

Trinity College
Trinity College Digital Repository

Senior Theses and Projects

Student Works

4-1-2005

Perceptions of a Montessori Magnet Elementary School

Caroline Johnston
Trinity College

Follow this and additional works at: <http://digitalrepository.trincoll.edu/theses>

Recommended Citation

Johnston, Caroline, "Perceptions of a Montessori Magnet Elementary School". Senior Theses, Trinity College, Hartford, CT 2005.
Trinity College Digital Repository, <http://digitalrepository.trincoll.edu/theses/72>

“Perceptions of a Montessori Magnet Elementary School”

Introduction

A child’s academic success involves a variety of factors that contribute to how well a student performs academically. Many of these factors are often used as indicators and predictors as to how well a child will perform in the school system. One of these important factors is the child’s family’s socio-economic status, or SES. A student’s SES background is a good indicator of how well a child will perform in school, demonstrating that students from lower SES backgrounds consistently perform less well than students from higher SES backgrounds. (Roseberry-McKibben, 4) There are a variety of complex factors that contribute to this recurring phenomenon; however, regardless of these factors, society continues to look to the educational system as the place where students from different SES backgrounds will have an equal opportunity to be successful in both school and life. Therefore, if the school is the one societal institution that is expected to provide an equal starting point for all children, yet it seems that this is not happening, what changes need to be made within the system to better serve students from all backgrounds?

Research Question

After considering this phenomenon, that students from lower SES backgrounds consistently perform less well than students from higher SES backgrounds, I was quite interested in exploring this topic in greater detail. Therefore, this research project aims to answer the following question: In requiring that students join their school at the age of 3, has the Montessori Magnet Elementary School been able to figure out a way in which they can help their students from lower SES backgrounds to be as successful academically and socially as their classmates from higher SES backgrounds?

Significance

This question is extremely important when assessing the educational system, and aspects that could be adjusted within the system. If the Montessori Magnet Elementary School’s philosophy helps students from both low or high SES family backgrounds be as successful as each other, perhaps there are elements of their philosophy that can be incorporated into the mainstream educational system. As stated previously, our society continues to look at the educational system to be an equal starting point for all children, regardless of their background. However, as the research will show, students from lower SES backgrounds continue to perform less well academically. Therefore, perhaps this suggests that there are aspects of our educational philosophy that should be readjusted to help those students who consistently are performing at a lower academic level. Though there are many components that contribute to a student’s academic performance, all possibilities for improvement should be considered. Therefore, I think it is extremely important for people to consider aspects of other educational philosophies when reassessing our society’s educational philosophy.

Thesis Statement

I believe that my research will demonstrate that the Montessori Magnet Elementary School does help students from lower SES backgrounds to be as academically and socially as successful as students from higher SES backgrounds. I

think that this will be contributed to their philosophy, an important part of which starts children in school at the age of 3.

Methodology

The research conducted to explore this question will be relying on both quantitative and qualitative research methods. A portion of the qualitative research will be conducted in terms of exploring what factors of socio-economic status affect a student's academic performance. This information will be dealing mainly with the connections between SES background and a student's academic outcome. Different theories will be examined that are often used to explain the connection and see if there is any relationship between this and the Montessori philosophy. In addition, testing results will be explored for the Montessori School and the Hartford Public Schools. The other portion of the qualitative research will be exploring the Montessori educational philosophy. This information found regarding the Montessori program and its philosophy will be better used to conduct the qualitative aspect of this research project, as well as being used for future reference for development on the project.

In addition to the quantitative research, there will also be a qualitative aspect to this research project. I will be conducting observations at the Montessori Magnet Elementary School in a 3-6 year old classroom. During these observations, I intend to look for the differences in the ways in which students and teachers interact with one another in comparison to the mainstream American public education system. In addition, I will make note of any other differences found between the Montessori School and the public education system. As a supplement to the classroom observations, I will also be conducting interviews with two of the primary classroom teachers, as well as an administrator at the Montessori School. These interviews will provide me with a deeper insight to the school's student population and their needs, as well as to how the school's philosophy is applied to create equal learning opportunities among students, regardless of SES background. As part of the qualitative research, I have submitted an IRB form with a description of my research project, as well as the questions that I will use when conducting my interviews. As in accordance with ethical guidelines, I will not use any names of the people I interviewed to protect their privacy. Therefore, only their position title will be used.

The quantitative research found in my project will be used mainly to develop an appropriate background for the qualitative research that will be conducted. I believe that when looking at the Montessori's philosophy, it will be clear that the qualitative research will give a clear and better insight to the school's philosophy, and how it functions, in comparison with testing results.

Findings and Supportive Evidence

There is a lot of significant research regarding various components that influence a student's academic performance. However, the majority of the research found looks at the relationship between various racial groups and their academic outcomes. However, there are some aspects of research that explore the relationship between socio-economic status and academic performance. This research is clear to point out that "a family's SES and educational level are much greater predictors of children's cognitive-linguistic development and academic success than skin color or language spoken in the home," meaning that SES background, and not race, is the important indicator. (Roseberry-McKibbin, 4) Socio-economic status is generally defined to include three components,

which are income, occupation, and educational level. (Marger) However, when assessing a family's SES background in a school system there is a general format that is followed. This is done by looking at whether or not a student is participating in the school's free or reduced lunch meal program. To qualify for the free lunch program, a family must earn an income of \$21,000 per year or less. To qualify for the reduced lunch program, a family must earn around \$30,000 per year. (Based on Interview)

Perhaps the most important research links a family's SES backgrounds to a child's language development. A study conducted on 1 and 2 year olds found that over the course of a year, "children from professional families would have heard 4 million utterances, and children from welfare families would have heard 250,000 utterances." (Roseberry-McKibbin, 5) This means that upon entering either preschool or kindergarten, those children coming from a lower income, or SES, family household have a significantly smaller vocabulary than children from wealthier families. Theories have been developed that discuss the disadvantage that this puts children from lower SES backgrounds at. Basil Bernstein has a theory developed that describes how "class membership generates distinctive forms of speech patterns through family socialization." (MacLeod, 16) This can be seen to be in agreement with the study mentioned before. Bernstein's theory elaborates that working class and middle class families use different forms of linguistic codes, which he defines as "the underlying regulative principles that govern the selection and combination of different syntactic and lexical constructions." (MacLeod, 17) To clarify, this theory suggests that children from working class children, because they are coming from a background where generally there is a strong feeling of community and shared "identifications," speak in a manner that assumes the listener will understand what he or she is saying without elaborating. This is in contrast to students from middle class backgrounds who tend to elaborate and distinguish exactly what they mean as individual to their listener. (MacLeod) Perhaps more precisely, as Shirley Brice Heath explains, "middle-class children are taught to label and name objects, to identify the features of the objects, and to talk about references out of context," which are exactly "the skills demanded of students in school." (MacLeod, 18) This means, that through these varying linguistic codes, children from middle-class backgrounds are better prepared upon entering the school system. As Heath further explains, students from working class backgrounds "are not socialized to cope with the language patterns used in school and quickly fall into a pattern of academic failure." (MacLeod, 18) This research is very important to consider when looking at the differences that exist between students from higher and lower SES backgrounds.

Besides looking at the connections between SES and academic outcome, I conducted research that explored the Montessori School and their philosophy on education. The Montessori educational model is formal, "with defined methods, teacher certification standards, and accreditation processes." (Edwards, 1) The philosophy was developed by Maria Montessori, an Italian physician, who began to analyze how children learned during her clinical observations. Montessori found that children had an ability to effortlessly absorb information from their surroundings and had a deep interest in manipulating materials. (Kahn) Therefore, "every piece of equipment, every exercise, every method Montessori developed was based on what she observed children to do 'naturally,' by themselves, unassisted by adults." (Kahn, 2) Montessori also believed that "children's natural intelligence involved three aspects from the very start: rational,

empirical, and spiritual.” (Edwards, 2) Therefore, her educational philosophy was drawn in a way to include these aspects of a child’s natural intelligence. From all this, Montessori developed her basic theory on education: “Children teach themselves.” (Kahn, 2)

The Montessori educational approach is extremely developmentally appropriate. This results in multiage classrooms. The primary program, which is 3-6 year olds is the level at which I have chosen to focus my attention. This is the stage of the “conscious absorbent mind.” This means that during this stage the child “seeks sensory input, regulation of movement, order, and freedom to choose activities and explore them deeply without interruption.” (Edwards, 3) All the activities and tools in the classroom are formed in such a manner that will be appealing to students, as well as developmentally appropriate. In addition, the Montessori educational philosophy, it is very important that children are seen as the “active authors of their own development.” (Edwards, 2) As I found from one of my interviews, the child is in charge of his or her own education, with the teacher there guiding from the back. Interestingly, in this same interview I discovered that a major part of the Montessori philosophy is that each child should be respected and allowed to develop at their own pace, on a continuum essentially. This means that there are no requirements for students while in a particular program, for example in the primary program. As long as a student fulfills the requirements set for them to pass into the elementary program, they are not rushed to complete tasks until they are ready to do so. Going along with this, children in the Montessori programs are not tested the way in which children in our public school systems are. They are encouraged to work at their own pace, and the only marks that a child will receive in regards to their task are: “Mastered,” “Working on it, but Inconsistent,” and “Beginning Level.”

The Montessori Magnet Elementary School is a public school and accepts students through a lottery system. Students are required to enter at the age of 3 and, unless they are transferring from a different Montessori School, are not allowed to enter if they are any older. The only requirement besides the age restriction is that the child must be toilet trained. The Montessori Magnet Elementary School draws 50% of its students from Hartford, while the other 50% are from 18 other surrounding communities. In general, the two teachers I spoke with as well as the administrator all believe that parental understanding of the Montessori philosophy tends to be relatively low when enrolling their child into the lottery. The administrator I spoke with believes that, especially parents in Hartford, tend to see the school as a nice, safe building. The school does put on an open house, which goes over the basic philosophy of the Montessori program. In addition to this, if a child is accepted into the school, there is a mandatory “New Parent Night,” which discusses the way in which the school works. Both of the teachers I interviewed seemed to complain that “sometimes it’s a battle to get the parents involved,” or that even after they have a child enrolled they do not try to understand the Montessori philosophy. Throughout the year there are a variety of educational opportunities for parents. Perhaps as a result of these complaints, one of the main goals for this school year, 2004-2005, is to increase parental involvement in the school. Each year they offer dinner nights, which feature guest speakers. This year they offered free child care to the parents. Attendance jumped from 30 to 180. This is extremely important since continuing the Montessori philosophy at home is an essential part of the program.

During my time spent at the Montessori Magnet Elementary School, both while conducting my interviews and my observations, I have strongly come to believe that the Montessori philosophy does help equalize student achievement regardless of socio-economic background. During my interviews I found that the general academic goals for their students are the same as they would be in the public school system, which are for their students to meet or exceed the state's testing. More specifically, in the primary program, for their students to be able to read, write and perform the basic math skills. However, part of their academic curriculum includes "Grace and Courtesy" lessons, which teach students the proper way of conducting themselves and various tasks. In addition to this, the social goals for this school are extremely focused on the children being able to be self-directed, self-controlled, compassionate, and independent thinkers. They want their students to be as independent as possible, both in regards to their academics as well as socially. As one teacher clarified about the classroom, "The atmosphere created encourages independence." Therefore, teachers and children work together to establish a learning plan that is developmentally appropriate for the child. This plan varies depending on the child, and the child is responsible for ensuring that his or her work is accomplished. Basically, the Montessori philosophy focuses on intrinsic motivation so that children can take pride in their work and achievements, rather than be stimulated to be successful by outside sources.

My observations in the classroom reinforced what I learned through my interviews. I conducted observations in 2 of the primary classrooms, the 3-6 year old students. The first classroom that I went into was very spacious and bright. There were more than 15 plants, as well as birds and other small animals in the classroom. This combination created a very nice and serene atmosphere. The birds were singing the whole time I was there, which I found rather relaxing. There were only 3 or 4 tables for working, which means that all the students cannot sit at the table at the same time. Instead, when doing their work, children may choose to sit at the tables or to work on mats on the floors. When I arrived the children were sitting in a circle on the floor. The teacher asked the children to go find something to do. I was surprised to see all the children scatter and find different tasks to work on. It was quite interesting to see that the teacher did not have to monitor the students; they were being quite productive on their own, consulting with other students or the teacher when need be. At one table in front of me there were two students. One child appeared to be practicing placement values in math, while the other was practicing zipping up a piece of clothe. I found this to be a great example of children working at their own pace. In addition, none of the students I observed appeared to be doing worksheets or any other type of work commonly referred to as "busy work." All the tasks that children were working on were hands-on. As I continued to look around, I found that everything in the classroom was developmentally appropriate and fit for the 3-6 year olds. Even the shelves were lower and at a level that would be most comfortable for the students. The furniture and blocks are all made from clean wood material, which makes the whole room look very clean.

As I continued my observations, I found it quite interesting the active role that students were taking in their own education. Not only were these children responsible in terms of learning their academic material, but they were also responsible in ways that surprised me. One child had decided to water the plants. I know that he did this on his own, because I heard the teacher tell him that she had already watered the plants recently,

so he did not need to water them again. This demonstrates that these children also feel a responsibility to take care of the environment around them. I was also surprised by some of the tasks these children completed. As I was getting ready to move onto the next classroom, one of the children brought me a grilled cheese sandwich that he had made himself! He was probably 4 or 5 years old, and I could not believe that he was able to prepare a small meal on his own. As I learned later during my interviews with the teachers, this is part of the “Grace and Courtesy” Lessons.

In the second classroom I continued to observe behaviors that I do not believe I would see in a regular public school classroom. Children were allowed to eat while in the classroom, and I was quite impressed to note that these children cleared their own plate and washed their own dishes. As I continued to watch the students, I noticed that some chose to work by themselves, while other opted to work in small groups or with partners. As one child seemed to wander around the teacher asked him gently, “Where is your work? You should be with your work.” This seemed to be a simple reminder to keep the child on task. Because these children are continuously in charge of their own tasks, this seems to give the teacher more of an opportunity to give various students individualized attention. While I was there, the teacher was working with one child on her math. In between helping this child she addresses other students who were seeking her attention.

During my interviews I was able to explore into even greater depth the Montessori philosophy. As I learned through my research, the teachers explained to me that the Montessori school begins at the age of 3 because the child has certain sensitive periods, at which time certain tasks are mastered. If you miss these opportunities, the skills are much harder to learning, and it’s possible that a child will not be able to learn them later. Language is an important skill that needs to be appropriately developed around the age of 3. The administrator I interviewed further emphasized the point that the primary years is the best time to learn effortlessly because it comes naturally. It is a good time for children to being to learn how to work independently and concentrate. When asked about the advantages and disadvantages of beginning school at the age of 3, it was clear that they all felt there were many more advantages. Most of these advantages where that children would begin to be socialized to be around other children and adults, and that it was a developmentally appropriate time for children to start learning from outsides the home, thus broadening their social experience.

One interesting thing that I learned from one of the teachers, which was touched on briefly previously, was the “Grace and Courtesy” lessons that are part of the academic curriculum. These lessons are meant to teach children how to behave appropriately. They are taught how to set the table, how to sit properly, how to wash their hands, how to sew on a button, how to dust and clean their shoes, how to dress themselves, as well as how to work together in a group and treat each other as a group. I found this very interesting that the Montessori philosophy, through these lessons, is clearly focused on helping the child develop as a whole person, rather than just academically.

Perhaps one of the most important questions I asked was regarding the differences observed between the entering 3 year olds. What I discovered from the interview was that the Montessori School has children entering from a variety of different backgrounds, with many different experiences. Interestingly, the first thing that the teachers and administrator mentioned regarding differences was language. While some students enter

with an extensive vocabulary, other students enter barely speaking, or not even knowing English. However, the Montessori philosophy is such that these children are given space and time to catch up at their own pace. As children go through the program, both the teachers and administrator agree, any problems tend to settle out. The administrator relayed a story to me about a child who entered the school not speaking any English. Given the opportunity to work at her own pace, this child was fluent within half a year. Part of this is because children are starting at the age of 3, which is still the sensitive period for language. This is part of the reason why the mixed age group classrooms are so important. The 3 year olds coming in, who are behind with their vocabulary or anything else, will learn from their fellow classmates, while the older classmates will reinforce the knowledge they already have when helping other students. In addition, students are allowed to be independent and explore their world at a rate that is most comfortable for them. Therefore, there are children who enter the Montessori school with a limited vocabulary, or lack of exposure to books, and are given enough freedom to develop on their own.

This is perhaps the most important question because it directly links to the research which demonstrated the language differences found between families from lower SES backgrounds compared with families from higher SES backgrounds. However, while children in the public school systems are rushed to be at a certain level at a particular time, children in the Montessori school are allowed to develop their language skills, or other skills, at their own pace without feeling as though they are falling behind. This helps elevate a child's own self-confidence, which then allows them to tackle these tasks that might otherwise be seen as obstacles.

In addition to the research, interviews, and observations, I also looked into the Connecticut Mastery Test results as a way to compare academic achievement. However, it is extremely important to point out that while the Connecticut Mastery Test does provide a basis for comparison, testing in general is not consistent with the theme and philosophy of the Montessori School. Therefore, while these results should be taken into consideration, I believe that the observations and interviews should serve as a better comparison than these tests. I looked at the test results from the year 2002, because the 2003 test results for the Montessori school were not available. What I found is that the Montessori Magnet Elementary School is performing consistently at a higher level than the local Hartford district. In addition to this, the Montessori School is quite close to meeting state averages in Math and Writing, and has surpassed them in Reading. The percentages of students meeting grade-level standards for 4th grade are as follows:

	State	Hartford	Montessori Magnet
Math	81	58	72
Reading	64	32	71
Writing	81	64	69

(Connecticut Mastery Test, Third Generation)

From this it is clear that the Montessori Magnet School has been quite successful. However, there are several other factors that should be taken into consideration when looking at this information. The Montessori Magnet School's primary program has 32% of their students participating in the free or reduced lunch programs. (Based on Interview) I could not obtain this same information for the Hartford School district as a whole, but when looking at a variety of schools, the percentages of their students who participated in

the school's free or reduced lunch program ranged from 72-96% of their students. (Great Schools Website) This clearly demonstrates that the Montessori's school population differs greatly than that of the average public school in Hartford. However, they still provide a solid basis for comparison.

Conclusion

From the extensive research that I have conducted, I have come to conclude that the Montessori educational philosophy does help children from lower SES backgrounds to be as successful as their peers from higher SES backgrounds. I believe that giving students the opportunity to be in charge of their own education and develop at their own pace, gives students a certain power in their education that they can be proud of and feel successful with. This in turn creates a higher self-esteem and also creates a more intrinsic motivation to continue learning. By not rushing students through a curriculum with which they do not feel comfortable, the Montessori school is allowing children to feel successful as they develop at a pace that is right for them. Though the test scores given may be seen as controversial in proving my thesis, I believe that they should just be a small contribution to the interviews and observations conducted. Through these interviews and observations I have come to see that in the Montessori education, the child and his or her individual needs are truly at the center of their educational philosophy. Perhaps that is what is needed to be incorporated in greater aspects into our mainstream educational philosophy. By having students enter at an age when they are still absorbing all new material, as well as letting them develop at their own pace, I believe the Montessori Magnet Elementary School's philosophy is extremely conducive to helping students from all background become successful in every aspect of their lives.

Works Cited

2000 Connecticut Mastery Test Scores.

http://www.youbelonginect.com/pupload/mastery_scores.pdf.

Connecticut Mastery Test, Third Generation: Comparison of Students' Achievement for 2000-2003, Grade 4. <http://www.cmtreports.com/AcrossYears/byYear/index2.html>.

Edwards, Carolyn Pope. "Fine Designs from Italy: Montessori Education and the Reggio Emilia Approach." *Montessori Life* 15 (2003) 34-39.

Great Schools. http://www.greatschools.net/modeperl/browse_school/ct/1441.

Kahn, David. *What is Montessori Preschool?*. Editor. North American Montessori Teachers' Association. 1995.

MacLeod, Jay. *Ain't No Makin' It: Aspirations & Attainment in a Low-Income Neighborhood*. Colorado: Westview Press, Inc., 1995.

Marger, Martin. *Social Inequality: Patterns and Processes*. Boston: McGrawHill, 2002.

Roseberry-McKibbin, Celeste. "Serving Children from the Culture of Poverty: Practical Strategies for Speech-Language Pathologists." *The ASHA Leader*. (Nov 2001) 4-6.