sand play IT-PMP8 - cutting with scissors</p>
<p>Tactile stimulation</p>	<p>Discriminate objects by sense of touch IT-PMP1</p>	<p>Resources are tactile objects for manipulation including: - wooden articles IT-PMP1 - variety of shapes IT-PMP1 - objects from the home IT –PMP1 - stereognostic bags IT-PMP1</p>
<p>Eye-hand coordination</p>	<p>Coordinate eye and hand movements IT-PMP6 Cross the midline while working IT-PMP6 Use two hands together IT-PMP7 Transfer objects from hand to hand</p>	<p>-beads for stringing IT-PMP6 -box with different shapes for mailing IT-PMP6 -slotted box and chips IT –PMP6 -puzzles IT-PMP6 -range of fastenings IT-PMP6 -objects for opening and closing IT-PMP6 -sewing IT-PMP6 -materials and implements for cutting and gluing IT-PMP6</p>
	<p>Sort objects IT-C10</p>	<p>Resources include collections of three dimensional objects for sorting.</p>

Language

Maria Montessori was one of the earliest researchers to observe and describe in some detail the development of language in infants (see, for example, Montessori 1982/1949). She recognized that the foundation for language development is established before birth. After birth, the innate human tendency to communicate with others drives infants to engage with the language used by those around them. Through observation, listening and interaction they learn the language and culture of their community. In the Montessori view this development is related to the development of movement. As infants become able to move about more and more, their field of interest and activity expands, and so does their need for language. The Montessori approach to language for this age group, therefore, starts not with the word but with the child's concrete experiences.

Language development in infants is described by Montessori educators as having the following two phases:

- the prelinguistic phase from birth to twelve months when infants may not use words with meaning but are absorbing and internally constructing the rhythms and patterns of language, and training vocal muscles and auditory perception of the sounds of the language in the environment

- the linguistic phase from twelve months to three years when infants progress from saying their first intentional words with meaning to complex phrases and simple sentences.

Initially, receptive language in infants is more developed than expressive language so they understand a great deal more than they can say. At about two years of age the indirect and direct preparation of the pre-linguistic and early linguistic phases results in an ‘explosion’ into language. At this time, instead of using single words and words fused together, young children suddenly combine words into grammatical patterns in order to express their meanings. From this point, language use typically expands rapidly.

In Montessori environments prepared for infants and toddlers Montessori early childhood educators strive to create an enriched language environment. Adults in the environment provide infants and toddlers with good models of language use at all times. They listen attentively, respectfully and responsively to all attempts made by the children in the environment to communicate. They also initiate interactions, ensuring language is directed toward the child, particularly during the pre-linguistic phase.

In the language-enriched Montessori environments children have many opportunities to expand their vocabulary and language use in their first language. They also benefit from hearing speakers of other languages if the use of other languages can be integrated meaningfully into the daily routine of the setting. At this age, this works best for children if the adults in the environment each speak only one language to the children. For example, one adult speaks only English and another adult speaks only Chinese when interacting with the children.

Content Strand	Knowledge, Skills and Understandings	Activities and Resources
	<i>Typically children will be able to:</i>	
Oral language acquisition and development	Communicate verbally and non-verbally IT-LC3 IT-LC4 IT-LC6 IT-SE6 Use spoken language to make meaning, with support if needed IT-LC2 Link words and meanings IT-LC6 Increase and extend vocabulary IT-LC7 IT-LC8 Extend language use from words to word groups, phrases and simple sentences IT-LC5 IT-LC7 Explode into language around 2 years of age IT-LC5 IT-LC8 Communicate confidently IT-LC1 IT-LC3 IT-LC8	Language-enrichment activities include: - being listened to attentively IT-LC8 - varied, real, everyday activities that involve incidental language use IT-LC7 - adults speaking directly to children, modelling language use children can understand and imitate IT-LC2 - listening to and telling stories IT-LC1 IT-LC2 IT-LC8 IT-LC9 IT-LC12 - questioning exercise IT-C1 IT-LC4 IT-LC8 - opportunities to speak and hold conversations with others ITC-LC5 IT-LC8 IT-SE10 - naming objects; naming pictures

		<p>of objects; identical and similar matching of objects to cards including naming IT-LC11 ITC-10</p> <ul style="list-style-type: none"> - fishing bags: general, classified and paired objects - songs, rhymes, games, finger plays, stories, poems IT-LC4 IT-LC9 - access to and being read to from quality children’s books IT-LC10 ITLC12 <p>Resources include:</p> <ul style="list-style-type: none"> - an enriched language environment IT-LC2 IT-LC5 - good models of language use that children can understand and imitate if they wish IT-LC1
	<p>Begin to use language appropriately in different situations to guide their own and others’ behaviour</p> <p>IT-SE6 IT-LC2 IT-LC-8 IT-C2</p>	<p>All activities in the environment offer and encourage vocabulary enrichment and language experience. Specific activities include:</p> <ul style="list-style-type: none"> - seeking assistance IT-SE3 - waiting - taking turns IT-SE4 - helping another child or an adult IT-SE4 - preparing food - making a contribution to the prepared environment <p>Resources include good models of language use and social interaction that children can understand and imitate if they wish.</p>
<p>Preparation of the hand for writing</p>	<p>Develop a pincer grip and good hand control</p> <p>IT-PMP8 IT-C1</p>	<p>Activities include all <i>practical life</i> and fine motor movement activities including: IT-PMP8 IT-C1</p> <ul style="list-style-type: none"> - puzzles IT-PMP8 IT-C1 - hand/eye coordination activities IT-PMP8 IT-C1 - food preparation IT-PMP8 IT-C1 <p>Resources include functional objects and implements matched to the children’s size, strength and dexterity.</p>

	<p>Learn how to hold and use a pencil, paint brush and needle IT-PMP8</p>	<p>Activities include:</p> <ul style="list-style-type: none"> - scribbling IT-LC-13 IT-PMP8 - gluing IT-LC-13 IT-PMP8 - painting IT-LC-13 IT-PMP8 - sewing IT-LC-13 IT-PMP8 <p>Resources include functional implements matched to the children’s size, strength and dexterity.</p>
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Development and Education of the Senses

Infants and toddlers make contact with and explore their environment through their senses. They then strive to organize in an ordered way the myriad impressions they gain through this exploration. Through sensory exploration infants and toddlers develop the ability to discriminate variation in color, form and shape, dimension, texture, temperature, volume, pitch, weight and taste. This ability is further refined in the *Children's House* and becomes the basis for the future ability to work with abstract concepts.

Content Strand	Knowledge, Skills and Understandings	Activities and Resources
	<i>Typically children will be able to:</i>	
Sensorial exploration	Discriminate objects using the senses IT-PMP1	Activities include: - <i>practical life</i> IT-PMP1 - food preparation IT-PMP1 IT-PMP10 Resources include psycho-sensory-motor materials. IT-PMP1
	Gain impressions of colour, shape/form, weight, length, dimension, texture, taste, sound	Resources include psycho-sensory-motor materials. IT-PMP1
	Develop a sense of aesthetics IT-PMP1	The environment and all materials are beautifully designed and arranged with just enough carefully-chosen objects to create just the right amount of stimulus.
	Begin to classify objects IT-C10	Activities in which children are given the names for general categories of items in their environment Resources include: - <i>nomenclature</i> objects IT-PMP1 - <i>nomenclature</i> cards and objects - <i>nomenclature</i> cards
Visual discrimination	Discriminate objects by sight IT-PMP1	Activities include: - observing and batting mobiles IT-PMP1 - observing and grasping varied objects IT-PMP1 - matching IT-C10
Tactile discrimination	Refine the sense of touch IT-PMP1 Discriminate objects by the sense of touch IT-PMP1	Activities include: - sorting IT-C10 - fishing bags IT-C10 - food preparation Resources include:

		<ul style="list-style-type: none"> - objects for tactile stimulation IT-PMP1 IT-C1 - objects for tactile discrimination IT-PMP1 IT-C1
Auditory discrimination	Listen to the sounds of objects IT-ATL3	Resources are objects for auditory discrimination, including: <ul style="list-style-type: none"> - rattles IT-PMP1 - balls with a rattle inside IT-PMP1 -shakers IT-PMP1
	Identify objects by sound IT-PMP1	
	Experience timbre, rhythm and beat	Activities involving music and movement, including: <ul style="list-style-type: none"> - singing IT-PMP4 - using percussion instruments
Olfactory and gustatory	Experience and identify different foods by smell, taste and sight IT-PMP1 IT-PMP10	Activities include: <ul style="list-style-type: none"> - food preparation IT-ATL3 IT-PMP1 - work with <i>nomenclature object</i> IT-PMP1
Stereognostic sense¹	Gain knowledge of an object by feeling around it IT-PMP1	Activities include: <ul style="list-style-type: none"> - general fishing bag IT-PMP2 - classified fishing bag IT-PMP2 - paired objects fishing bag IT-PMP2

Fundamental Life Skills in the Infant Community

Learning fundamental life skills, called *practical life* by Montessori educators, is the component of the Lumin Bachman Lake Community School Program that links Montessori settings for toddlers with the home. The activities in this area of the environment exploit the desire of toddlers to imitate the adults around them, particularly in self-care, food preparation and care of the environment.

Toddlers love order and strive for independence. Both these impulses find expression in Montessori practical life activities designed for this age group. Through these activities toddlers build and refine motor skills, including whole body equilibrium and coordination, as well as fine motor skills, specifically the transition from palming to pincer grip. *Practical life* activities for children of this age originate in the home and capitalize on very young children's intense interest in food and their desire to imitate adults. Independence is fostered and movement refined through the use of these activities.

The child will be shown how to do a *practical life* activity and is then free to choose this activity at any time. When toddlers are engaged in self-chosen *practical life* activities, they strive to execute precise movements to achieve a goal, in the process building and refining voluntary control of both movement and attention through repetition and the opportunity to work at their own pace uninterrupted. When toddlers are free to complete cycles of work without interruption, they learn to bring their attention under voluntary control, to exercise the *will* in Montessori terms, and they are

¹ The word 'stereognostic' comes from 'stereo' meaning 'around' and 'gnostic' meaning 'to know'. The term refers to sensory perception that combines visual and muscular exploration and memory. When used in Montessori contexts, it refers to the means through which young children gain knowledge by feeling around an object.

able to concentrate for longer and longer periods. They also experience feelings of satisfaction and achievement that contribute to the development of confidence.

Practical life activities, and the equipment and utensils used in the activities, are already familiar to the children as they are the activities and implements that are used in the culture in which the children are living. They are matched to the children’s size, strength and level of independence. *Practical life* exercises and activities are modelled by adults in lessons presented to individual children at point of need.

Content Strand	Knowledge, Skills and Understandings	Activities and Resources
Transition (from home to Montessori early childhood settings)	<i>During transition typically children will:</i>	
	Become familiar with an environment outside the home IT-C3 ITC4 IT-PMP5	Activity within the setting, which is familiar, home-like and a culturally appropriate environment IT-SE2
	Shake hands and greet another IT-C2 IT-C4 IT-ATL1 IT-ATL2	Activities include: - observing good models of adults IT-SE11 - greeting and shaking hands IT-ATL1 IT-ATL2 - opportunities to interact with others, using culturally-appropriate greetings
	Remove shoes IT-PMP7 IT-PMP9	Resources include: - a place for shoe removal and storage IT-PMP7 - a low bench to sit on IT-PMP7
	Store bag and clothes IT-PMP7 IT-PMP9	Resources include hooks or a cubby for clothing and bag. IT-PMP7
	Pour a drink IT-PMP9 Choose and prepare food for themselves IT-C6 IT-PMP9	Resources include pre-measured portions located within reach. IT-C6
	Choose an activity Set up a mat or table as a workspace IT-C9 IT-PMP7 IT-PMP9 Wait and take turns IT-SE8 IT-PMP9	Activities are organized within reach on low shelves. Adults model behaviors. Resources include: - child-sized tables and chairs IT-C9 - work mats IT-C9
	Develop a sense of belonging, being and becoming IT-SE10 IT-SE13 Imitate the social norms of society IT-SE3 IT-SE11	Resources include: - a multi-aged group of children within same developmental phase IT-SE5 - a supportive adult to observe, model and with whom to interact

		IT-SE7
	Develop more precise control of voluntary movement and hand/eye coordination IT-PMP6	<p>Activities for learning how to:</p> <ul style="list-style-type: none"> - carry furniture and equipment, e.g. - chair, tray, mat, buckets, jug IT-PMP6 - pull out and push in a chair IT-PMP6 - roll and unroll a mat IT-PMP6 - prepare drinks and food IT-PMP6 <p>Resources include functional objects and implements matched to the children’s size, strength and dexterity.</p>
Care of person	<i>Children develop and consolidate independence in:</i>	
	Drinking IT-PMP7 IT-PMP9	Resources are a water source and glass within reach
	Food preparation and eating IT-ATL8 IT-PMP7 IT-PMP9 IT-PMP10 IT-SE12 IT-C5	<p>Food preparation activities including:</p> <ul style="list-style-type: none"> - cutting IT-PMP9 - grating IT-PMP9 - juicing IT-PMP9 - mixing IT-PMP9 - shelling IT-PMP9 - kneading IT-PMP9 - peeling IT-PMP9 - modelling by adult and more expert children IT-PMP9 <p>Resources include utensils matched to children’s size, strength and dexterity.</p>
	Toileting IT-PMP7 IT-PMP9 IT-SE12	<p>Resources include:</p> <ul style="list-style-type: none"> - accessible toilet matched to children’s size and level of independence - adult support
	Dressing and undressing IT-PMP7 IT-PMP9 IT-SE12 IT-C6	<p>Activities that include:</p> <ul style="list-style-type: none"> - washing hands IT-SE10 - cleaning teeth IT-SE10 - blowing nose IT-SE10 - brushing hair IT-SE10 - cleaning shoes IT-SE10 - role-modelling by adults and more expert children <p>Resources include:</p> <ul style="list-style-type: none"> - storage hooks/cubbies and

		<p>furniture matched to children’s size and strength</p> <ul style="list-style-type: none"> - grooming area with mirror matched to children’s size <p><i>dressing frames</i> for learning how to use - buttons, zips and Velcro IT-SE12 IT-C12</p> <ul style="list-style-type: none"> - implements matched to children’s size, strength and dexterity
<p>Care of the environment (indoor and outdoor)</p>	<p><i>Typically children will be able to:</i></p>	
	<p>Clean and care for the indoor environment IT-ATL9 IT-PMP7 IT-PMP9 IT-C6</p>	<p>Activities include:</p> <ul style="list-style-type: none"> - dusting IT-ATL9 - cleaning mirrors and windows IT-ATL9 - polishing wood IT-ATL9 - washing cloths IT-ATL9 - washing and drying dishes IT-ATL9 - sweeping IT-ATL9 - beating rugs IT-ATL9 - scrubbing tables IT-ATL9 - role-modelling by adults and more expert children <p>Resources include implements matched to children’s size, strength and dexterity.</p>
	<p>Clean up spills IT-PMP7 IT-C7</p>	<p>Activities include wiping, mopping and sweeping using implements matched to children’s size, strength and dexterity. IT-PMP9</p>
	<p>Care for plants and garden IT-ATL6 Observe and appreciate nature IT-ATL4</p>	<p>Activities include:</p> <ul style="list-style-type: none"> - dusting and wiping leaves IT-ATL9 - arranging flowers IT-ATL9 - planting and watering plants IT-ATL9 - growing seeds IT-ATL9 - raking and sweeping IT-ATL9 <p>Resources include implements matched to children’s size, strength and dexterity.</p>
	<p>Care for animals IT-ATL6 IT-ATL9 IT-PMP7</p>	<p>Activities include:</p> <ul style="list-style-type: none"> - learning appropriate behavior around animals IT-PMP10 - feeding animals - caring for animals’ habitat

	Develop a connection with reality and purposeful work IT-C2 IT-C4	All <i>practical life</i> activities IT-ATL7
	Develop a responsibility for the environment IT-C2	All <i>practical life</i> activities IT-ATL9
Social relations	<i>Typically children will:</i>	
	Acquire appropriate language IT-LC1	Resources include: - modelling by adults and other children IT-C11 - supportive adults and other children to observe, imitate and with whom to interact IT-SE1
	Experience interactions with others IT-ATL1 IT-SE5 IT-SE9 IT-SE12 IT-SE13 IT-C2 IT-PMP1	The resources are adults and other children in the environment. IT-SE3
	Begin to acquire culturally appropriate customs and manners IT-C3	Adults model behaviors at point of need. IT-SE9 T-PMP10
	Develop awareness of self and others IT-SE5 IT-SE7 IT-SE9 IT-SE10 IT-SE11 IT-SE13 Experience taking turns IT-ATL5 IT-C1 IT-C3 IT-C4	Children are respected as individuals and are free to choose and complete their own work. The environment is prepared so children have space for their own work. The number of each set of materials is limited, generally only one of each set. In this way children learn to value each activity and to take turns. IT-C3
	Preparing food for others to share IT-C5 IT-SE4 IT-SE8	Food preparation activities include: - making bread - cutting up fruit

Mathematics

One of the human tendencies is to measure the world and to calculate quantities. Infants are born with this tendency, which is called the 'mathematical mind' by Montessori educators. From birth infants observe and respond to measurable physical relationships in their environment in order to be able to orient themselves to the environment and to make sense of it. They assess, measure, hypothesize, order and classify as they explore their environment with their senses and learn to operate in their environment. To crawl or walk from A to B involves assessment and calculation. Up to three years of age this is done unconsciously and by using the senses.

Many of the activities in Montessori settings prepared for infants and toddlers provide sensory experience of mathematical relationships. Some examples are:

- The Montessori materials provide experiences with dimension and form, sequencing, patterns, order and comparison. They also encourage reasoning and calculation.
- The Montessori environment and program provides experiences in shape and space, time and predictability and enhances working memory.

- Food preparation activities provide experience with measuring, quantity, weight, volume, sequencing and fractions.
- Puzzles, exact matching of nomenclature objects and cards, table setting, and flower arranging provide **one-to-one correspondence. ITC10**
- Language materials provide classification experiences.
- Washing hands, dishes and cloths provides experience with volume, weight and sequencing.
- Sand play provides experience with quantity, volume, weight, measurement and area.
- Songs, poems and finger plays provide experience with number.
- Counting books provide number experience
- Mathematical language pervades the environment – ‘more/less’, ‘right/left’, ‘up/down’, ‘high/low’, ‘in/out’, ‘big/little’, ‘large/small’, ‘heavy/light’, ‘some’, ‘full/empty’, ‘same/different’, ‘near/far’, ‘under/over’, ‘open/close’, ‘here/there’, ‘fast/slow’, ‘today/yesterday’, etc.

These experiences in the *Nido* and *Infant Community* provide indirect preparation for the introduction of more formal concrete mathematical materials in the Montessori preschool setting, the *Children's House*.

Science, Geography and History

Children from birth are interested in the world around them. They observe the natural world and absorb the culture of the society into which they are born. Children are fascinated by the way the world works, by the life of plants and animals, by the features of the places they find themselves in and by the customs and stories of the people around them.

In later educational contexts these interests are taken up formally in the study of science, geography and history. In the Lumin Bachman Lake Community School Program they are integrated across the curriculum. Often children pursue their interest in science, geography or history as an extension of the exercises of the senses, because it is through the senses that children first perceive, observe and explore phenomena related to these fields of study.

In the *Nido* and *Infant Communities*, children experience nature informally through sensory experiences inside and outside the classroom. Many experiences happen spontaneously in the garden, for example:

- planting seeds
- watering plants
- cleaning leaves
- raking leaves
- arranging flowers
- observing animals

Creative Arts

Music

Music, in the Montessori view, is like language; it is an aspect of human expression that is integrated into daily life. From birth children delight in and respond to music. Often this delight is expressed through movement. The exercises of practical life build foundation skills in whole body and fine motor control of movement and hand-eye coordination children can use to participate more effectively in musical activities and exercises.

In *Infant Communities* music and movement are integrated in activities that include:

- listening activities in which children move to music
- playing simple percussion instruments
- sense exercises in auditory discrimination
- games involving singing and movement

Content Strand	Knowledge, Skills and Understandings	Activities and Resources
	<i>Typically children will:</i>	
Music: <i>auditory discrimination</i>	Listen to the sounds of objects IT-ATL3 Identify objects by sound Experience timbre, rhythm and beat	Activities include: - singing - identifying different voices Resources include: - rattles - balls with a rattle inside - percussion instruments - sounds in the environment
Music: <i>timbre</i>	Listen to and play simple instruments	Resources include a range of percussion instruments.
Music: <i>Self-expression</i> IT-ATL8 IT-SE6	Develop the skills to express themselves	Activities involving self-expression in music, movement and drama, including: IT-C13 - singing IT-C13 IT-SE5 - movement and dancing IT-C13 - playing percussion instruments T-C13 - movement games IT-C13 - finger plays IT-C13

Movement and Dance

The development and refinement of movement is an integral part of the child's development from birth to six years of age. The ability to appreciate dance and to be able to move one's body as a form of expression is an important facet of children's development. The focus on specific movements can assist children's development in many other areas, for example whole body coordination. Dance is also an important aspect of health and physical exercise. Young children have a natural sense of rhythm and often lack inhibition so dance comes naturally and spontaneously to them.

In *Infant Communities* movement is one of the most critical components of the environment. Dance is experienced through movement and music activities.

Visual Arts

Artistic expression was considered by Dr Montessori to be one of the fundamental needs of humans. In particular, she encouraged children to draw. She felt that if children have fine motor control of the hand, learned through the exercises of practical life, combined with trained skills in perception, learned through the exercises of the senses, they would be able to create visual art works of a high quality.

In *Infant Communities* art activities include sewing, cutting, painting, gluing, drawing, working with clay and flower arranging.

Parent Education

Montessori education is *an aid to life* and is not restricted to the prepared environment. An important part of Montessori education is working with parents, families and the community to foster understanding and appreciation of the extraordinary development of young children from birth to three years of age.

Montessori educators provide parents with as much information as possible about child development at this stage, how parents can nurture that development and the way the Montessori approach can support that development. The ways this is achieved include:

- group socializations (group connections)
- classroom observations
- provision of videos, DVDs, books and articles
- discussion groups
- home visits.

Throughout the year there are regular individual meetings offered to parents and prospective parents.

Adults awaiting the birth of a baby and those waiting to adopt may also be invited to attend these environments to observe and gain understanding of infant development. It is part and parcel of the role of the trained Montessori *Assistant to Infancy* to promote understanding of development at all times. For this reason, parent information sessions are not restricted to parents of children attending Montessori centers.

Family Support

Early childhood settings are often the first point of contact for families needing additional support. Montessori early childhood settings aim to be a welcoming community center, a place of learning, and a safe place for children. The Montessori approach recognizes that children come from widely-varied family settings, and that culture, home life and family situation all affect learning and development. Family support may include consultations in the home or at the centre, referrals to other services, support in crisis situations, and informal information and advice.

Community Outreach

The role of Montessori *Assistants to Infancy* includes sharing their knowledge and expertise in the field of early childhood development, with other professionals and the wider community. This may involve formal or informal presentations and talks including the following:

- speaking at public conferences and workshops
- speaking to other early childhood professionals and professional organizations, such as nursing mothers associations, pediatricians, pediatric nurses, speech pathologists, occupational therapists and child psychologists
- building links with non-government organizations who work with children, particularly disadvantaged children
- giving talks to adolescents to prepare them for future parenthood.