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# Invisible Instruction: Exploring the Life and Work of Maria Montessori and the Montessori Method

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INVISIBLE INSTRUCTION

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SCHOOL OF HUMANITIES, ARTS AND EDUCATION

DEPARTMENT OF EDUCATIONAL STUDIES

INVISIBLE INSTRUCTION: EXPLORING THE LIFE AND WORK OF MARIA  
MONTESSORI AND THE MONTESSORI METHOD

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**Abstract**

This report moves forth to discuss the life and work of Maria Montessori and the Montessori Method. This method, which developed primarily in the early 20<sup>th</sup> century, is focused on independent learning and exploration. We will look at the formation of the Montessori Method per Maria Montessori's background and career in the medical field and education. The paper will then assess the many components of the classroom and fundamental principles of such, thus moving further into the practice and current existence of how the method stands today.

**Table of Contents**

Introduction.....3

Chapter 1 Maria Montessori.....4

    Early Life.....4

    Resistance.....5

    Medical Career.....6

    Movement into Education.....7

Chapter 2 The Rose of Montessori Philosophy.....8

    New Directions.....8

    Casa dei Bambini.....9

    Extraordinary Discoveries.....10

    Unwavering Concentration.....11

    Love of Order.....12

    Desire for Choice.....12

    Preference for Work Over Play.....12

    Success of Casa dei Bambini.....13

Chapter 3 Montessori Methodology.....15

    Methods in Action.....15

    The Montessori Classroom.....15

    The Teacher.....22

Conclusion.....23

### **Invisible Instruction: Exploring the Life and Work of Maria Montessori and the Montessori Method**

Upon entering a traditional preschool classroom, one is often greeted by vivacious colors and bright, eye-catching décor. Posters and artwork tend to live all over the walls, nearly as busy and lively as the students playing with toys in the center of the room. This scene is what we have come to know as the standard for early childhood education. However, upon entering Tiger Lily Montessori, an infant-toddler facility on the East Side of Providence, Rhode Island, we are greeted by a vastly different setup. Simple white walls are brightened by large plants, soft lighting and natural furnishings. Everything from tables and chairs, to rugs and cleaning implements are child-size and easily accessible. These items are strategically placed around the classroom, allowing children to move freely throughout, assess their materials, and choose based upon their own interest. Seven tiny bookshelves separate the classroom into neat squared off work areas, which enhances the fact that there is no focal point of the classroom. Children are free to explore and make use of any work they choose to, so long as the items are swiftly returned to their home upon completion. The work itself is practical; along each shelf one may find natural or every day objects, as well as specific Montessori tools and materials. At any given moment, one child may be working with pouches containing flower petals, while another is situated on an individual mat practicing yoga poses. So what exactly have we stumbled into upon entering this classroom? one may ask. To answer that question simply, we have entered into a classroom built upon the philosophy of Maria Montessori's Montessori Method. In order to understand this circumstance further, this paper stands to examine the life work of Maria Montessori, thus leading to the creation and implementation of the Montessori Method. Through

discussion of her background and influences, we will come to an understanding of the current state of this method and how it has existed in action over the course of time.

### **Chapter One**

#### **Maria Montessori**

##### **Early Life**

On August 31<sup>st</sup>, 1870, Alessandro and Renilde Montessori gave birth to their daughter Maria Montessori in the province of Ancona, Italy (Standing, 1984). Alessandro, an old school military man, and his charming wife, believed wholeheartedly in order and discipline. Throughout Montessori's loving upbringing, her parents enforced strict ideals in regards to education and social awareness. It has been reported that each day of her youth, Montessori was required to knit a certain amount alongside her mother, who would then donate the product to someone in need (Standing, 1984). This early recognition of the needs of others sparked a fire in young Montessori, fueling her naturally empathetic soul and aiding in the development of an early passion for helping others. Up until the age of 12, Montessori attended the state day school of Ancona. However, her parents made the thoughtful decision to move the family to Rome shortly after her 12<sup>th</sup> birthday to assure she received the best education possible (Standing, 1984). Fascinated by her schooling, young Montessori took a particular interest in mathematics. Her parents urged her to pursue this interest and become a teacher, the only truly acceptable profession for a woman in the late 1800s. Riddled with personal dignity and determination, Montessori shot this idea down quickly for she had her sights set on becoming an engineer. Following her passion, Montessori began to take classes at the local all boys technical school,

## INVISIBLE INSTRUCTION

much to the utter disgust of her male classmates (Standing, 1984). Despite the opposition she endured during this time, Montessori's passion for education did not falter. After completing her studies at the technical school, she decided to do the unthinkable and pursue a degree in medicine. At this time, no woman had ever been enrolled in a medical school in Italy. Upon her initial interest, she was able to obtain an interview with Dr. Guido Bacelli, the head of the University of Rome's Board of Education. Dr. Bacelli made it very clear to a young Montessori that her wishes were unobtainable. According to E.M. Standing's book *Maria Montessori: Her Life and Work*, "...she thanked him politely, shook hands cordially, and quietly remarked 'I know I shall become a Doctor of Medicine'. Thereupon she bowed and went out" (Standing, 1984, p.24). Per this interaction, Maria Montessori's intentions were clear and her drive was insurmountable. With an unyielding tenacity and pure grit, she eventually proved Bacelli wrong and was accepted into university; thus, Maria Montessori became the first female medical student in the country of Italy (Standing, 1984).

### **Resistance**

Although her accomplishment of acceptance to this program was groundbreaking, she was not met without resistance by her classmates. This hostility was nothing new to Montessori, yet proved to make her life incredibly difficult during this time. Male faculty and university administration found many in-class exercises to be inappropriate for Montessori to partake in, while in the company of men. For example, for her biological component of her degree, students were required to dissect human corpses (Standing, 1984). However this was not seen to be appropriate for Montessori to do in the presence of her peers, so she was forced to do such dissections after hours, alone with just the bodies. Despite being utterly dismayed and discouraged, Montessori obliged (Standing, 1984). In this instance, we see yet another example

## INVISIBLE INSTRUCTION

of her determination and disregard for the social constructs that were meant to hold her back. Thus, contrary to the beliefs of her peers and professors, in 1896 Dr. Montessori obtained her degree and became the first female Doctor of Medicine in Italy (Standing, 1984)

### **Medical Career**

Immediately diving into her field, Dr. Montessori quickly became an assistant doctor at the University of Rome's psychiatric clinic (Standing, 1984). As per her role there, she was required to make regular visits to 'asylums for the insane', as they were referred to, in order to gather subjects for the clinic. It was not long before Dr. Montessori began to notice a particular trend in the treatment of intellectually disabled children. These children were forced to reside in such asylums, grouped together with the 'insane', and were on the receiving end of utterly despicable treatment (Standing, 1984). Upon a visit to one asylum, Dr. Montessori was taken aback by the large number of students crammed into a very small room. The children's caretaker treated the children with true disregard for their humanity. The caretaker took to Dr. Montessori's ear to express her disgust with the children, for she could not understand why they would continue to play with the crumbs of their dinner after they had finished eating (Standing, 1984). As Dr. Montessori listened, she began to observe her setting. The room that the children were forced into was more than bleak- it was empty. Aside from their beds, there was no materials for engagement for the children, or toys for them to occupy their time with. Dr. Montessori came to the quick conclusion that these deprived children were merely playing with the crumbs of their food in an attempt to fulfill their natural desire to learn (Standing, 1984). The only vehicle these children had access to for intellectual stimulation was their hands, and the crumbs were their only hope of obtaining knowledge. After leaving the asylum that day, Dr. Montessori's views on the treatment of disabled children began to flourish in a manner that was



## INVISIBLE INSTRUCTION

quite contrary to the beliefs of professionals at the time. Put simply, “it became increasingly apparent to her that mental deficiency was a pedagogical problem rather than a medical one” (Standing, 1984, p.28).

### **Movement into Education**

As her career progressed, Dr. Montessori became fixated on the idea of education in regards to the disabled. She continued to deeply study the interactions educators and caretakers had with mentally disabled children, and failed to find a system that she found beneficial to anyone. In 1899, Dr. Bacelli, the same man who attempted to stop Dr. Montessori’s medical education, invited her to give a series of lectures on the education of the ‘feebleminded’ (Standing, 1984). At the culmination of these lectures, Dr. Bacelli posed the idea of opening a state orthophrenic school, where the teachers were comprehensively trained in the education of mentally disabled children. Considering her work in the field, Dr. Montessori was appointed director of the school from 1899-1901 (Standing, 1984). During her time here, she worked closely with her colleagues to develop a “special method of observation and in the education of feebleminded children” (Standing, 1984, p.29). Following the trend of her nature, Dr. Montessori became engrossed in understanding how mentally disabled children learned and tirelessly devoted herself to working with children and developing methods of teaching that could reach them.

Without the slightest bit of a doubt, Dr. Montessori’s work with these students was a wild success, so much so that not only were her disabled students able to learn to read and write, some were able to pass public exams alongside the “normal” children (Standing, 1984). However, while the education and psychiatric community was in awe of Dr. Montessori’s results, she grew deeply concerned with the education of the so-called “normal” children. It became her belief that

something must be terribly wrong with their schooling if the mentally disabled children were able to equal them in tests of intelligence. Dr. Montessori began to believe this was due to major differences in the education principles between the way the disabled and “normal” children were taught (Standing, 1984). In an effort to express her concerns, Dr. Montessori claimed (in regards to her work) “I became convinced that similar methods applied to normal children would develop and set free their personality in a marvelous and surprising way” (Standing, 1984, p.30). As soon as this mentality set in, Dr. Montessori knew her work had barely even begun. Thus, the initial seed that grew the Montessori Philosophy had been planted.

## **Chapter Two**

### **The Rise of the Montessori Philosophy**

#### **New Directions**

Having come to the aforementioned revelation suggesting applying this method to ‘normal children’ could have amazing potential, Dr. Montessori decided in 1901 that it was time to end her work with disabled children and begin a new venture. However, she did not feel as if she held a sufficient enough education needed to further her exploration. Thus Dr. Montessori decided to expand her own foundations by taking any and all opportunities that came her way. At this time, she was uncertain as to what she was looking for or where her career was taking her, but in some surreal way, Dr. Montessori knew that she needed to explore every avenue and take every step possible. Only this way would she find the answers to the questions she had yet to ask. At one point, she described this period as “A series of experiences linking themselves together to prepare for the next step” (Standing, 1984, p.31). During this time, despite being a lecturer at the University of Rome, she decided to reregister as a student and take an abundance of psychology

## INVISIBLE INSTRUCTION

and philosophy courses (Standing, 1984). She also furthered her knowledge of the work of Itard and Edouard Séguin- two scientists who dedicated their studies to the education of deaf-mute children and others disabled. While she was not studying, Dr. Montessori was appointed the Chair of Hygiene at a woman's college in Rome, Magistero Femminile. She held this position from 1896 through 1906 (Standing, 1984). In 1904, her career advanced yet again as she became a professor at the University of Rome, as well as the Chair of Anthropology. While holding this position, Dr. Montessori continued her lectures at the university, all of which were founded off two points that later appear in her pedagogical approach. The first was that the responsibility of the teacher is to aid and assist- not to judge the child. The second was that "true mental work does not exhaust, but rather gives nourishment" (Standing, 1984, p.34). As if her time was not already entirely consumed, Dr. Montessori all the while maintained a private practice, as well as continued to practice in clinics and hospitals throughout Rome (Standing, 1984). Her expedient nature resulted in an immense saturation of the world of children, thus expanding her desire to understand the hows and whys of child psychology.

### **Casa Dei Bambini**

In 1906, Dr. Montessori was propositioned with a job that not only came to shape her career, but resulted in the redirection of the entire education system. At this time, Rome's San Lorenzo quarter was the poorest, most run-down and hopeless section of the city. In an attempt to ameliorate the chaos that ran rampant throughout the community, abandoned buildings were turned into low-income tenement housing for the poor residents (Standing, 1984). Although the authorities were attempting to better the neighborhood, they could not prevent the vandalization and petty crime that was committed by the young children who remained home alone during the day while their parents were at work. The police decided that rather allow this to continue, it

## INVISIBLE INSTRUCTION

would be in the best interest of the community to rally all the children together and hire a professional to look after them on a daily basis (Standing, 1984). Having heard of her work in the field, a community member contacted Dr. Montessori and offered her this position. Considering her deep desire to work with ‘normal children’, she accepted gleefully. Thus, Dr. Montessori was granted a room in one of the tenement buildings, where she began to watch over sixty impoverished youth on a daily basis (Standing, 1984). The circumstance offered limited funding, so Dr. Montessori had to come up with alternatives to a traditional classroom setting. She was not given enough money to purchase student desks, yet just enough to buy the materials needed to make tiny desks and chairs. As for classroom materials, Dr. Montessori had to make-do yet again, using the available funds to create wooden tools that the children could work with. Ultimately the “classroom” setup appeared anything but resembling a traditional school environment (Standing, 1984). Due to these circumstances, Dr. Montessori was not expected to succeed. Between the lack of funding, lack of assistance, and resistance of the children, all the odds were against her. However, she knew deep down that this was the beginning of a breakthrough.

### **Extraordinary Discoveries**

The following six months far surpassed proving Dr. Montessori’s expectations. The school came to be known as Casa dei Bambini (Children’s House), an institution that opened the doors to a whole new world. What she came to observe in this classroom environment astonished even her own premonitions unto the underlying logic and rationale of children. Put best in E.M. Standing’s book *Maria Montessori: Her Life and Work*, “Montessori discovered that children possess different and higher qualities than those we usually attribute to them. It was as if a higher form of personality had been liberated, and a new child had come into being” (Standing, 1984,

## INVISIBLE INSTRUCTION

p.39). This concept overwhelmed Dr. Montessori's understanding of children. She began to orient her classroom in a way that did not interfere with a child's traditional nature, but rather gave them a space in which they had the opportunity to release their own true desires. In action, this meant the teacher or instructor must step back and allow the child to make and act upon their own choices. In her own words, this sort of environment "is offered to the child [so that] he may be given the opportunity of developing his activities" (Montessori, 1965). Following suit, Dr. Montessori came to quite a few radical revelations, all upon which she built her methodology.

### **Unwavering Concentration**

The first of these "understandings" was that children have an underlying, intense, mental concentration. She first noticed this when one day, a three year old girl had taken to playing with a series of wooden dowels and placing them into their corresponding sockets. Dr. Montessori noticed immediately the focus in her eyes. As she observed the child using the tool, she noticed that she was entirely unphased by any commotion around her. The extent of this concentration was not even hindered when Dr. Montessori picked up the chair on which the child sat and worked, and moved it onto a table top (Standing, 1984). Moving forth, the child repeated the action of placing the dowels into the sockets a multitude of times. This exemplifies one of Dr. Montessori's fundamental principles, "the reliance on the spontaneous interest of children as the mainspring of their work" (Standing, 1984, p.40). It also revealed what she believed to be a fundamental characteristic of children, which was the tendency to repeat the same thing over and over again" (Standing, 1984, p.41). Upon her observation of this event, Dr. Montessori chose not to act but to speculate. She decided to bare this construct in mind while watching the children from that point forward, gathering more information that she could later apply to her studies as a whole.

## INVISIBLE INSTRUCTION

### **Love of Order**

Many other underlying characteristics of children began to reveal themselves throughout the initial six months of Casa dei Bambini's opening. The love of order is one that has remained pertinent to the Montessori Method. Dr. Montessori originally decided it would be best to keep all the children's work locked away in a cupboard. As time went on, Dr. Montessori noticed that every time she ventured to the cupboard to gather the tools, the children followed. More so, upon completing their use, the children would follow Dr. Montessori back to the cupboard as she returned the tools (Standing, 1984). Based on these observations, she came to the conclusion that children have a natural desire to put things back where they belong and to understand their place. Dr. Montessori ran with this concept, and began allow the children to access the work in the cupboard on their own. Sure enough, the children would consistently return the objects exactly where they found them upon finishing their work (Standing, 1984).

### **Desire for Choice**

Coupled with this characteristic, Dr. Montessori observed the children's desire for freedom of choice. This came into clarity one day when Dr. Montessori's assistant had accidentally left the cupboard where the work was kept unlocked. When the assistant arrived, the children had made their way into the cupboard, chosen their work and had already begun to use it. Despite her assistant's initial anger, Dr. Montessori took this event as exemplifying the children's desire to choose their own work. They had learned to use the tools properly earlier on and took this opportunity to exhibit their knowledge of use (Standing, 1984). She was overjoyed that the children were taking the initiative to commence work on their own, even at the ages of three and four.

### **Preference for Work Over Play**

## INVISIBLE INSTRUCTION

Yet another fundamental characteristic of children that revealed itself during the initial opening of Casa dei Bambini was the child's preference to work over play. Although Dr. Montessori did not have the initial funding to buy fancy toys for the children to use, she had many of her wealthy friends donate games, dolls, and other children's toys for use. She noticed almost immediately that the children did not take to these toys in the slightest. At first Dr. Montessori assumed this was due to a lack of understanding on how to use the dolls and such, which she took upon herself to personally show the children how to play with. In the most interested cases, the children played for a few moments with these toys, but ultimately returned to the simplistic, self-correcting wooden work and tools they had previously been using (Standing, 1984). This was perhaps the most surprising, and confusing, observations made by Dr. Montessori. Yet she eventually concluded that the explorative nature of the child causes them to seek solutions to their work- a concept that can not be achieved by merely playing with a doll. Rather, the satisfaction of self-correcting tools could hold their interest and attention for great lengths of time (Standing, 1984).

### **Success of Casa Dei Bambini**

Throughout the formative period of Casa dei Bambini, Montessori and her assistants remained in awe of their own success. However, their success was proven through the success of the children, whom Dr. Montessori was continuously astonished by. The above mentioned revelations had by the team at Casa dei Bambini were only the beginning of the world unlocked by the methods they had put in place. Dr. Montessori expressed this sentiment quite truly in the following quote- "It took time for me to convince myself that all this was not an illusion. After each new experience proving such a truth I said to myself, "I won't believe yet; I'll believe in it next time.' Thus for a long time I remained incredulous, and at the same time deeply stirred and

## INVISIBLE INSTRUCTION

trepidant. How many times did I not reprove the children's teacher when she told me what the children had done of themselves!" (Standing, 1984, p.53). And Dr. Montessori was not the only one to recognize the tremendous success of Casa dei Bambini. Shortly after word got out of her experiment, a second Casa dei Bambini was established in the San Lorenzo area (Standing, 1984). News reporters began to show up at the door step of her classrooms, aiding in the spread of word of this philosophy. It wasn't long before visitors from around the world were sent to observe and learn from Dr. Montessori herself. Much to her surprise, these visitors were not only fulfilling the orders of their bosses to learn what she had discovered and report home; rather, many were coming on their own accord because they fundamentally believed in the process she had created. To appease her new found followers, as well as per the urging of her friends and family, Dr. Montessori began work on putting her philosophy into writing. The first ever publication of Dr. Montessori's methods was titled *The Method of Scientific Pedagogy as Applied to Infant Education and the Children's House* (Standing, 1984). In this manuscript, she depicted the procedures and success of Casa dei Bambini and by the end of 1908, the work was circulating throughout the globe. Dr. Montessori found this phenomenon humbling and quite comical. She had never intended for world-renowned success, and quite frankly would have preferred to keep her work contained to her Children's Houses in San Lorenzo. Yet scholars from around the world repeatedly made their way to Rome and demanded to learn from Dr. Montessori herself- to which she could not bring herself to say no to. In her heart, Dr. Montessori began to feel the weight of her work and knew that she would be doing the future of education a disservice to keep her methods contained. As she began to instruct other educators and her work continued to reach various areas of the globe, Montessori movements began to appear in each



corner of the world. Dr. Montessori knew that this meant her work was nowhere near done, thus she began to write and lecture at a rapid pace. The Montessori Philosophy was now in full swing.

## **Chapter Three**

### **Montessori Methodology**

#### **Methods in Action**

When looking at the methodology Dr. Montessori used to put her philosophy into action, we must first identify the method's two main components. These are 1)the environment, materials, and exercises, and 2)the teachers who prepare the environment (Lillard, 1972). Ultimately, Dr. Montessori viewed the environment to be of the utmost importance. Yet she felt it was equally important to recognize the following three points. Paula Polk Lillard's book *Montessori: A Modern Approach* expresses this quite clearly. First, the environment is secondary to living life itself. Second, a trained and understanding adult must be the one to prepare said environment, and third, said adult "must be a participant in the child's living and growing within it" (Lillard, 1972, p.51). In regards to these adults, they must be self-aware and welcoming of the environment. Dr. Montessori strongly cautioned against teachers who were merely trying to get by in life, for fear that this would prohibit the intellectual growth of the children. He or she must be willing to grow and learn with the children, thus contributing to the evolution of their classroom environment as time goes on and learning takes place. If the teacher is able to check all these boxes, the classroom environment will thrive.

#### **The Montessori Classroom**

## INVISIBLE INSTRUCTION

**Freedom.** The classroom itself must adhere to six basic components (Lillard, 1972). The first of these six is the essence of freedom. Dr. Montessori believed that children reach their full potential when they are given the opportunity to explore as they please and choose their own direction. Thus a free, open classroom environment will allow independence to be fostered and liberty to be manifested.

**Development of Discipline.** Dr. Montessori believed that the child will learn best when they feel a sense of completion and accomplishment through their work. In the classroom environment, children must be assisted and encouraged to reach the end goal of their chosen task, and teachers must assist in this process. More so, there must be a particular amount of attention paid to discipline. In the classroom, Dr. Montessori believed that it was the role of the teacher to aid in a child's development of inner discipline. Her philosophy suggests that this discipline will ultimately be developed through opportunity to work and explore.

**Good and Evil.** Moving forth, the classroom must allow for an understanding of good and evil. It is the responsibility of the teacher to aid in the child's understanding of these concepts, for they lend to the manner in which children are allowed choice in the classroom. Fundamentally, Dr. Montessori saw that children need to have knowledge of "evil" behavior—such behavior that hurts or bothers others in any way. This type of behavior should be the only behavior that is limited in the classroom. If the child is acting in any way that does not disturb, hurt, or bother their peers, then they should be allowed to move forth in what they are doing. We see this exhibited in the philosophy's push for freedom of what the child chooses to do to occupy their time. Put simply, "the children are free to choose their own activities in the classroom, again keeping in mind 'that here we do not speak of useless or dangerous act, for these must be

## INVISIBLE INSTRUCTION

suppressed'. This protection of the child's choice is a key element in the Montessori Method, and it must not be violated" (Lillard, 1972, p.54).

**Interpersonal Relationships.** This essence of freedom is pivotal to the success of the classroom in many more ways. Competitions, punishments, and rewards are discouraged within the classroom. Dr. Montessori believed that this artificial circumstance would alienate students from their work, their peers, and their environment (Lillard, 1972). She also found that the interaction between the children must be nourished. Social relations and disputes are best handled between the children, without the teacher's direct involvement. Following this mentality, Dr. Montessori felt it was greatly important to not limit student interaction. If children felt like socializing and working with their peers, than that would be acceptable. However, if the children did not want to partake in group activities and perform their work on their own, that would also be allowed. The logic behind this is quite pure- "Because they are not forced to compete with each other, their natural desire to help others develops spontaneously" (Lillard, 1972, p.55). In sum, by allowing the classroom to be a place of freedom, the children are given the opportunity to develop self-knowledge and self-awareness, without the hinderance of traditional educational restraints.

**Structure and Order.** The second basic component of the Montessori classroom environment is in regards to structure and order. Dr. Montessori believed that both structure and order were integral to early childhood development, and designed her classrooms to model the underlying structure and order of the universe. She found that her students learned best when the classroom was extremely organized and free of chaos. Thus, the design of the classroom was dependent upon these concepts. Materials are organized on low bearing shelves, easily accessible to the child, in order of difficulty- moving from left to right (Lillard, 1972). Upon completion of

## INVISIBLE INSTRUCTION

work, the child must return the object to the exact place it was found before they are permitted to move forth. It is through this practice that the children learn to trust their surroundings, for the classroom becomes regular and dependable (Lillard, 1972). One thing to note is that although order is pertinent to the classroom, it is important that teachers periodically reorganize the materials. The reason for this is so the classroom is able to grow alongside the children. Put best, it is “necessary to rearrange continuously many individual items in the environment in order to keep it a living place” (Lillard, 1972, p.57). Thus, by instituting structure and order into the daily life of the children, they are set up for a life full of organization and clarity.

**Reality and Nature.** The next primary component of a Montessori classroom is a focus on reality and nature. The intention behind this is that the child will better understand the essence of the real world and develop self-discipline, without being caught up in fantasies. In a traditional Montessori classroom, you will find typical household appliances and every day items. The children will use real glasses and place settings, learning how to appropriately use the materials despite the delicacy of such objects. Interestingly enough, there only exists one of each classroom work materials, so the children learn to wait their turn as one would in the real world (Lillard, 1972). This again aids in the development of self-discipline and respect for others and one’s surroundings.

Dr. Montessori believed that our relationship with nature is pivotal to our understanding of ourselves and the world around us. For this reason, the classroom frequently expands to the outdoors. When possible, children are given the opportunity to utilize the natural world as a basis for their work. Some schools incorporate an “outdoor classroom”. Similar to a playground, the space will be enclosed and designated just for the children. However, toys and playground equipment do not fill the space. Rather, you will find gardening tools, endless amounts of plants,

## INVISIBLE INSTRUCTION

and other objects typically found in a large yard. The children invest their time to helping the garden grow, and learn to care for the outdoor classroom as much as they do the indoor.

Inside the classroom, the essence of nature should shine through. Plants and other living things will be found throughout, bringing the natural world to the children at all times. Dr. Montessori believed that if children are given the opportunity to closely examine artifacts from the world around us, they will be more concerned and in tune with the well-being of our planet. For this reason, we often see many magnifying glasses, microscopes, and other means of closely studying plants and animals, in the classroom (Lillard, 1972).

**Environmental Aesthetic and Beauty.** Quite similar to this, the fourth component of a Montessori classroom is a direct focus upon beauty and the atmosphere. Dr. Montessori felt it was critical to the development of the child to create an environment that was comforting, welcoming and aesthetically pleasing. The materials themselves should always be in tip-top condition- no broken or tarnished bits (Discovery Preschool, 2017). Bright colors and simple arrangement bring the classroom focus to the children without an immense amount of distraction. Ultimately, the classroom should be a desirable place for the children to be, considering how much time will be spent there.

**Materials and Tools.** The fifth component of a Montessori classroom deals with the materials and tools used by the children. Traditional Montessori equipment is geared towards “assisting the child’s self-construction and psychic development” (Lillard, 1972, p.60). Typically wooden, these self-correcting tools are intended to capture the focus of the child and play upon an innate sense of perseverance and determination that will guide the child to completion. Each material is going to be designated for a particular developmental stage; eighteen month olds are not going to be using the same work as three year olds. It is ultimately up to the teacher to

## INVISIBLE INSTRUCTION

observe and determine when the children have outgrown a particular tool and when they are ready to move forward to more complex objects.

Montessori tools come in a wide range of forms. The tools typically fall into the category of motor education or sensory education. Let's take a look at a traditional Montessori tool used to enhance sensory education. This object is essentially a one foot long solid piece of wood. Drilled into the top of this wood are ten cylindrical holes, decreasing in size from the left to right. In each hole is a corresponding cylindrical peg that can be easily removed by the child. This tool is discussed at length by Dr. Montessori in her book *Dr. Montessori's Own Handbook: A Short Guide to Her Ideas and Materials*. She explains the intention of this tool as follows- "The exercise consists of taking out the cylinders, mixing them and putting them back in the right place. It is performed by the child as he sits in a comfortable position at a little table. He exercises his hands in the delicate act of taking hold of the button with the tips of one or two fingers, and in the little movements of the hand and arm as he mixes the cylinders, without letting them fall and without making too much noise and puts them back again each in its own place" (Montessori, 1965, p.66). She moves forth to discuss the lack of necessity for teacher interference with this exercise. The tool is intentionally self-correcting, and the child will push forth to figure out the solution, mostly because they see their peers completing similar tasks. This work is meant to encourage a deep sense of independence. As Dr. Montessori explains, "They like to do it alone; in fact, sometimes almost in private for fear of inopportune help" (Montessori, 1965, p.69).

Another traditional Montessori tool, typically used in the developmental stage following use of the cylinders, is known as "The Tower". The tower is a series of ten wooden pink cubes, ranging from ten centimeters to one centimeter. The variation in the cube sizes is purely due to

## INVISIBLE INSTRUCTION

the fact that if the child wishes to build the tower, he or she must complete it in the correct order. The tower will not build in any other way, for the size variations of the cubes will not allow it. As Dr. Montessori explains, “The reason is that the mistakes which the child makes, by placing, for example, a small cube beneath one that is larger, are caused by his own lack of education, and it is the repetition of the exercise which, by refining his powers of observation, will lead him sooner or later to correct himself” (Montessori, 1965, p.75). This process is drawn out by each item found throughout the classroom, thus resulting in a surge of independence within the child, as he or she successfully completes their chosen task.

**Community Life.** The sixth and final component of the Montessori classroom is the development of community life. This concept expands from the relationship the children have with the classroom to the relationship they have with one another. The classroom itself should be the epicenter of the community- a place where the children feel is meant for them. As we know, the tools and materials in the classroom are intended for the direct betterment of the children, as they tend to be child-sized and child-specific. Dr. Montessori hoped that by using the classroom as a small-scale model of the real world, the children would develop a personal relationship to their learning. By doing their own cleaning, maintaining order and structure, down to caring for their own plants, the children understand that they are directly contributing to the wellbeing of their community.

This moves forth to deal with the relationship between the students themselves. Considering the immense focus on independent learning, there is often the concern that Montessori educated children are missing out on their social development (Lillard, 1972). In fact, quite the opposite occurs. Dr. Montessori believed that by limited forced social interaction, the children would naturally and spontaneously become curious of their peers, thus leading to their

## INVISIBLE INSTRUCTION

own personal examination, exploration and discovery of those around them (Lillard, 1972). This is particularly noticeable considering the mixed-age classrooms Montessori depends upon. These classrooms, which span three year age groups, look to this community essence in hopes that the younger children will become curious and model the older children, and the older children will begin to lead the younger ones (Lillard, 1972). Dr. Montessori saw it best that by creating a world where children did not feel forced to act in accordance with their peers, they would naturally gravitate towards modeling and leadership, thus resulting in a more solid and trusting community.

### **The Teacher**

Now that we have looked at the six components of the classroom, we must attempt to understand the role of the teacher. As we can see throughout this discussion, the role of the teacher in a Montessori classroom is quite different than the traditional role we have come to know. The teacher in a Montessori classroom acts less as an enforcer, and more as an influencer for the children. “It is similar to that used in therapy, where the goal is not to impose the will of one person on another, but to set free the individual’s own potential for constructive self-development” (Lillard, 1972, p.77). Dr. Montessori has been noted many times discussing the importance of the growth of the teacher herself. We often consider a teacher to be a fixed figure, full of knowledge that she then passes down to the student. Dr. Montessori saw it as quite the opposite. The teacher is ever evolving with the student, and ultimately holds no more ability than the child- just a tad more experience. Thus, the teacher stands back and offers guidance and support to the child as he or she learns from their environment and develops on their own. Perhaps the most important quality the teacher must possess is faith in his or her students. In her book *The Absorbent Mind*, Dr. Montessori expresses this sentiment as follows- “The teacher,



## INVISIBLE INSTRUCTION

when she begins work in our schools, must have a kind of faith that the child will reveal himself through work. She must free herself from all preconceived ideas concerning the levels at which the children may be. The many types of children (meaning they are more or less deviated) must not worry her...The teacher must believe that this child before her will show his true nature when he finds a piece of work that attracts him” (Montessori, 1967, p.276). Ultimately, the teacher must believe that her students are working in their best interest and be there to support their decisions throughout their work periods. It must be noted that within the classroom environment, acting in this way is much more challenging than as expected. Teachers often find themselves jumping in to correct and redirect students who may not be performing as anticipated. Yet it is the successful teachers that are able to take a step back, allow the children to act as they may, observe and offer guidance when appropriate.

### **Conclusion**

Throughout this exploration into Dr. Montessori and the Montessori Method, one thing has become abundantly clear- in order to encourage a purely Montessori education, there must be respect for the child and the process of his or her learning. We see the gentle guidance the teacher offers, as opposed to intense instruction. We see the careful manner the classroom is structured in order to encourage independence. We see the deep understanding of the inner working of the child that leads to self-discipline and self-motivation. By developing a pedagogy such as this, Dr. Montessori did more than create a new approach to education. She opened the doors to a world of coexistence, nurturing, and empathy. The children that experience the world through the eyes of a Montessori foundation are furthered prepared to understand how we exist amidst the external world, including other people, nature, and ultimately the universe. On a daily

## INVISIBLE INSTRUCTION

basis, a child in a Montessori community is exposed to the world around them, as well as the world inside them. None of this would be possible without the persistence, brilliance, and determination of the young woman who saw beauty and hope in place of despair. Her light and love has been carried on for decades and continues to move forth with the world. With any hope, Dr. Montessori's deep affinity for learning and passion for continual growth will live on through her methods, thus bettering the future for each and every child who is fortunate enough to see the world through her eyes in the years to come.

## References

5 Things Montessori Teachers Do Differently. (2017, May 03). Retrieved from

<http://ageofmontessori.org/five-things-that-montessori-teachers-do-differently/>

Components of the Montessori Classroom. (2018, November 01). Retrieved from

<http://discoveryasheville.com/components-of-a-montessori-classroom/>

DuPont, B. A. (1990, Oct 21). Exploring montessori // method treats each child as special.

Telegram & Gazette Retrieved from <http://rwulib.idm.oclc.org/login?url=https://search-proquest-com.rwulib.idm.oclc.org/docview/268398572?accountid=25133>

Faryadi, Q. (2007). The montessori paradigm of learning: So what? Online Submission, , 1-17.

Retrieved from <http://rwulib.idm.oclc.org/login?url=https://search-proquest-com.rwulib.idm.oclc.org/docview/62038889?accountid=25133>

Gutek, G. L. (2004). The montessori method: The origins of an educational innovation:

Including an abridged and annotated edition of maria montessori's the montessori method

Rowman & Littlefield Publishers, Inc., 4501 Forbes Blvd., Suite 200, Lanham, MD

20706. Retrieved from <http://rwulib.idm.oclc.org/login?url=https://search-proquest-com.rwulib.idm.oclc.org/docview/62114532?accountid=25133>

[com.rwulib.idm.oclc.org/docview/62114532?accountid=25133](http://rwulib.idm.oclc.org/docview/62114532?accountid=25133)

## INVISIBLE INSTRUCTION

Lillard, P. P. (1972). *Montessori, a modern approach*. New York: Schocken Books.

Marshall, C. (2017, October 27). *Montessori education: A review of the evidence base*. Retrieved from <https://www.nature.com/articles/s41539-017-0012-7>

Montessori kids respect each other, earth. (2005, Feb 05). Now Retrieved from <http://rwulib.idm.oclc.org/login?url=https://search-proquest.com/rwulib.idm.oclc.org/docview/359002948?accountid=25133>

Montessori, M. (1966). *The discovery of the child*. Madras, India: Kalakshetra Publications.

Montessori, M., & Claremont, C. A. (1967). *The absorbent mind*. New York, NY: Dell.

Montessori, M., & Orem, R. C. (1965). *A Montessori handbook; "Dr. Montessoris own handbook"*. New York: Capricorn Books.

Standing, E. M., & Havis, L. (1984). *Maria Montessori: Her life and work*. New York: Plume.

The Pros & Cons of Montessori Education. (n.d.). Retrieved from [https://www.rasmussen.edu/degrees/education/blog/pros\\_cons\\_montessori\\_education/](https://www.rasmussen.edu/degrees/education/blog/pros_cons_montessori_education/)

What Is Montessori Education? (n.d.). Retrieved from <https://amshq.org/About-Montessori/What-Is-Montessori>

## INVISIBLE INSTRUCTION

Willcott, P. (1968). THE INITIAL AMERICAN RECEPTION OF THE MONTESSORI

METHOD. *School Review*, 76(2), 147-165. Retrieved from

<http://rwulib.idm.oclc.org/login?url=https://search-proquest>

[com.rwulib.idm.oclc.org/docview/60637953?accountid=25133](http://rwulib.idm.oclc.org/docview/60637953?accountid=25133)

Zierdt, G. L. (2007). Women in history--maria montessori. *Journal of Women in Educational*

*Leadership*, 5(3), 159-161. Retrieved from

<http://rwulib.idm.oclc.org/login?url=https://search-proquest>

[com.rwulib.idm.oclc.org/docview/61797556?accountid=25133](http://rwulib.idm.oclc.org/docview/61797556?accountid=25133)