

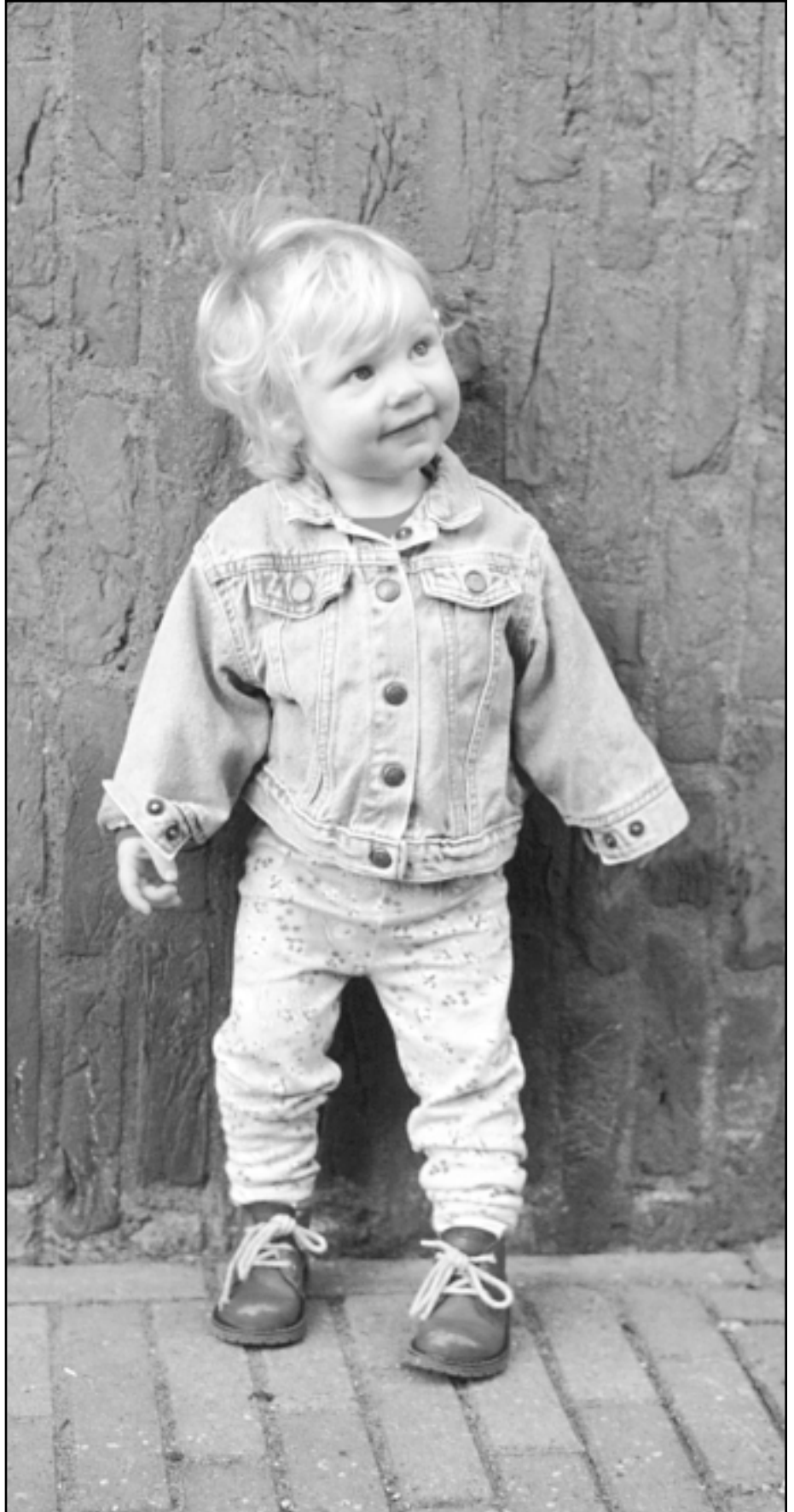
Montessori Infant-Toddler Programs:

The Best Beginning

There is an ironic prejudice about education found in almost every country: the older the students are that one teaches, the higher the pay and respect for the teacher. We take it for granted that a professor in a graduate school is a more prestigious position than that of a high school teacher, which is, in turn, considered a more sophisticated position than teaching elementary and, of course, both are far more respectable than that of a nursery-school teacher. And no one in his or her right mind would want to teach infants and toddlers, right? Yet research clearly shows that the most important period in a human being's educational and emotional development are not the years of high school and college but rather the first six years of life.

Human beings are a magical combination of at least three factors: our genetic inheritance, our biological development, and our experiences.

Authors' Note: We wish to thank Susan Tracy, M.Ed., Director of the Learning Together Parent Education Center in Palatine, Illinois, for her invaluable assistance in co-authoring and preparing this chapter. We also thank the many schools that welcomed us into their infant-toddler classrooms. In the case of K.T. Korngold of The Montessori Children's Center at Burke (White Plains, NY), we wish to extend a special thanks for allowing us to enter "Sarah's world," a beautiful at-home Montessori infant environment that is pictured throughout this and the following "Montessori in the Home" section.





Genetics play an enormous role. In addition to the more obvious issues such as our sex, eventual height, and the color of our eyes, genetics determine our special gifts and handicaps, predispositions, and many aspects of our interests, talents, and personalities that scientists are only now beginning to understand.

However, whatever potential or predispositions we inherit from our parents, they will only be developed if our bodies are allowed to develop normally. A child who is malnourished in the critical first six years of life, or who suffers a devastating disease or physical injury, will normally develop much less of his or her potential as a human being than one who enjoys good health.

Equally important, and most relevant to this book, is the question of the

child's early education. Of course the brain is not a muscle, but like a muscle, the brain only develops through active use. This is especially true in the years of infancy and early childhood.

In the past, many people pictured a child's mind as a blank slate on which adults, through instruction, could "write down" the content of a good education. Likewise, another common metaphor was that of an empty bowl, waiting to be filled with the contents of the school's curricula. Montessori demonstrated that both concepts are inaccurate.

The young child's mind is more like that of an acute observer or scientist, eager to learn, explore, try new things, and master new skills. But most importantly, she recognized that with stimulation, the child's ability to concentrate, absorb, and master new ideas

and skills increases, and that the earlier we begin a program of intellectual, physical, sensory, and artistic education, the more dramatic the result.

This is a time of great sensitivity to language, spatial relationships, music, art, social graces, and so much more. If, during this period, the mind is stimulated by the child's exposure to a rich environment, the brain will literally develop a much stronger and lasting ability to learn and accomplish. In short, while our culture may believe that preschool teachers are the least significant educators our children will encounter, in reality the contribution that they offer is of incredible importance in a child's education.

This is especially true of those who teach infants and toddlers. So please forgive us when we cannot hide our frustration when parents say things

like, "Oh, for goodness sake, my child is just in preschool! Education during these years is not all that important! All she needs are teachers who are warm and kind."

**~~The Terrible~~ Terrific Twos:
Montessori for the Infant and
Toddler Years**

The concept of a specific program for these very young children was developed by Adele Costa Gnocchi and Dr. Silvana Quattrocchi Montanaro at the Centro Educazione Montessori in Rome. This world-famous teacher education program awards the Association Montessori Internazionale's Assistants to Infancy Certification, preparing Montessori educators to work with children from birth through age three. Over the last twenty years, other Montessori programs have developed infant-toddler teacher education programs of their own.

Infant-toddler Montessori educators are passionate about their work. Inspiring teacher educators Celma and Desmond Perry, Virginia Varga, and Carole Korngold have tirelessly advocated the importance of these programs and are slowly beginning to convince Montessori schools around the world to develop them.

Montessori programs for children under age three are not quite as rare as hen's teeth; however, they are anything but common. Toddler classes are still fairly few and far between, and infant programs are still so uncommon that parents would be fortunate to find one in their community. Where infant and toddler programs do exist, they tend to be extraordinarily popular, and it may be quite difficult to find an opening unless parents begin their search a year or more in advance.





(Above) Young children enjoy constructing new shapes with a wide variety of blocks and connecting materials.

Why don't more schools offer infant-toddler programs? Basically there are four major reasons.

The first is that there are very few certified Infant-Toddler Montessori teachers.

Secondly, because only a handful of children are supporting the trained teaching staff and classroom, these programs are more expensive to run than the classes for three to six-year-olds, and few schools feel that they can ask parents to pay the true cost of operation. As a result, many schools lose money on this type of program. The compensation is that the children who come through these programs will be

among their very best students in the years to come because of their early start. In some cases, state regulations may prohibit schools from accepting children under age three. Similarly, in some states, operating a program at this age level may cause the school to be classified as a child-care center, rather than as an educational institution.

And finally, many Montessori administrators wrestle with the concern that if they accept children under age three, prospective parents will view the school as a day-care center, rather than as a school, which some administrators fear might cause their entire program to lose credibility.

The Four Common Types of Infant-Toddler Programs

Parent-Infant Programs

These are primarily programs designed to educate the parent of very young children in child development and the Montessori strategies for helping parents to respond to the needs they observe in their infants. These programs give parents an opportunity to observe their children and, through discussion, learn how they can best respond to their babies' needs. Normally, parent-infant programs will accept children under eighteen months of age. Parents come with their children to a short class normally lasting about ninety minutes, held once a week. Often, there will be a parent-teacher discussion held at another time during the week. Topics always include parent questions and concerns and a weekly topic, such as: sleep, nutrition, home environment, and infant and toddler development. The staffing is commonly one certified Montessori Infant-Toddler teacher with the parents working in the

A Note on Staffing: A key issue with infant programs is the adult-to-child ratio. State regulations vary, and the required ratios and maximum group sizes will vary from one state to another. The standard that we recommend for this age is lower than most states require – striving for a one-to-three adult-to-infant ratio, or a small group of normally nine infants to one teacher and two adult assistants. This tends to make such programs more expensive, but due to the low adult-to-infant ratio and the special training needed, the quality is well worth the cost. It is especially important that staff turnover in these programs be very low, as even the youngest infant tends to bond deeply with the adult caregivers. Their consistency over time is very important to the program's success.

room. In this model, parents learn how to observe their child and learn a great deal about child development to be used at home.

Montessori Infant-Care Programs

For those who need all-day care, there are a handful of Montessori Infant-Care programs, which normally accept infants aged six weeks to fifteen months of age. These programs are still very rare, but they are slowly beginning to spread. It is especially important in these programs that the lead teacher working with each group of nine infants be certified in Montessori Infant-Toddler education to ensure the quality of the program.

With infants, the schedule of the day is dependent on their needs. Each baby has a different schedule for feeding and sleeping. There should be a routine of stability and consistency; babies look for predictability.

Toddler Half-Day Programs

These programs will normally run for two or three hours a day. Some will accept toddlers from fifteen months and older, although this lower age range may vary due to local regulations and the school's decision about how it wishes to organize the program.

Generally, the low end of fifteen months is followed because by that age, most children are fairly mobile and have become very independent. Most toddler programs will begin with a somewhat older child of eighteen months, or even as old as twenty-four months. These groups will commonly include children up to thirty to thirty-six months of age, at which time the child is normally ready to move into a Montessori three-to-six class.

The typical schedule in a half-day toddler class might look something like this:

1. Arrival, greeting, storing coat and bag, changing shoes, choosing work.
2. A work period of 1½ to 2 hours.
3. Preparation and serving of a snack.
4. Group singing, finger plays, and movement to music: this is an activity in which toddlers may or may not choose to participate.
5. Outdoor time: running, climbing, swinging, exploring nature, sand and water.
6. Dismissal.

It is important that children move out of the toddler program to the next level not according to a simple age criteria

but when they are developmentally ready (when they are no longer challenged in the toddler program and are showing signs of being bored). This normally occurs at about two years eight months of age. We strongly recommend four- or five-day programs rather than offering two- or three-day options. Why? Because children, in general, and toddlers, in particular, need consistency and routine.

Staff Ratio: In a group of ten to twelve toddlers, you would normally have a certified Montessori Infant-Toddler teacher and an assistant. Some states allow a higher adult-to-child ratio. This small class size and low adult-to-child ratio tends to make toddler programs more expensive, but, once again, the quality is well worth the higher cost.

(Below) Even toddlers can help care for their environment. This young boy is shown washing windows.





(Above) This young student is getting one of her first art lessons in using the brush and paint.

A Note about the Role of the Adults in the Toddler Class: With the low adult-to-child ratios and the tender age of the children, many parents would expect to see the teacher and assistant interacting constantly with the children, as one might find in a more traditional child-care program. Montessori, however, encourages the development of each child's independence. In a toddler class, you will notice that the adults will not rush in continually to entertain or control the children; instead, they will quietly give lessons, redirect a child who is having difficulty, interact with the children verbally to help with their language development, and observe and take note of the children's activities.

All-Day Toddler Programs

These programs are quite similar to the half-day toddler class, except that children may remain all day for nine or ten hours. Obviously, in these programs, accommodation must be made for napping, meals, outdoor time and play, art, food preparation, and other activities. Because of the luxury of the extended hours, these programs can do much more with the children. Normally there will be some overlap in staffing, as some staff members arrive early in morning and leave in the early afternoon, while others arrive later and stay until the last child is picked up. Whoever remains until day's end should be prepared to communicate with the parents about how the day has gone.

The schedule for a full-day toddler class can be more relaxed — there is the luxury of more time for work, outdoor exploration, food preparation, art activities, and an early afternoon nap. Arrival and pick-up routines should be well planned to ease the transition for toddlers and parents.

What makes Montessori at the infant-toddler level different from child care?

Let's begin by considering the needs of the very young child.

Ideally, many of us would love to stay home and care for our newborns, but this is not always possible. When both parents have to leave the home to earn a living, Montessori infant-care programs offer a wonderful alternative.

Infant-toddler education begins during pregnancy. It is an important time of growth and formation. We want a mother to be healthy and peaceful and to feel supported. This is the time for the expectant mother to give her baby the best nutrition, avoid stress and toxins, and prepare herself

to be a mother. The father should prepare for the birth as well. Together parents should prepare their home for the baby and prepare themselves for a peaceful birth. We want every child to feel welcome and wanted and to have a peaceful beginning.

The First Three Months

The newborn period is sometimes called the "symbiotic" period because there are things that both the baby and mother receive from one another. Both benefit. The baby needs physical closeness, skin-to-skin contact, and to be held and surrounded. The warm surrounding feeling reminds them of when they were still in the uterus.

The best environment for a newborn baby is in her mother's arms. There she gets the warmth and feeling of being held. She can nurse or be held close while being bottle fed and still hear her mother's heart, breath, and voice.

The mother still needs to feel connected to this baby that was so recently inside her. Nursing helps the mother's body return to normal and helps her uterus shrink back to size. The uterus contracts in response to nursing, which helps control bleeding. A close relationship with the baby makes it less likely that a mother will have post-partum depression. Finally, nursing burns approximately 1,000 calories a day, which helps her to lose the weight gained during pregnancy.

During the first three months, the baby needs to bond closely to someone. Normally, this will be with the mother, the first and most important relationship in our lives. Without this attachment, the child will later have difficulty developing normal loving relationships with other people. The neglected child tends to have a hard time caring about other people and feeling compassion, and there seems to be some evidence that many crimi-



nals and people displaying aggressive behavior began this pattern during infancy.

The Development of the Very Young Child

The primary environment for the newborn is in the mother's arms. There is very little that new parents need to buy for their newborn baby. Of course the baby needs diapers (we recommend cloth diapers, rather than disposable). For the child's sleeping environment, the newborn might like the closeness of sleeping with his or her parents. Some newborns like the feeling of being in a basket or bassinet (many newborns still like the feeling of being surrounded).

As children reach four to six months, their bodies are beginning to change. The underlying cause is Myelination: the process by which a newborn's brain and nerve cells gain a fatty coating (Myelin) that serves as insulation and keeps the electrical impulses transmitted by the brain moving in the correct pathway along the nervous system. This is crucial to the child's development of the ability to coordinate movement.

Movement develops from the head down as the process of Myelination proceeds. During the first few months, young children refine their ability to move the head and control eye movements. They can see further and focus on moving objects. They spend a lot of time observing what is happening



(Above) During the child's first year, provide an environment that encourages movement without using containment devices such as playpens or "walkers."

around them. Because they are not yet mobile, they become people watchers.

During this period, they learn how to roll over and creep, and sit (normally by six months). Crawling follows at about eight months, and most children will begin to "toddle" at about twelve months. Thus, during the child's first year, it is critical that we provide an environment for movement. We avoid containing children in playpens, cribs, walkers, jumpers, and child carriers except when necessary for travel or for short periods. Instead, we would provide time for the young child to be on a quilt on the floor, which would enable the child to move about freely.

We recommend that parents and infant programs provide beds that are low to the floor so that children can independently get in and out on their own. They quickly learn how to stay in the bed, and most will not roll out. For

the child who rolls, put a soft rug by the bed — just in case.

We recommend a tiny table and a chair with arms, instead of a high chair, as the child begins to eat solid foods at five or six months of age. For diaper changing, we recommend a pad on the floor in the bathroom instead of a changing table, since it is so easy for children to fall from changing tables. (See the following section on *Montessori in the Home* for more parenting tips.)

Toilet Training: In the "head-down" development of the young child's muscle control, about halfway through the process comes the development of sphincter control of the bladder and bowels. This process usually begins by ten to twelve months, and a

child can be out of diapers by eighteen months on the average and certainly by twenty-four months. Changing diapers in the bathroom allows parents to be able to work with the child on using the potty chair or toilet.

Arm and Hand Control: In addition to the "head-down" development of movement, there is development from the center out, referring to the arms and the hands. During the first few months, babies move and swing their arms with little control. Gradually at four to six months they begin to gain control of arm movement. Also at this age they have the ability to grasp objects with their whole hand. Between six and ten months they become able to use fewer and fewer fingers, until they begin to use a pincer grasp using the index finger and the thumb.

The Infant Classroom Environment: A Montessori infant classroom has an area for the youngest babies, with quilts on the floor, mirrors at floor level, mobiles to observe, bat and grasp; balls and rolling toys to "chase" by creeping; and rattles and objects to hold, shake, bang, and mouth.

In an all-day infant or toddler program, there are low beds available for naps. A half-day program may just have

(Below) Montessori Infant-Toddler classrooms provide low beds or mats so that the children can get in and out of bed independently when they are tired.





(Above)
During the first few months, young children refine their ability to move their heads and control their eye movements.

one low bed in case someone gets sleepy.

Movement is critical to brain development — it is as necessary as nutrition! Most classes for children under age eighteen months will include a stair with low steps and a railing for use by children who are beginning to crawl and walk. The class will have bars and furniture placed around the room on which young children can pull themselves up. There will normally be walk-

ing wagons, which little ones can push before they can take steps on their own. As they begin to walk, there are push and pull toys to take along.

As a general rule, in order to encourage movement among children under eighteen months, the less restrictive the clothing, the better. Rooms are kept quite warm and cozy, allowing infants and very young children to spend time in comfortable clothing that does not inhibit their freedom of movement.

The infant classroom typically contains one or two low shelves with fine-motor activities such as puzzles, bead-stringing, rings on posts, a pegboard with large pegs, and various containers to open and close, fill and empty.

Our recommendations are generally the same for home and school settings for children under twenty-four months. At age two, we suggest some differences in how the home and school environment are organized.



The Infant Program

Practical Life for Infants

Practical Life is a major element in Montessori education for all age levels. For infants, Practical Life at this level basically allows their participation in caring for themselves and eating independently. As they reach fifteen months, toddlers love to spend time with their hands in water.

Fine-Motor Control

To assist young children in gaining control of their arms and hands, we provide mobiles, rattles, and objects to grasp and move. Infants like to experiment and discover cause and effect, such as shaking a rattle or banging things around to make a noise.

As the pincer grasp develops (age nine to twelve months), we feed the children very small bits of food such as Cheerios™ or grains of rice, which they can pick up and bring to their mouths. As the child is gradually weaned from breast or bottle to cups, we give them a small cup without a lid, about the size of a shot glass, instead of a non-spillable toddler cup. We also provide them with a tiny pitcher and they begin to pour their own drinks. When spoon feeding a child of five to nine months of age, allow the child to hold one spoon and the adult another, so that they can make beginning attempts to feed themselves.

Sensorial Development

All of an infant's senses are functioning at birth. They grow more acute over the years from birth to three.

Infants and toddlers are very interested in sensorial experiences. For

(Left) A mirror is a wonderful addition to any infant's environment at home or at school.



infants, we provide rattles, bells, music and the human voice for listening; mobiles and mirrors for visual stimulation, and varied textures for touching. Toddlers are learning to discriminate sounds, colors, and textures. They especially enjoy the sensorial experiences of the outdoors: sand, water, dirt, leaves, sounds of birds, wind, raindrops, and the feeling of the sun or wind on their skin.

Language Development

Receptive Language

An infant hears its mother's voice before birth and is intently listening and watching mouth movements from the time of birth. Infants gain under-

(Above) The sandbox is a wonderful extension of Practical Life for young students: pouring, scooping, using funnels, and cleaning the sand off their shoes.

standing long before they can speak. They need to be exposed to language with the adults around them talking to them and explaining what is happening. We should tell the baby what we are going to do before we do it. For example, we might say, "I'm going to change your diaper," or "Let's go get into the car." They begin to understand what we are telling them. Adults should just assume the baby understands them.

(Right) Using a child-sized mop in the toddler class is a much loved activity.





By twelve months of age, children are experimenting with their voices, imitating sounds, and generally saying a few words. It is most important that adults talk and listen to the child. In addition, we must provide language materials such as books, objects, and pictures for naming.

The Young Toddler

Between the age of fifteen and eighteen months, toddlers have a new awareness of themselves as separate, unique people. They know it is possible to act and to speak, but often they are not yet able to do what they would like.

This is often a frustrating time of life. Aggression, such as pushing,



(Above) Children should feel that they can rest when they are tired.

(Left) Having carefully selected containers of the right size with large mouths and lips for pouring, even very young children can develop fine eye-hand control.

(Below) A toddler classroom at Montessori in the Gardens, Dunedin, New Zealand.





(Left and above) Bathroom activities are an important part of Practical Life for the infant and toddler. The bathroom is prepared with a mat on the floor for changing diapers. Once they can stand, the child's clothes are changed while the child is standing up. A potty chair and toilet are provided. A child-sized toilet is ideal, but if that is not available, we can put a smaller seat on the toilet and a stool to help them get up on the toilet independently. Unless we have a low sink, there must be a stool high enough for children to wash their own hands.

hitting, and biting is fairly common and is normally outgrown as the toddler gains speech and learns other techniques for coping.

It can help tremendously for the adult to acknowledge rather than judge: "I know, you wanted the ball and Stephen has it." "You look very angry!" They do not yet have the self-control to obey consistently, so adults must supervise and offer constructive activity.

Practical Life for Toddlers

Once the toddler is walking (on average at about twelve months), this frees their hands for work. Their new interest is in accom-





plishing things with their hands. They want to imitate what they see adults doing, and they want to gain independence. Adults will observe beginning signs that the child is interested in dressing and undressing himself. The child will also become interested in tasks such as brushing their own hair and putting things away around the house.

Because the child is just discovering that he is a separate person from his parents, he very strongly asserts this independence. The wise adult allows toddlers to have independence to explore and to make choices within a safe environment. We need to give freedom within the security of limits and within a loving and trusting relationship.

The toddler needs more independence at home. Parents need to step back and allow them to do things for themselves. Toddlers can also benefit from attending a Montessori class where they have some independence from parents and lots of opportunity for exploration and learning. Because they are gaining coordination of their hands, toddlers enjoy fine-motor tasks, such as puzzles and stringing beads. They also enjoy the challenge of cooking and can help prepare food at home and at school. Practical Life activities for toddlers are simpler than at the three-to-six level and follow simpler lines. The young child enjoys activities, such as table washing, hand washing, dish washing, sweeping, and mopping.

Sensory Training

At the toddler level, Montessori programs tend to place far more emphasis on Sensorial activities. Generally these will be at the lower end of the normal three-to-six Sensorial activities. As with the Sensorial activities found at the three-to-six level, Sensorial activities challenge the younger child to match objects by size, shape, color, or to



Toddlers learn lessons in grace and courtesy by shaking hands with their guides and visitors to their classroom.

solve simple puzzles. Toddlers enjoy sensorial exploration of water, sand, dirt, clay, textured objects, the smell of flowers and food, discriminating size, color, and sound.

Language

Between eighteen months and age two, there tends to be an explosion into spoken language, with young children learning new words every day. First we hear them speak using mostly nouns: "ball" instead of "please give me the ball," or "I threw the ball. Hooray for me!"

As they learn to speak in phrases, toddlers begin to add the other parts of speech. Most of their vocabulary is present by their third year, and researchers estimate that most children have learned seventy percent of the vocabulary they will use as adults by age three.

In Montessori Infant-Toddler environments, we provide language materials such as books, objects and pictures for naming, but most important is that the adult talk and listen to the child.

Art

Toddlers enjoy basic creative work such as cutting paper, gluing, coloring with chalk and crayons, painting with watercolors or at an easel.

Music

We can provide music in several ways. We may sing with a large group of children, or just one or two. Music need not be limited to a certain time of the day. Toddlers are learning language, so they are interested in the words as well as the melody.

Some can sing along; some still listen. They are learning to control their movements, so they enjoy simple finger plays and movements to music. It is important that we do not expect toddlers to sit as a group for a long period.

For part of the day, we may have varied background music playing. Certain songs could signal transitions in the schedule. Toddlers could also have the opportunity to choose music and listen on head phones. This can be very calming.

