

# The Impact of Montessori Public Elementary Experiences on High School Students

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#### **ABSTRACT**

Maria Montessori believed that children have a natural yearning for exploring and understanding the world around them, which could lead them to gain the intrinsic satisfaction and enable them to develop positive characters. Her belief was transformed into the Montessori educational practices of supporting and nurturing the potential of the "whole child". Montessori schools have become a school option in the public sector in the United States since the 1960's. However, there has been limited research describing the influences of public Montessori programs on student's learning outcomes beyond the elementary school level. The purpose of this basic qualitative research study was to explore the high school social and academic learning experiences of students who formerly attended a Montessori public elementary school. Six students and four teachers participated in this study. Students responded to 10 questions and teachers to 11 questions through email interviews. The interview results reflected the students' social and academic experiences in regard to the influence of Montessori elementary education. The high school teacher participants recalled the former Montessori students engaging in academically advanced coursework and performing in leadership roles in their high school years. Students recognized that the elementary Montessori experiences prepared them well for the process of transitioning into traditional settings socially and academically at the secondary levels and beyond.

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## **Background/Literature Review**

Montessori believed that children desired to be engaged in purposeful, explorative and engaging environments that developed independence and the facilitation of reaching their fullest potential (Montessori, 1966).

Learners should have experiences that involve student engagement, movement, integrating concepts vs. learning in isolation and immersion in real-world application. Students reflecting student-centered learning with teachers facilitating creates necessary needed for future careers (Luterbach & Brown, 2011).

The purpose of this study was to discover the long-term influence of completing a Montessori public school program (ages 3-11 years old, 5th grade) on students' academic performance and social skills during the secondary years in non-Montessori schools. Research provided awareness of how student and high school teacher participants perceive elementary learning experiences to influence success.

#### **Research Questions**

What are social learning experiences of high school students who formerly attended elementary Montessori schools?

What are middle/high school teachers' experiences with and perceptions of the former Montessori students' social learning?

What are the academic learning experiences of high school students who were formerly instructed through Montessori elementary teaching methods? What are high school teachers' experiences with and perceptions of the former Montessori students' academic learning?

## **Methods/Validity Concerns**

Research Design: A qualitative approach was used involving structured email interviewing with graduates of traditional high school hat had completed the school-wide public Montessori school as elementary students and with secondary teachers of the student participates at the high school

Recruitment: A recruitment letter was mailed through the school district's Office of Accountability, Assessment and Research to 165 students who were eligible to participate and a district email list provided potential high teachers for the recruitment process. Teacher recruitment occurred through district email and interest in participation. An Interview Question Guide was sent to students and teachers through email to complete the interview and return electronically.

Criteria: Students whom attended the school-wide public, Montessori school during the first five years, completed the program through 5<sup>th</sup> grade and attended a non-Montessori high school.

## **Participants**

- One school-wide public, Montessori school
- Two non-Montessori high schools
- 3 female and 3 male students/2 black and 4 white
- 2 female and 2 male teachers/ 1 coach, 1 performing arts, 2 English subject areas

### Findings

- Felt respected as individuals that engaged in relevant activities based on their interest and potential to be life-long learners.
- Direct connections of Montessori instructional practices in improving student achievement through developing students cognitively, socially and emotionally.
- Enjoyed being in school with elementary peers due to the philosophy of respect for others, self and the environment showing the development of skills in self-control and conflict resolution.
- The ability to appreciate others differences and each person's uniqueness.
- Benefited from practicing problem solving, collaboration, communication and interactive skills which supported the development by high school of positive, active engagement with peers and adults.
- Students described as compassionate, confident and supportive of peers likely to be in leadership positions due to ability to guide groups and peer interactions.
- Social engagement of students described as cooperative naturally and seriously towards a common goal.
- Majority of students love reading and opportunities at the Primary level to engage with words, text and letter formation. If lacking reading interest, other subject areas were favorable.
- Accessible literature supported developing reading fluency and comprehension strategies towards becoming independent readers able to read beyond grade level text.
- Learned mathematics through seeing the "big picture" of concepts with the assistance of specialized materials explored concretely first towards abstraction in conceptualizing numbers, thinking critically and problem solving were foundational in their academic success.
- Concerns with having application of mathematical concepts, management of homework tasks and weakness involving letter formation and penmanship in producing work products.

#### Limitations

This study did not include private Montessori students.

All of the student participants were chosen to attend the public Montessori elementary school through a random, selection lottery process.

This study was based on students that attended the school-wide program during the 2000-2001 school year in a school district.

Former students of the researcher were ineligible to participate.

The sample size of this study is small as only six students and four teachers responded to recruitment, therefore, the study findings may not be able to apply to the whole Montessori education community.

### Implications/Future Research

Theories of effectiveness in the affective domains of academic and social development.

Duplicate on a broader scale to include student graduates in the state and across the country that have completed a Montessori public school program. Increasing the number of respondents would generate broader perspectives of the influences of this approach.

Duplicate more teacher participants from the middle and high school level.

Involve the parental perspectives of student graduates.

Study affective areas of the physical, emotional and mental development of students

Study research findings of Montessori students having messier handwriting could be explored.

Focus on the factors of homework experiences in Montessori and the traditional settings.

Study differences in the experiences of students starting at the primary level and those coming in elementary with no previous Montessori experiences could be explored further.

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