

Honors Senior Thesis

Montessori Kindergarten Center-Joplin

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Giuseppe Sergi once stated, “Today in the social world, an imperative need makes itself felt- the reconstruction of educational methods; and he who fights for this cause, fights for human regeneration” (Montessori, 1912, p.70).

In a worthy effort to fight for human regeneration, a physician by the name of Maria Montessori began researching and practicing methods that challenged the educational systems of the early 1900s. Maria Montessori was the first woman physician in Italy. She used her knowledge of the scientific method, including that of observation, to increase awareness of the construct in which children learn best. After observing children work for minutes or even hours to complete tasks by themselves, Maria Montessori concluded that uninterrupted work time was necessary for the child to discover his/her strengths, weaknesses, and talents (Sledin, 2010). During the uninterrupted work time, the children would question the materials of their environment and explore how these materials could work better or benefit the task in a more efficient way. The children taught themselves, using materials that were provided for them, in a prepared environment. These influential guiding principles became the backbone to the Montessori Method. The Montessori Method would go on to become a major worldwide educational philosophy (Kramer, 1976).

Obviously, the public school sector of today teaches students through very different techniques compared to those of the Montessori way. Unfortunately, many children are still under the “weight” of the common instructional methods, including: associating immobility and muteness with doing the right thing. The reality is that by taking away a child’s mobility and ability to converse, the child is held back from his/her natural development. If by instructional methods, curriculum, or assessment, educators stifle a child’s ability to discover the world on his/her own terms, the child will grow to rely more on systems than his/her creative intelligence.

Therefore, an educator's duty is to not only teach to the whole child, but also to teach to the man or woman "within" (Montessori Teachers, 2011, p.1).

Maria Montessori and her discovery

After being exposed to various theorists at Missouri Southern State University through the Teacher Education Department, I became awestruck by Maria Montessori and her practices. I began questioning whether or not her methods would work. All that I had read or seen about Maria Montessori led me to believe that her instructional practices were pretty sound. However, what sounds good in theory may be quite different in practice. So, I began investigating her strategies. I found that the theory did not just sound good, it actually worked! Children moving about a room, teaching themselves, teaching others, and learning how to interact with their world and others is a brilliant foundation for cognitive development.

Maria Montessori was a physician who specialized in pediatrics and psychiatry. During her clinical work, Montessori began working closely with the poor. Through these efforts, Maria Montessori was appointed a director position at the University of Rome in 1901. For the next few years, Montessori would observe, teach, and care for what society had labeled as the "deficient and insane" students (Seldin, 2010, p.10). Popularity surrounding her autonomic educational practices surfaced when in 1903, when her disabled students passed the sixth grade standardized test given by the Italian public school. Montessori claimed that if her disabled students could achieve these scores, the public school sector had no excuse for its normal children falling short of standards. Because this claim did not reside well with the Italian Ministry of Education, the IME prohibited Montessori from teaching school-aged children. Despite this set back, Montessori was determined to continue her educational experiments and did so by establishing the Casa dei Bambini, also known as the Children's House. This day care

was located in the slums of Rome. Once the public witnessed the transformation of children leaving the Casa dei Bambini, they began broadcasting her efforts internationally. This was to be expected given that four-digit addition and subtraction operations were being performed by four-year old children (Seldin, 2010). Further, the four-year old children whose hands were pliable and uncoordinated were also being taught how to write (Montessori, 1967). Concurrent with writing, the four-year olds learned how to read (Standing, 1957). Maria Montessori often discussed that her efforts were more of a dramatic discovery than a method per se. Whether a discovery or method, Montessori founded, fostered, and explored an educational system unlike any of her time (Seldin, 2003).

Montessori Method Compared to Other Educational Models

When examining any model for education, it is prudent to compare the method to similar methods, and also to the most common form of education, the public school sector. Thus, I will compare *The Montessori Method* to Rudolf Steiner's *Waldorf schools*, John Piaget's *Constructivist Theory*, John Dewey's *Pragmatist Theory*, and Friedrich Froebel's *Froebelian System*. My first observation is that all of these innovative theorists placed the child's self-activity at the center of learning.

Waldorf Schools

Rudolf Steiner differed from the Maria Montessori in that he believed the child learned best through play and fantasy. Montessori clearly appreciated and respected both play and fantasy as creative modes of operation. However, she believed the main means by which a child learns is through uninterrupted work time where the child relied on his/her own five senses to understand concepts (Montessori, 1967). It is through the five senses that the child made sense of his/her world and gained knowledge.

Constructivist Theory

According to the *Constructivist Theory*, knowledge could not exist without meaning. Therefore, through personal and social connections of meanings, knowledge was formed (Hein, 1991). The *Montessori Method* and the *Constructivist Theory* are similar in that both relied on the learner to construct knowledge for themselves. Montessori simply took the *Constructivist Theory* further by emphasizing the importance of using one's hands to literally construct understanding (Elkind, 2003).

Pragmatist Theory

John Dewey believed that the child must learn through “directed living” rather than rote memorization. Dewey's pragmatic views advocated a learning process that was based in inquiry. The child learned through moving from doubt to belief about a particular concept or skill by manipulating the materials and environment to change reality (McDermid, 2006). The *Montessori Method* supported the ways of a pragmatic. Directresses, a Montessori term used to identify teachers, constantly and rigorously tried new techniques and never settled in one fixed practice (Montessori, 1912).

Froebelian System

Compared with the *Froebelian System*, the *Montessori Method* differed in “comprehensive and scientific scheme” by which the materials affected a child's learning. While Froebel designed materials that were used in much broader approaches, materials of the Montessori way specifically targeted and trained the child's five senses piece by piece (Holmes, 1912).

Traditional Education

All of these theories combined are dramatically different from the practices implemented in public school systems. Considering the differences listed above, between Montessori and the

various theories, it is clear that the *Montessori Method* is strikingly different from the traditional method used in the public school sector. The Golden Oak Montessori School of Hayward, California (2011) has formulated a comprehensive table representing the variances between Montessori schools and Traditional schools.

See Table 1.

The *Montessori Method* provides what *Traditional Education* cannot...the elimination of unnecessary “wasted” time (Olaf, 2011). Because each child works independently, each child can move at his/her own pace. He/she is not bound by a system that creates boredom or frustration due to a set group pace. Furthermore, the child is free to use his/her innate skills of mobility and conversation that were created for exploration. Maria Montessori created an approach to education a century ago that truly today is a modern approach (Seldin, 2003).

Why I Chose to Create a Montessori School for Joplin

I knew my intentions had always been to teach in the local area. So, when the opportunity arose for me to create a project that accompanied my major, I knew that somehow the *Montessori Method* would be incorporated. As I explored Maria Montessori’s theories further, I understood that my true desire was to open my own Montessori school in Joplin, Missouri. When I started piecing together features of my project, I realized that creating a detailed curriculum for birth through third grade was simply not feasible in such limited time. So, with the help of my faculty advisor, I was able to discuss the different characteristics of my ideal curriculum and target an audience. From having prior experience in teaching pre-school and an interest in teaching in the lower elementary grades, I

Table 1
Montessori Method vs. Traditional Education

Montessori	Traditional Education
Emphasis on cognitive structures and social development	Emphasis on rote knowledge and social development
Teacher has unobtrusive role in classroom activity; Child is an active participant in	Teacher has a dominant, active role in classroom activity; Child is a learning assive participant in learning
Environment and method encourage internal self-discipline	Teacher acts as a primary enforcer of external discipline
Instruction, both individual and group, adapts to each student's learning style	Instruction, both individual and group, conforms to the adult's teaching style
Children are encouraged to teach, collaborate, and help each other	Most teaching is done by the teacher and collaboration is limited
Child chooses own work from interests and abilities	Curriculum is structured with little regard for the individual child's interests
Child formulates own concepts from self-teaching materials	Child is guided to concepts by the teacher
Child works as long as she likes on a chosen project	Child is generally given a specific time-limit for work
Child sets own learning pace to internalize information	Instruction pace set by the group norm or by the teacher
Child often spots errors through feedback from the material and process of learning	Work is corrected and errors pointed out by the teacher
Learning is reinforced internally through the child's own repetition of an activity and internal feelings of success	Learning is reinforced externally by rote repetition and rewards/discouragements
Multi-sensory materials for physical exploration	Fewer materials for sensory development and concrete manipulation
Organized program for learning care for self and environment	Less emphasis on child involvement in care for self or classroom
Child can work where he is comfortable (at a desk or on the floor), moves around and talks at will (without disturbing the work of others), and group work is voluntary and negotiable	Child is assigned to a desk and is encouraged to sit still and listen during group sessions
Organized program for parents to understand the Montessori philosophy, bring concepts home, and participate in the learning process	Voluntary parent involvement, not participants in understanding the learning process

selected the kindergarten level. I believed this would combine both skills with passion. The Montessori school I would create would be designed with the Joplin community in mind. Aspects of the vision statement, philosophy, curriculum, materials, and even desired faculty would all be centered on both the Montessori philosophy and the local people of Joplin.

Needs Assessment

Joplin, MO is a city in the Southwest corner of the state. Joplin cuts across two counties, Jasper and Newton. Jasper County spreads across 640 square miles, with a population of approximately of 109,460 (Geographic, 2010). Newton County totals 626 miles and a population of approximately 54,775 (Newton County, 2011).

The Department of Elementary and Secondary Education of Missouri (2011) claimed that in 2000, nearly half of the students in Jasper and Newton County were on free or reduced lunches. Over a quarter of the county's population of children were in poverty. Poverty status is determined by "comparing a person's income with the poverty threshold appropriate for that person's family size and composition" (Appendix B, 2000, p. B-34). Persons whom poverty status was determined in Jasper County were 54,246 out of the 109,460 people. For Newton County persons whom poverty status was determined were 23,090 out of the 54,775 people.

The federal, state, and local government mandates the access to public schools. This means that through taxes, the child's education is paid for. However, for a six-year old child to attend a Montessori school with more individualized attention and curriculum, it would cost nearly \$7,000 for a typical eight month term. This means the cost today could possibly be even higher (Montessori FAQ, 2011).

According to the Department of Elementary and Secondary Education of Missouri (2011), 30, 279 children resided in Jasper County and 14,762 in Newton County during the 2000

Census. Out of the 30, 279 children in Jasper County, 17% were minority children, and 624 children had limited English proficiency. Out of the 14,762 children in Newton County, 14% were minority children, and 316 had limited English proficiency. Joplin is located in both Jasper and Newton County of Missouri. With these statistics in mind, it is difficult to ignore the need for second language instruction. As part of the Montessori Kindergarten Center-Joplin (MKC-J), students will receive direct English language instruction. Directresses certified in Teaching English to Speakers of Other Languages (TESOL) will teach the direct English language instruction.

Considering the statistics surrounding the Jasper and Newton County area, it is unlikely that children living in poverty would be able to attend a Montessori school based on costs alone. However, the Montessori Kindergarten Center-Joplin is dedicated to teaching all children, providing scholarships to not only children in poverty, but also English language learners. Through personalized scholarships and grant programs, the children at MKC-J will receive a unique education based in targeting the individual's needs and/or situation.

Howard Gardner and his theory of Multiple Intelligences

Howard Gardner is an award-winning leader in various educational circles. He is a Harvard Graduate whose 1983 publication of *Frames of Mind: The Theory of Multiple Intelligences* brought upon him controversy from the public. In *Frames of Mind*, Gardner claimed the human brain was capable of multiple intelligences. In his 1993 book, *Multiple Intelligences: A Theory in Practice*, Gardner clarifies that while humans are capable of possessing different talents, they also have “an unknown number of separate human capacities” (introduction xi). Multiple intelligences serve as a way of problem solving in one or more ways (Gardner & Hatch, 1989). Howard Gardner went on to formulate a list of the eight multiple

intelligences: bodily-kinesthetic, intrapersonal, interpersonal, mathematical-logical, musical, naturalistic, spatial, and verbal-linguistic (Smith, 2008). I wish to incorporate this theoretical framework into my proposal.

The Proposal

The Montessori Kindergarten Center-Joplin is a synthesized product between the Montessori Method and Howard Gardner's theory of Multiple Intelligences. The MKC-J is based upon the Grade Level Expectations (GLEs) for the public schools in state of Missouri.

Vision Statement

The vision statement of the school serves as a welcome to the community. In short, it explains the core principles that are valued at the Montessori Kindergarten Center (MKC) as well as the esteemed benefits of sending a child to the school. Here is the vision statement:

Our mission is to constantly develop, encourage, challenge, inspire and support the children of the now, and the men and women of the future. All children at the Montessori Kindergarten Center will be free to explore their talents, capabilities, multiple intelligences, and personalities through the use of spontaneity, mobility, and interaction. The safe and enriching atmosphere of our school allows children to engage in the ideas of community, respect, and creativity and to implement these ideas in a practical, realistic setting.

Philosophy of Education

The vision statement is a brief preview of the philosophy of education for the school. The philosophy of education elucidates the specifics of the beliefs of the school. While some aspects of the philosophy carry a strong Montessori background, most of the components in the philosophy are generated through my own personal preferences. Maria Montessori built her schools on the five core principles: respect for the child, the absorbent mind, sensitive periods, a prepared environment, and auto-education (Morrison, 2007). These principles are carried over into my philosophy. However, I have also added other characteristics such as: the children

planning their own lessons, reflecting on their growth academically, socially, physically, and intellectually; and exploring a prepared environment built on their multiple intelligences. Here is the philosophy of education for the Montessori Kindergarten School:

, “Education cannot be effective unless it helps a child to open up himself to life” (Maria Montessori, 1914, p.7)

The Montessori Kindergarten Center embraces this philosophy wholeheartedly. We desire to see children awakened and rewarded by their own desires for learning and the fruits of those ambitions. Every child has the spirit and drive to not only explore and be shaped by his/her environment, but also to create life utilizing his/her surroundings. Children at the Montessori Kindergarten Center are given the opportunity to participate in learning through a prepared environment. Our teachers provide interesting materials that stimulate and inspire the intellectual, physical, and artistic mind of the children. These materials can be manipulated by the children for sensory and cognitive growth.

Children spend time weekly with the teacher, planning their own lessons and reviewing their growth. Each child is observed and encouraged in his/her multiple intelligences and talents. Spontaneity, mobility, and interaction are the core pillars for classroom involvement. The children are free to move about the classroom, engaging in activities that develop their whole sense of being. These activities are rooted in practical life application, sensory exploration, personal independence, and academic stimulation.

Our goal is to make children the center of learning. They learn not only respect for themselves, others, and the environment, but also how they personally can change the world, just by being them. The Montessori Kindergarten Center is devoted to raising the men and women of our future with the abilities to be self-regulating, and community oriented citizens. Children *are* the best people on earth and should be nurtured and challenged to maintain their joy and desire for learning.

The vision and philosophy statements clarify the standards under which the school is to operate.

The next step in the processes of the Joplin Montessori School development is the curriculum.

Curriculum

The curriculum takes into account the individual needs of the students at the kindergarten developmental stage. A thematic approach to curriculum in a Montessori school is crucial to tying together aspects of the separate disciplines (Curriculum, 2002). According to Susan Kovalik (1993), inventor of the *Integrated Thematic Instruction Model*, content within a curriculum should come from real life and should not involve any external rewards. The brain is

a self-regulator and should learn to experience joy from understanding one's environment.

Kovalik (1993) stated, "We are born virtual learning machines. We become our environment and our brains are a recording of what we have done, and where we have been literally becomes who we are. Humans are born with a keen drive to understand and act upon their world. When information is identified by it as "meaningful," it jumps into high gear (54)." When new comprehension and meaning arrives in the brain, it actually rewards itself by sending neurotransmitters that trigger the entire organism to feel a sense of well-being. This is key to creating a curriculum. The content must be engaging and meaningful (54). Therefore, the curriculum that is the structure for the content must also have these components.

When creating a curriculum, especially for a Montessori school, it is helpful to have thematic units in which each lesson can be categorized. I chose to pinpoint a yearlong theme, and then break it down into quarterly sub-themes. Kindergarteners are at a time in their lives when learning to respect and interact with people needs to be their common curiosity. The overarching theme is that of Citizenship. The quarters are divided into Stewardship, Giving Thanks, Cooperation, and Community Helpers. Within each of the quarters, lessons are designed that match the Grade Level Expectations for the Missouri Department of Elementary and Secondary Education.

Assessing for multiple intelligences.

I decided to incorporate Howard Gardner's (1989) *Theory of Multiple Intelligences*, or *MI*, into the school. Because the philosophy of the Montessori program allows students to engage in curricula that are abnormal, personalizing my own curriculum by infiltrating different theorists into the craft actually focuses student learning. This theory suggests that students are born with innate talents and ways of understanding their world. According to Gardner, there are eight of

these different intelligences. Many schools only teach to the mathematical-logical intelligence and the verbal-linguistic intelligence.

Before a teacher can work alongside his/her student, he/she must extensively observe and document the student's interactions with his/her environment and peers. From this data, the teacher can then assess the child's multiple intelligences. Many tests formulate a list of a child's multiple intelligences. The noteworthy tests include the *Birmingham Grid for Learning MI Test* (2011) and *Find Your Strengths* by Literacy Works (2011). I chose to implement Walter McKenzie's *Multiple Intelligences Inventory* (1999) because each section contains statements worded in child-friendly lingo. The teacher could orally give the student his/her test and the child could easily respond. McKenzie has also developed a non-reader picture based inventory called, *Multiple Intelligences and Instructional Technology*. Students could choose pictures that best represent their intelligence (McKenzie, 2005). Between the data of documented observation and the MI Test, the teacher can then prepare the correct environment for the child.

Case studies.

As directress of the Montessori school, I would observe and identify each of the intelligences within my students. Next, I would create a file for that student. This file would contain observation notes, lesson plans, and ideas for improving that specific student's growth. The child would be able to add to the file with comment sheets. These sheets are another part of the process I developed. The comment sheets would serve as another form of teacher- student communication. Any time the student noticed he/she solved a problem differently, was irritated by part of his/her environment, or found a new interest in a certain topic, he/she could write/draw on the comment sheet. The comment sheets help the child to identify how they acquire information best. Therefore, the child is not designing the curriculum, he/she is simply

contributing by method of self-reflection and content inquiry. By these two major contributions, the child is able to take ownership of his/her learning. The comment sheet along with observational notes and collected work samples would help the teacher to better prepare future lessons by gaining access to more beneficial manipulatives and/or planning for collaborative group work. The child's multiple intelligences stem from their strengths, which are characteristics of their personality.

Therefore, as part of the development to the Montessori Kindergarten Center-Joplin, each child is given lessons that are targeted towards their intelligences, personalities, and strengths. One difference that the JMKC has compared to that of other Montessori schools, is that all of the lessons are aligned with the Grade Level Expectations for the state of Missouri. This means a child could attend the JMKC for his/her kindergarten year, and then be easily immersed into a public school. The child would be on target for that Missouri public school. In June of 2010, Missouri joined the National Common Core Standards. The state of Missouri is in the process of switching from Grade Level Expectations to the Common Core Standards. The JMKC is devoted to making all changes that co-align with the state standards.

Each student understands the expectations, and is able to design lessons for himself/herself, with the assistance of a directress. These lessons would be kept neatly in his/her file. The file would also hold information concerning the child's ethnicity and social class. Here are various examples of case studies that would be performed and example documentation for each student:

Case study 1.

Name: Brett

Race: African- American

SES: Middle

Brett is a five-year old boy who is extremely spontaneous and active. His multiple intelligences are: bodily-kinesthetic, interpersonal, and naturalistic. He is strong headed, loud, and dramatic. He finds interest in superheroes, science, and food. See Table 2 below.

Table 2

Lesson Topic: Taking Care of the Environment

GLE	Quarter of the Year	Date	Status
Mathematics Data and Probability 10K-Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them	1	9/15	NC

Note. *NC means nearly competent.

Now, as the created chart above shows, the lesson is matched to a GLE. Then, the Mastery level of this expectation is rated, not graded. The mastery level can be near competent, near proficient, almost proficient, or mastered. The idea is for the directress to cover this GLE at least four times throughout the year and preferably once per semester. When the directress addresses the GLE in a lesson, she may write the date in the box. Here is an example of a lesson that has been decided upon between Mrs. Reed and Brett that relates to the information above.

See Table 3.

Not only does this lesson align with the GLEs, but Brett is also allowed to incorporate the various aspects of his whole self including personality, intelligences, and strengths to better understand the lesson.

Table 3:
Lesson Plan 1

Objective:	SWBAT explore and explain the effects of corn in cows' diet through means of a short skit.
Connection to Other GLEs:	Science- living organisms interaction with other living organisms Social Studies- the wants of people vs. the needs of animals Lang. Arts- expressing the negative effects of poor stewardship Geography-location of corn fed cows throughout the United States
Key Concepts:	Relationship between people, animals, and the environment People's decisions can make a strong negative or positive impact
Supplementary Materials:	stalks of corn, grass, jawbone of a cow, picture of a cow's four stomachs, field trip to a farm, discussion with local farmers, and animal figurines.

Case study 2.

Name: Amelia

Race: Hispanic

SES: Middle

Amelia is a five-year old girl who is reserved and calculated. She is typically found playing by herself, writing, or questioning others' behavior. Her multiple intelligences are: linguistic and intrapersonal. See Table 4 below.

Table 4
Lesson Topic: Pilgrims' Appreciation of Indians' Culture

GLE	Quarter of the Year	Date	Status
Social Studies Tools of Social Science Inquiry 7A0K- identify artifacts (building structures and materials, works of art representative of cultures, fossils, pottery, tools, clothing, musical instruments)	2	11/23	NP

Note. *NP means nearly proficient.

Not only does this lesson align with the GLEs, but Amelia is also allowed to incorporate the various aspects of his whole self including personality, intelligences, and strengths to better understand the lesson. See Table 5.

Table 5
Lesson Plan 2

Objective:	SWBAT express the thoughts of Pilgrims on behalf of their interaction with Indians through a diary entry portraying herself as a Pilgrim.
Connection to Other GLEs:	Science- the resources of the Indians' Geography- the location of the First Thanksgiving Mathematics- measurements of various artifacts Lang Arts- diary entry, wisdom literature
Key Concepts:	Different people in different locations use what they have to make their life Sharing Manners
Supplementary Materials:	storybooks, Indian hieroglyphics, Indian artifacts, online documentaries

Case study 3.

Name: Lauren

Race: Caucasian

SES: Low

Lauren is a six-year old girl who enjoys “mothering others.” Her multiple intelligences are: interpersonal and musical. She goes about the classroom singing and is a leader among her peers. See Table 6 below.

Table 6
Lesson Topic: Achieving More Together

GLE	Quarter of the Year	Date	Status
Science Changes in Ecosystems and Interactions of Organisms with their Environments 10K- Organisms are interdependent with one another and with their environment	3	2/20	P

Note. *P means proficient.

Here is an example of a lesson that has been decided upon between Mrs. Reed and Lauren that relates to the information above. See Table 7.

Table 7
Lesson Plan 3

Objective:	SWBAT stop a (pretend) case of bullying, by displaying the strength having good friends, through lyrics in a song.
Connection to Other GLEs:	Social Studies- people's basic needs Mathematics- analyzing and problem solving Lang Arts- poems, rhyming words, and wisdom literature
Key Concepts:	Choosing friends Confidence Dependence on others' strengths in our own weaknesses
Supplementary Materials:	<i>Stop Bullying Now!</i> Webisodes, "Don't Laugh at Me" song from <i>Teaching Tolerance</i> Series, interviews with other kindergarten students who have been bullied

Case study 4.

Name: Eric

Race: Chinese

SES: High

Eric is a six-year old boy who loves administrating and seeing to the details of a project. He sees problems and scenarios in black and white. Eric is precise in his decisions about communication, building structures, and enforcing the "law." His multiple intelligences are: spatial, logical-mathematical, and interpersonal. See Table 8 below.

Table 8
Lesson Topic: The Local Architect

GLE	Quarter of the Year	Date	Status
Mathematics Measurement 1D0K- Identify and know the value of a penny, nickel, dime, and quarter	4	4/19	M

Note. *M means mastered.

Here is an example of a lesson that has been decided upon between Mrs. Reed and Eric that relates to the information above. See Table 9.

Table 9
Lesson Plan 4

Objective:	SWBAT design a new police station by using classroom blocks. Each block size will have a designated value. SW calculate the total cost for the new facility.
Connection to Other GLEs:	Science- buildings effects on the local ecosystem Social Studies- supply and demand of supplies Lang. Arts- petitions for certain accommodations Geography- best location for the facility based on crime rate
Key Concepts:	Value of an individual’s skill All jobs further community Character: work ethic, discipline
Supplementary Materials:	building blocks, pennies, nickels, dimes, quarters, money chart, labels, grid paper for construction blueprint

List of Materials

When designing a Montessori school, or any school for that matter, it is impossible to foresee every material that will be needed and utilized by the teacher and students. However, to gauge the types of materials at the MKC-J and how those materials play a role in the student's learning, I have created the following bulleted list:

Bodily-Kinesthetic.

- finger puppets, retelling a story
- building blocks, designing a building

Intrapersonal.

- journal, writing daily thoughts, problems, and/or plans
- interactive boards, arranging continents to make a map

Interpersonal.

- costumes, acting out a play over characters from a story
- child-sized kitchen set, role playing

Mathematical-logical.

- geometric shapes, forming animals
- child-sized cash register, counting money

Musical.

- bells, deciphering the various pitches of sound
- child-sized guitar, create a song listing the stages of a frog's life cycle

Naturalistic.

- child-sized garden set, gardening at the MKC-J and in the local community
- butterfly net, catching butterflies to examine

Spatial.

- child-sized easel, painting a picture to represent location of Joplin in Missouri
- various-sized stepstools, maneuvering to reach higher objects

Verbal-linguistic

- tape recorder, recording oneself reading a book
- big books, reading a story to the class

The student meets with the teacher to discuss his/her objective and the materials need to meet that objective. From his/her list of needed materials, the teacher prepares the environment. With the right materials, children can be autonomous. The materials should promote active involvement with the content and be aesthetically pleasing (Montessori, 1914). Children then are able to explore, manipulate, and create with the materials to accomplish the task, which is aligned with the objectives. After researching the *Montessori Method*, I discovered that part of her philosophy is comparable to that of a constructivist theory. The company, Constructive Playthings, specializes in creating materials for the constructivist classroom. The items are created on a child's scale. Therefore, the materials are all physically and developmentally age appropriate. The materials all provide concrete representations of the abstract concepts. They also are crafted to develop and organize incoming sensory perceptions. Maria Montessori was dedicated to only using only natural materials. Today, Montessori schools do not use plastic materials. Montessori believed that by only using natural materials, quality would be ensured (Montessori Materials, 2011). However, the MKC uses materials of all kinds, including plastic. Plastic materials are available for "play" areas only. The plastic materials may not be used during the three hour periods of uninterrupted work time. The MKC believes there is something significant and raw in a child working with natural materials that are found in his natural

environment. However, at the MKC plastic materials can be used in play areas where fantasy and pretend play are developed.

Description of Faculty

Because the uninterrupted, prepared work time is such a necessary component of the Montessori educational system, the directress must be that of the highest qualified in the educational field (Montessori, 1912). She should have a degree from an accredited university, certification from the American Montessori International, American Montessori Society, or another organization that is recognized by the International Montessori Index. At the Montessori Kindergarten Center, the average ratio of teachers to students would be that of one to one or one to fifteen. This ratio is different than the average Montessori schools. Typical Montessori schools have a teacher to student ratio of one student per one teacher, or thirty-five students per one teacher. The directresses at the MKC should be well-trained, enthusiastic, organized, patient, and creative. Students are directly influenced by their directresses. Therefore, the directress must model proper behavior and encourage individuality.

Conclusion

Montessori children have continued to score above average in following directions, asking daring questions, displaying enthusiasm for learning, adapting to new situations, and actively listening, all which are necessary skills for developing into adulthood. Research proves that children who have experienced the order *and* freedom of a Montessori school, are well prepared in social, academic, and emotional realms for tasks later in life (Olaf, 2011). Individuality, autonomy, a prepared environment, practical life application, sensory materials, mobility, and academic stimulation are the foundations of the Montessori Kindergarten Center. These principles are established from the ideas of Maria Montessori and her experiences with

children in the early 1900s. The MKC provides learners with the opportunity to exercise and flow in their creative multiple intelligences. With the synthesis of the *Montessori Method* and Howard Gardner's *Theory of Multiple Intelligences* that incorporates the Grade Level Expectations for the state of Missouri, the MKC is strikingly different from the traditional Montessori school. The Joplin Montessori Kindergarten Center values Maria Montessori's work in recognizing a need for educational reform. Even though the *Montessori Method* challenges and sometimes even opposes today's typical school systems, it is effective and beneficial for the students. Children are the most creative, spontaneous, joyful, and uninhibited individuals. They should not just be allowed to be who they are, but also encouraged in their strengths, multiple intelligences, and talents. The Montessori Kindergarten Center-Joplin is a place that serves the local community by providing an educational haven for children to flourish in a natural, unrestrained environment.

This proposal is a true dream of mine. After graduation in May 2011, my plan is to teach in the public school system for at least five years. Once I have completed at least two years of this training, I will begin pursuing my Masters in Montessori Education. Within the next fifteen years, it is my passion and dream to see the Montessori Kindergarten Center-Joplin serving the community to the best of its ability.

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