

Empowering Adolescents: A Multiple-case Study of U.S. Montessori High Schools

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ABSTRACT

This research examined five U.S. Montessori high school programs through a qualitative multiple case study. Data collected from school documents, students, and staff were used to create a conceptual framework of Montessori education at the high school level, with the goal of informing Montessori practice and providing a means for considering Montessori methodology as a tool for widespread high school reform. Findings of the study indicate that it is not the specific curricular content that makes a high school program Montessori. Instead, Montessori education at this level is centered around addressing all aspects of development using student-directed learning, integrated curriculum, place-based opportunities, and experiential learning. The context that supports this approach is a school environment in which there are family-like relationships between students and teachers, the staff focuses on supporting students' emotional needs, students enjoy close relationships with their peers, and there is a culture of mutual respect and community cohesiveness. The overall school structure creates an environment where students actively work to gain skills that will support them in higher education and adult responsibility.

PROBLEM

The standards-based, teach-and-test methods that have come to proliferate secondary education since the inception of the No Child Left Behind Act (NCLB) fail to adequately prepare students for higher education and employment. In order to realize sustainable school change, educators need to consider reform measures that go beyond variations on traditional educational approaches.

PURPOSE

This study documented Montessori high school practices in a public school, two charter schools, and two private schools. Specifically this study aimed to:

- Identify traits of traditional Montessori practice and document how these traits are implemented with Montessori high-school-age students.
- Identify aspects of Montessori's Erdkinder model that are practiced in Montessori high school programs, and identify how they are being adapted to the various school structures and geographic settings.
- Contribute to addressing the gap in the professional literature related to Montessori secondary education in general and Montessori high school education in particular.
- Provide a catalyst for school reform by contributing to the body of literature regarding alternative methods for high school education.

RESEARCH QUESTIONS

Overall: What constitutes Montessori High School education and how can this philosophy and practice be used to reform traditional public high schools?

- How are traditional Montessori approaches that appear in lower levels integrated into Montessori high school programs?
- How are concepts of the Erdkinder model integrated into the Montessori high school programs?
- In what ways do the curriculum, class structure, pedagogy and approach serve to meet the developmental needs of high school students as outlined in Montessori's Four Planes of Education and current literature?
- In what ways do the curriculum, class structure, pedagogy and approach serve to prepare adolescents for higher education and adult work?

RELEVANT LITERATURE

The works of Maria Montessori, L.S. Vygotsky, Alfie Kohn, and William Glasser; the current literature on place-based learning, experiential learning, 21st Century skills, student-centered practices, and school reform; and the literature on Montessori education sites below served as the foundation for this study.

Brehony, K.J. (2000). Montessori, individual work and individuality in the elementary classroom. *History of Education* 29(2) 115-128.

Retrieved May 24, 2009 from Academic Search Premier database.

Cossentino, J. (2005). Ritualizing expertise: Non-Montessorian view of the Montessori method. *American Journal of Education*, 111(2). Retrieved October 13, 2007, from ERIC database.

Cossentino, J. (2006). Big work: Goodness, vocation, and engagement in the Montessori method. *Curriculum Inquiry*, 36(1), 63. Retrieved October 13, 2007, from ERIC database.

Rathunde, K. & Csikszentmihalyi, M. (2005a). Middle school students' motivation and quality of experience: A comparison of Montessori and traditional school environments. *American Journal of Education*, 111, 341-371. Retrieved January 23, 2007, from Academic Search Premier database.

Rathunde, K. & Csikszentmihalyi, M. (2005b). The social context of middle school: Teachers, friends, and activities in Montessori and traditional school environments. *The Elementary School Journal*, 106, 59-79. Retrieved January 23, 2007, from Academic Search Premier database.

Vaughn, M. (2002). A delicate balance: The praxis of empowerment at a midwestern Montessori school. *Communication Education*, 5(1)2, 183-201. Retrieved Jan. 23, 2007, from Academic Search Premier database.

Whitescarver, K. and Cossentino, J. (2008). Montessori and the mainstream: A century of reform on the margin. *Teachers College Record*, 110 (12), 2571-2600. Retrieved May 25, 2009 from <http://www.tcrecord.org>.

DATA COLLECTION PROCEDURES

Data were collected from the five participating schools over the a 12-week period. Three types of data were collected as described below:

- School Documents—Documents were provided by school principals and retrieved from school web sites. They included handbooks, newsletters, curriculum, and other documents as available.
- Focus Groups—Two groups of students participated in online focus groups using a blog format. They responded to discussion prompts and to each others' posts.
- Individual Interviews—Students and staff participated interviews via phone or video conferencing. The interviews were audio recorded and then transcribed verbatim.

DATA ANALYSIS

Categories and codes were created in advance of data collection for use during analysis. A line-by-line coding approach was employed in the research. The researcher did, however, employ open-coding technique of identifying themes in the data as they arose, and added a category specifically for items that were not consistent with typical Montessori practice. Once data was coded, a narrative profile was created for each participating school, using the coding descriptions as topic headings. This allowed the researcher to compare the five programs, look for common characteristics, and relate characteristics to the research questions.

FINDINGS

Research Question 1

How are traditional Montessori approaches that appear in lower levels integrated into Montessori high school programs?

- The multi-age classrooms, the prepared environment, and authentic assessment play diminished roles in the high school programs compared to their roles in the lower levels. Concern about preparing students for university matriculation appeared to be at least one factor in decisions made in this regard.
- There was wide variation in terms of multi-age practices, with some schools maintaining three-year age cycles and others relying more on single-grade class structures. Still, students at all five schools had opportunities to interact with students from the full program age range.
- Community interaction through internships and service work, which were part of all five programs, greatly expanded the age range of the people with whom students regularly interact.
- Assessment practices at the high school level appear to be the most dissimilar to those at the early childhood and elementary levels. Grades were used in some manner across the board, which would indicate at least some degree of standardization and comparison of students' work.
- Self-directed learning, experiential learning, and focus on the natural world were a part of all five of the programs. At the three schools that offered farm-based programs, there was a particular emphasis on experiential learning in nature. Older students at those schools, as well as students at schools with no farm component, still had learning experiences that incorporated these characteristics extensively.
- There is evidence in this research that the relationships between students and staff and among students play an important role in Montessori high schools. The give-and-take environment in which teachers and students are learning together is exemplified repeatedly in all five cases. Interest in individual students' learning that was articulated in the data may be another factor that minimizes the negative impact of the use of grades and standardized tests.

Research Question 2

How are concepts of the Erdkinder model integrated into the Montessori high school programs?

- None of the programs follow the Erdkinder model precisely as described by Montessori, yet all five of them incorporate elements of the plan, based on the evidence.
- Three of the five schools specifically include a farm program; one of the schools that does not include a farm program does have a boarding component. And the school that includes neither of these elements offers a course specifically intended to create Erdkinder-like business experiences in the urban, public school setting.
- The evidence indicates that all of the programs work to address the reform Montessori suggested with regard to what she called the *present form of society*. This reform, according to Montessori, should aim to prepare students for economic independence. Service learning and internships incorporated into the five schools' curricula do just that.
- Montessori suggested reform also center around meeting the *vital needs of the adolescent* by providing them experience in adult society by doing real work that makes an authentic contribution to the community. Opportunities to do meaningful work in the community at large abound in all five programs.

FINDINGS, CONTINUED

Research Question 3

In what ways do the curriculum, class structure, pedagogy and approach serve to meet the developmental needs of high school students as outlined in Montessori's Four Planes of Education and current literature?

- Data showed that in the third plane, adolescents develop the concept of empathy, begin to experience society independently, and develop self-respect through this place-based work. The opportunities for authentic work and authentic contribution to the local and global community assist Montessori high school students in gaining skills to become members of adult society.
- Given the frequency with which the data addressed social development, the evidence suggests that the integrated curriculum that encourages students to make connections in their learning, the freedom students are afforded in the classroom, the caring relationships that are forged between students and teachers, and the experiential approach to learning all work to relate the education experiences to the students' roles in society, thus meeting their developmental needs.

Research Question 4

In what ways do the curriculum, class structure, pedagogy and approach serve to prepare adolescents for higher education and adult work?

- There seems to be a slightly greater focus on preparing students for adult work than for higher education, yet there is evidence in the data that demonstrates that both goals are incorporated into the five participating schools.
- Integrated curriculum, apparent in the data, fosters higher-level thinking needed for success in both post-secondary venues.
- The class structure of the Montessori high schools provides a great deal of autonomy for students, yet encourages interdependence as well, creating activity systems that foster skills needed in the adult world.
- The egalitarian relationships among students and staff and the expectation that students hold a great deal of responsibility for their learning, as described in the data, also foster skills for higher education and adult work by giving students the opportunity to experience learning in an adult social context.

CONCLUSIONS

Results of this study suggest a need for action in two distinct areas. On one hand, the study should be used to inform practice in traditional public education. On the other, it sets the stage for informing Montessori practice. It is reasonable to expect that the core elements of Montessori high school practice—student centeredness; experiential, place-based learning; familial relationships among students and teachers; authentic opportunities that support development of 21st century workplace skills; and an emphasis on all areas of development—can be implemented as reform measures in a diverse array of schools. Though high school level Montessori education in the United States is in its infancy, given that the key components identified are not exclusive to Montessori education, they could be employed in schools where staff members are open-minded regarding educational enterprise and willing to modify their thought processes and behavior patterns.

SOCIAL CHANGE IMPLICATIONS

This study serves as a starting point for understanding how Montessori is being practiced at the secondary level and informing both classroom practice and teacher preparation. Additionally, this study may serve as a catalyst for future research that considers how the program characteristics identified in the findings might be incorporated into traditional educational reform measures.