The Prepared Environment

Introduction

Dr. Montessori continually reminds us to look at the child; that it is the nature of childhood we are studying, not an educational pedagogy. She tells us, “Education is not what the teacher gives, education is a natural process spontaneously carried out by the human individual... by his experiences upon the environment.” (Montessori, Education for New World, p.3, Kalakshetra, 1974)

If the child's experiences in his environment are so significant, then it becomes essential that we also understand not only child development, but also what we mean by “environment.” Consider the last two definitions in Webster’s: “the complex of physical, chemical, and biotic factors that act upon an organism ... and ultimately determine its form and survival.” And also, “The aggregate of social and cultural conditions that influence the life of an individual or community.” With these definitions, all aspects of life, internal and external, individual and societal, contribute to the environment.

With the absorbent mind, the child creates all aspects of his personality and intellect from what he finds in his environment. The child’s “form and survival” depends on the quality of what he finds in his environment. And remember, the child cannot differentiate between which conditions will be helpful and support his development, and which will be harmful and hinder his development. He takes in everything about him and weaves it into his character. The child will grow and develop in any environment, but our aim should be to provide the most perfect environment we possibly can to support the growing life of our children.

Almost everywhere we look, nature has provided the most perfect of environments for developing life. Have you noticed how the monarch butterfly lays its eggs on the milkweed plant? When the larva emerges, it has the perfect food supply readily available. By the time the caterpillar has eaten most of the leaves on the plant, it is of just the right maturity to build its chrysalis. Nature has provided just enough, at just the right time.

Think of the natural environments for the developmental stages of the frog. The tiny embryo eats the content of the egg until it is gone and a tiny tadpole has developed enough to live in the water. The tadpole has gills to take oxygen from the water and a tailfin to propel itself underwater. It takes from its environment what it needs to grow, and gradually the gills change to lungs and legs replace the tail. Now nature has given just what the young frog needs for life out of the water. Nature provided just enough at just the right time.
Humans, by contrast, have created an environment that is actually unsafe for its young. We spend much of our time protecting our children from the hazards we ourselves have placed in our environment. We place children in an adult environment that is too fast, too busy, filled with toxins, noise, and complexity virtually inaccessible to the young child. It is easy to see why Dr. Montessori calls the child the "forgotten citizen." In this culture, it has even become a "badge of honor," of sorts, for new parents to declare that their young baby won’t change their life at all, and they will continue to do everything just as they did before the baby was born.

The environments that adults have created are, in many ways, well designed for adult work; they are complexly organized and efficient with a division of labor to achieve maximum productivity with the least effort. But we know that this is the exact opposite of the way that children work to develop themselves. Each child works individually and joyfully with maximum effort and no regard at all for productivity or efficiency. This is directly at odds with the adult environment in which the child finds himself. Dr. Montessori does not mince words when she describes this incongruence; she says,

"The great tragedy of the child is that he is born for the environment and the environment does not accept him. He is the potential master of the environment and the environment is closed to him. This is the great tragedy of the child."

(Montessori, unpublished London Lecture #15, 1946)

And yet, the child has to come to terms with this environment, to adapt to this environment, because his ultimate task is to become a man of his time and place, to “realize the present stage of an evolving society.”(Montessori, The Absorbent Mind, “Embryology and Behavior,” p.58-9, Kalakshetra, 1984) The child can only do this by his own experiences in his environment but we have limited and compromised the experiences available to the child. How do we remedy this situation?

Dr. Montessori gives us the answer to this paradox. In order to support the child's spontaneous development, we must allow the child the freedom to experience the world in his own way, to explore and assimilate the world and all of its principles. Adults must

"Construct a bridge between their world and that of the child. Montessori education provides this bridge through the prepared environment... The idea is not to replace the adult world in miniature... rather, the prepared environment should bring the world at large, and thus the adult world, within reach of the child at whatever stage of development it is, at a given moment.”(Mario Montessori Jr., Education for Human Development, p. 20, Schocken edit., 1977)
As we continue the process of deconstructing our conventional ideas about children and our societal prejudices towards them, we are rebuilding a new way of looking at the child based instead on supporting his universal laws of development. Now we must also discard our notions of what it means to “educate a child” and instead look at what it means to prepare an environment that will aid the process of developing life. In this way, we can assist the child in using the unique powers that nature has provided, the absorbent mind and the sensitive periods, to adapt and understand the complicated life around him. We will prepare an environment that is “just enough at just the right time.”

The Three Essential Components of the Prepared Environment

A Montessori prepared environment gives the child the opportunity to develop in accordance with the laws of nature. To do this, any environment that we prepare for the child must have three components:

- A group of children who are in the same stage of development
- Materials and activities, which match the needs and work of the children at that stage of development
- A trained adult who understands child development, who can prepare and maintain a special environment, and who can connect the children with the materials and activities within that environment.

The standard image of the relationship between these three components is an equilateral triangle. The children, the materials, and the adult make up the three sides of the triangle. Each side is equally important, and together they form an extremely stable construction.

Although these components are found in any Montessori prepared environment, it is the developmental stage of the children that determines specifically what that environment will look like and how it will function. Remember that at each of the four planes, or stages of development, the child has very different needs, and so the environment that will best meet those needs is also very different. Think of the prepared environment for the adolescent at the Farm School- although there is still a group of children in the same developmental stage, activities and materials that will aid their development, and trained adults to connect the students to the activities, it would be entirely unsuitable for a child of 3 to 6. Similarly, the seven year old elementary student who wants to explore the universe with his reasoning mind and imagination would find the concrete, limited environment of the Casa a prison to his expanding mind and burgeoning social development.

So let us focus on the prepared environment for the three to six year old, the Children’s House, by first reviewing the particular needs and characteristics of the first plane child, and then examining the three components of the prepared environment.
Review of the Child’s Needs and Characteristics during the First Plane
We first talked about the needs of the child from 3-6 during the lecture on *The Four Planes of Development*. We know that the young child is in what Montessori calls the “first plane of development”; from birth to age six; and that during the second half of this period, from around 3-6 years, the child is able to begin to *consciously* work at refining and organizing the myriad of impressions taken through his senses. Remember that this is the second sub-phase of the first plane, the time of crystallization, of the “Conscious Worker,” when the child is becoming more aware of his work. The child needs *physical and psychological nurturing and protection* with a *consistent caregiver and environment*, but now this will expand to include the Children’s House community. She needs opportunities for *sensorial exploration*, *liberty of movement* and to *manipulate objects*. She needs opportunities to practice *communication* and experiences with the *social and material culture* of her people. She needs the opportunity to practice the skills of *functional independence*. He also seeks a larger society than that of the family and the home, and begins to *explore social relationships* with others.

In addition to identifying these needs, we have discussed the principle of the *human tendencies* that propel us towards actions that enliven our spirit; and that these tendencies manifest differently at different stages in our development.

We know that the young child possesses a unique mental quality, the *absorbent mind*, which allows him to take in information effortlessly and joyfully. He has temporary *sensitive periods* that irresistibly draw him towards mastering particular aspects of life.

It is essential that we keep these needs and characteristics in mind, and use them as our guide when we consider preparing a Children’s House environment that is “just enough, at just the right time.”

“A Group of Children in the Same Stage of Development”
Because children must ultimately grow up to become members of society, to be adapted to the society of their time and place, it is essential for them to have the society of other children at this age. Montessori writes, “It is the society of little children who are guided by the magical powers of nature. We must value it and treasure it, because neither character, nor the social sentiment can be given by teachers. They are products of life.” (Montessori, *The Absorbent Mind*, “Cohesion in the Social Unit” p. 234, Kaledshetra, 1984) The child’s absorbent mind and the sensitive period for order urge the child to integrate the patterns of society. It is a function of the child’s life to do this work in relation to other individuals. The child cannot become a harmonious member of society without the company of others. This is the rationale for the Children’s House, even when the parents have chosen to stay at home with their young child.
Montessori is clear that there must be mixed ages within the group of children. This type of living together with mixed ages is similar to the structure in a family and is essential for individual development and social cohesion. She writes, “This fact makes such a difference, that if one were to put all the ones of the same age together, there would be no success, and it would be impossible to apply our method.” Generally one-third of the class are five year olds who have been with the class for two years, one-third are four year olds who have been with the class for one year, and one-third are brand new three year olds. (Montessori, The Child, Society, and the World, “Montessori's Alternative Comprehensive School, p. 64-65, Clio 1989)

Regarding the total number of children in the class, Montessori says, “In its best condition the class should have between thirty and forty children.” There may be more, depending on the capacity of the teacher. She continues, “When there are fewer than twenty-five the standards become lower, and in a class of eight children it is difficult to obtain good results.” She tells us that the best results come with greater numbers - “twenty-five is sufficient, and forty is the best number that has been found.” (Montessori, The Child, Society, and the World, “Montessori's Alternative Comprehensive School, p. 64-65, Clio 1989)

It is important to know what Montessori wrote about the composition and size of the class and to keep an open mind, especially as this idea flies in the face of current conventional bias towards the benefits of smaller class sizes. Keep an open mind when considering having forty children in your own class as well. This is not often seen in the United States. State licensing agencies have regulations that need to be followed regarding adult/child ratios, but consider for instance, modifications to physical space and number of assistant teachers rather than decreasing the number of children. Try 40 children with 4 adults instead of 20 children with 2 adults. Our own experiences have confirmed that it is much more work trying to achieve good results with small classes than it is with larger classes.

“Materials and Activities”

The next component in the prepared environment of the Children’s House consists of the materials and activities that match the needs and work of the children in that stage of development. Not just any materials and activities, but those that “stimulate the interest of the children in the kind of purposeful activities they need to further their general development.” (M. Montessori Jr., Education for Human Development, “The Montessori Materials,” p.21, Schocken, 1977) Not only should everything in the environment reflect this distinction, but the environment must also protect the child from all obstacles to growth. It should be full of purposeful activities that stimulate mental and physical involvement, and rich in learning activities for the absorbent mind.
The Montessori materials have an internal and an external purpose. They further the inner development of the child by providing a means to act on sensitive periods and human tendencies. But the materials also aid the child in acquiring new perspectives in the exploration of the external world around them. The materials are not designed to “teach facts,” instead they make it possible for the child to continually reorganize everything she has experienced previously in relation to this new information. This increases the child’s capacity for learning. (M. Montessori Jr., *Education for Human Development*, “The Montessori Materials,” p. 22, Schocken, 1977) For instance, in the beginning, a child learns the color “green” and refers to all shades of green simply as “green.” But if we show the child a series of tablets in several different shades of green, from darkest to lightest, the child can reorganize her understanding of “green” to include this new information. Not only that, but she can also generalize that other colors must have different shades too.

The materials and activities that are found on the shelves in the Children’s House are there because Montessori found, through years of observation and experimentation, that these were activities that best met the children’s needs. Montessori writes, “The material of our schools today is based on the selection that the children have voluntarily made themselves from the mass of things that were at their disposal.” (Montessori, *The Child, Society and the World*, “Montessori’s ‘Alternative Comprehensive School’”, p. 64, Clio 1989) These were the materials that were chosen over and over again, by children all over the world. These materials provided just enough, at just the right time; they were the “keys to the world.”

In addition to being purposeful, the materials have several key features. Initially, these features help attract the child’s interest but on a deeper level, they lend a feeling of respect, dignity, and love to the child’s work. The materials are well displayed, accessible to the children, and scrupulously clean. They are arranged on low, open shelves that invite the child to touch and handle them. Implements and tools are real, functional, and proportioned to the child’s body. They are made of natural materials, such as wood, wicker, fabric, and ceramic; they are beautiful, and often breakable. The materials are limited in number, generally just one of any activity, which aids the child’s social development through practiced patience, respect for another’s work, and shared responsibility for community resources. The materials have a self-correcting nature that offers the child opportunity to experiment and work towards exactness without adult criticism or intervention, and often contain points of interest lead the child towards greater attention to detail.

We have organized the activities in the classroom into the related areas of Practical Life, Sensorial, Language, and Mathematics. These areas are distinct, yet integrated. Everything in the environment is a part of the child’s life and should call out to the child’s entire personality. The child’s sense of order is supported through the sequence of the materials on the shelves, and by the order within the
presentations themselves. The materials isolate just one new quality or concept, allowing the child to focus her attention and absorb it with clarity. Themes of progression run throughout the areas, from the whole to its parts, from general to specific, from concrete to abstract, from simple to more complex.

The Four Areas of the Children’s House

The activities of Practical Life are among the first to greet the child. These exercises begin very simply and through them, the child learns to adapt herself to this new social community. She gains self-confidence and independence as she learns to control her body. She strengthens her mental processes as she concentrates on the logical sequences in the activities. She practices the fine motor control, manual dexterity, and coordination that serve her developmental needs and will be applied later as well. Through these purposeful activities comes a child who is normalized, freed from deviations, and who can concentrate on the task at hand.

Through the materials in the Sensorial area, the child becomes more aware of her senses and refines them through exploring the qualities of the world. She is aided in organizing and classifying all of the impressions that her absorbent mind has taken in. She forms concepts such as “broad” and “narrow”, and is given the names for these categories. The child learns to observe, compare, contrast, and look for patterns.

The Language area provides the tools for communication. Through spoken language, writing, and reading, the child develops an understanding and appreciation for the cultural heritage of the world around her.

Mathematics begins with concrete representations of mathematical concepts such as quantity and symbol, and gradually moves towards an integration of how numbers work together in the operations of addition, subtraction, multiplication, and division – without fear, anxiety, or boredom.

Remembering the image of the equilateral triangle that is the prepared environment, we have examined the group of children, the materials and activities, and now we will take a look at the role of the adult.

“A Trained Adult”

The third component in the Montessori prepared environment is a trained adult who understands child development, who can prepare and maintain this special environment, and who can connect the children with the materials and activities within that environment. She is the dynamic link between the children and the materials.
It is not enough to have a room full of eager three to six year olds and turn them loose among these shelves full of beautiful, developmentally appropriate material. You can imagine the bedlam that would ensue. It is the trained adult who uses her observation skills and her knowledge of child development to present the child with just the right material at just the right time. This is not an easy task, but it is the art, and the heart, of a Montessori teacher.

It is the adult who establishes the **psychological and physical safety** in the prepared environment through love for the children who will live in it. This love is not the same as parental love, but comes from the respect and concern of adults who recognize the profound work of the child and want to provide the best possible support for life-affirming growth and development. The Montessori adult sets the “tone” of the environment and creates, through her own example, an atmosphere of acceptance, love, and belief in the good within every child and within the social community.

The adult supports positive behavior through established limits:

- Children may not harm themselves, others, or materials
- Children may not disturb another’s work

She maintains the underlying structure for freedom of choice in the environment:

- Children may choose any activity from the shelf with which they have had a presentation
- Work as long as they wish
- Return it to the shelf ready for the next person

She continuously supports psychological safety and structure through the lessons of **grace and courtesy**, which offer positive models for social interactions and the means to carry out the ground rules. The basic rules provide for a happy, relaxed environment in which the children may freely move about and interact with one another.

It is the specially trained adult who prepares and maintains the prepared environment, taking into account the needs and characteristics of the group of children that it will serve, while following guidelines that apply to any Montessori environment, regardless of the age of the children.
General Qualities of the Montessori Prepared Environment

Beauty
The first of these is beauty. Our environments for children should be beautiful, with "grace and harmony in line and color." Montessori saw how the children responded to beauty, how it called to their spiritual nature. Think of how the elaborate architecture, lovely stained glass windows, colorful mosaics and paintings, and artistic woodcarvings create an atmosphere of calm and clarity in a church. This was in stark contrast to the commonly held belief that a classroom should be barren and devoid of any potential distractions so that the only thing the students would look at was the instructor. Montessori found that beautiful surroundings did not distract the children, but instead, that "beauty both promotes concentration of thought and offers refreshment to the tired spirit." (Montessori, *Advanced Montessori Method, Book 1*, "The Environment," p. 114, Clio, 2004)

Beauty also promotes care and respect for the environment, and offers a sense of worthiness that the child is deserving of the very best. Beauty includes the use of natural materials whose texture and colors call to the child’s spirit. Our environments should be as "home-like" as possible, with low windows that the children can see out of and open for fresh air, and that let in plenty of natural light. We might place lovely cultural artifacts where the children might freely touch or examine them.

Liberty of Movement
Another aspect of beauty, empty space, is necessary in order for the children to have liberty in movement. The children must be allowed to move about freely without the clutter of too much cumbersome furniture or unnecessary objects. Montessori refers to the balance of physical and psychic space, in the sense of comfort that comes from open space that offers the potential for mental and physical expansion.\(^1\) (Montessori, *Advanced Montessori Method, Book 1*, "The Environment," p. 112, Clio, 2004) As adults, many of us are particularly attuned to this idea, and find it much easier to work in a place that is free of clutter, or to completely relax in a room that is simple yet lovely. Other adults may relate to the Chinese practice of “feng shui” in creating environments that support the positive flow of energy. The children should be at liberty to circulate freely throughout the environment, choosing activities that interest them, and watching the activities of others.

Furniture
There are those who might think that as the children “move about freely” in this “open space” they would careen about and knock into the furniture, and so would need large, heavy furniture that would not move if a child bumped it. However, Montessori found just the opposite! She found that when children

\(^1\) Individual states have specific requirements for the amount of physical space required per child.
bumped into lightweight, child-sized furniture, the furniture offered them feedback that their movements were too hasty, and they needed to take more care. Conversely, the furniture itself celebrated the children’s careful movements when they were able to move a table without making a sound. Light colored furniture shows dirt and invites special care and cleaning. No adult has to chastise the children; the light furniture itself helps the children be more careful. Lightweight furniture, proportioned to the child’s body also offers him comfort and ease. The child does not have to sit, immobile, in an uncomfortable position; he can move about freely in body and in spirit. (Montessori, *The Discovery of the Child*, “The Environment, p.48, Balantine, 1983) The furniture should be arranged in “little rooms” and walkways that articulate the space and provide enticing areas for specialized work.

Tables are arranged singly, and in groups of two, three, or four at appropriate places, but there should also be spaces for working on the floor. The spaces for table and rug work should be integrated neatly so that there are no “odd gaps” when rugs are not being used. There could be a cozy chair for looking at books, or other places where a child might just sit and quietly rest. We are creating a place for children to live together; and so our environments will look more like “living rooms” than “schools.” (A.M. Joosten, “Notes on the Prepared Environment,” NAMTA Quarterly, Fall/Winter, 1979)

Outdoor Environment

The prepared environment should extend to the outdoors as well. A garden, either in the ground or in containers allows the child close contact with plants, botanical features, and the growing cycle. Montessori tells us that a small garden is preferred to a large park because the children must remain under close supervision in the park, but have liberty to explore a small garden freely. (Montessori, “The Children’s Environment,” AMI Communications, 1999/4) Children have a natural fascination for plants and animals and love caring for them. Some children have already absorbed the adult prejudices and fears towards animals, but bringing young children into contact with animals helps diminish these fears, and helps the children understand appreciate the lives of these creatures that share the earth. Mario Montessori writes, the children “begin to observe the outside environment, and the world is widened for them.” Mario tells of schools in the country in India where the children caught lizards and snakes, and the how the lizards learned to come when the children whistled for them. (M.M. Montessori, unpublished Lecture #3, London, 1946)

In addition to gardening and animal care, there should be many other different kinds of purposeful activities outdoors. There might be seasonal activities such as raking leaves, sweeping walkways, or shoveling snow, and the children should also be free to bring materials from inside to work on outdoors. There should also be opportunities for climbing, running, and other large movement activities, preferably with natural structures such as large logs, boulders, or small hills, rather than man-made play structures. An ideal situation would be the free flow of movement and activities from indoors to outdoors all throughout the day, as the children wish.
Conclusion

Dr. Montessori tells us “The right education depends fundamentally on the right environment. Seeing that the child has a distinct life rhythm, and that his activity has different aims from those of adults, he needs an environment apart, specially created for him.” (Montessori, “The Child’s Environment”, AMI Communications, p. 49, 1999/4) This specially created environment is not for the purpose of “educating” him, rather, we “prepare an environment for life, where the child can develop his life.” (Montessori, Creative Development in the Child, p. 52, Kalekshetra, 1994) This is the “Montessori Prepared Environment.” It allows the child freedom to follow the natural laws of development, offers special materials to assist him in developing and refining his skills, and a gentle adult presence to guide him in the process of adapting to the world around him. In doing so, the child is able to take his place as the future of humankind.

Montessori calls herself “at most, the child’s interpreter.” We too must become “interpreters.” She tells us that adults can “only help the great work that is being done, as servants help the master. Doing so, they will be witnesses to the unfolding of the human soul and to the rising of a ‘New Man’ who will not be the victim of events, but will have the clarity of vision to direct and shape the future of human society.” (Montessori, Education for a New World, p.3-4, Kalakshetra, 1974)
Quotes

Education is not what the teacher gives, education is a natural process spontaneously carried out by the human individual... by his experiences upon the environment.

Montessori, Education for New World, p.3, Kalakshetra, 1974

The great tragedy of the child is that he is born for the environment and the environment does not accept him. He is the potential master of the environment and the environment is closed to him. This is the great tragedy of the child.

Montessori, unpublished London Lecture #15, 1946

(Adults must) construct a bridge between their world and that of the child. Montessori education provides this bridge through the prepared environment... The idea is not to replace the adult world in miniature... rather, the prepared environment should bring the world at large, and thus the adult world, within reach of the child at whatever stage of development it is, at a given moment.

Mario Montessori Jr., Education for Human Development, p. 20, Schocken edit., 1977

It is the society of little children who are guided by the magical powers of nature. We must value it and treasure it, because neither character, nor the social sentiment can be given by teachers. They are products of life. Montessori, The Absorbent Mind, “Cohesion in the Social Unit” p. 234, Kalakshetra, 1984

In its best condition the class should have between thirty and forty children. When there are fewer than twenty-five the standards become lower, and in a class of eight children it is difficult to obtain good results. She tells us that the best results come with greater numbers - twenty-five is sufficient, and forty is the best number that has been found.


The material of our schools today is based on the selection that the children have voluntarily made themselves from the mass of things that were at their disposal.


The right education depends fundamentally on the right environment. Seeing that the child has a distinct life rhythm, and that his activity has different aims from those of adults, he needs an environment apart, specially created for him.

Montessori, “The Child’s Environment”, AMI Communications, p. 49, 1999/4

Montessori called herself, “at most, the child’s interpreter.” We adults can “only help the great work that is being done, as servants help the master. Doing so, they will be witnesses to the unfolding of the human soul and to the rising of a ‘New Man’ who will not be the victim of events, but will have the clarity of vision to direct and shape the future of human society.”

Montessori, Education for a New World, p.3-4, Kalakshetra, 1974
References


