### Montessori: An Early Childhood Education Model for Urban Schools

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## **Purpose**

Proponents of public preschool argue that early childhood education (ECE) is a cost-effective investment in early language, math, and school readiness skills that pays dividends later in life ("Universal Preschool," 2006). Low-income children in particular have been shown to benefit from ECE (Fuller, 2014). While few disagree that preschool is beneficial for low-income and/or marginalized students, there is wide variety in the type of educational philosophy and approach that preschools utilize (Walsh & Petty, 2007). This article examines the facets of Montessori education as an early childhood education program for marginalized students and special populations in urban schools. First, the Montessori philosophy, method, and curriculum will be introduced. A review of the research on Montessori education follows, concluding with a consideration of the implications and possibilities of Montessori preschool for special populations in urban public ECE programs, including students with learning disabilities, gifted students, second language learners, and students facing school disciplinary sanctions.

#### Framework

### What is Montessori?

Montessori is more than just a curriculum; Montessori is an entire philosophy of child development that informs a unique educational approach. The Montessori philosophy posits that every child contains unique and boundless potential; the role of the teacher is to guide children and help them develop on their own terms. Although Montessori programs are available from the infant/toddler level all the way up to the secondary level, Montessori is most frequently utilized in early childhood education (American Montessori Society [AMS], n.d.)

What does this abstract and poetic philosophy look like in practice? Montessori primary classrooms are multiage, with students in a single classroom ranging from three to six years old. The core of the school day is a three-hour uninterrupted work period, where students are free to work independently or collaboratively at tables or on small rugs on the floor. Hands-on didactic materials are typically kept on low shelves, where small children can easily reach them. Students choose the materials they wish to work with, with the caveat that they may not use a set of materials that the teacher has not demonstrated for them. Dr. Maria Montessori<sup>1</sup>, the creator of this method, referred to the classroom as a "prepared environment," a highly structured and ordered space within which children could exercise choice and exert control over their learning (Montessori, 1972). The teacher's role is to guide and observe rather than instruct and correct; Dr. Montessori's motto was, "follow the child" (Montessori, 1967). Close teacher observation takes the place of formal assessments. Children work independently and move at their own pace. The Montessori approach, then, is one of choice and individuality within clearly defined parameters.

### **History of Montessori**

Maria Montessori, Italy's first female physician, developed the Montessori method in the early 1900s. Her initial interest as a physician was in working with mentally and physically disabled children. Drawing on the work of Eduard Seguin and Jean-Marc Itard, Dr. Montessori developed an approach using specially designed hands-on materials to teach concepts, moving from concrete to abstract representations of ideas and skills (Cossentino, 2010; Lillard, 2005). She eventually expanded her approach to include non-disabled, general education students (Cossentino, 2010; Lillard, 2005; Whitescarver & Cossentino, 2008). In 1907, she founded her own preschool, the *Casa dei Bambini*, in a housing project in Rome where poor factory workers lived with their families (Lillard, 2005; Whitescarver & Cossentino, 2008).

Dr. Montessori spent the remainder of her career expanding and fine-tuning her method and curriculum, writing, training teachers, and founding schools (Lillard, 2005; Whitescarver & Cossentino, 2008). Since then, Montessori has spread to over 100 countries (Whitescarver & Cossentino, 2008).

#### Montessori Research

Due to the predominance of private school Montessori programs, much of the research on outcomes for students in Montessori programs in recent years has focused on this demographic, although this is changing (Bagby, 2007; Bagby, 2010; Lillard, 2012). Private school studies have shown that the benefits of Montessori education include improved executive function (Bagby, Barnard-Brak, Sulak, Jones, & Walter, 2012; Diamond & Lee, 2011; Lillard, 2012), more positive perceptions of the social context of school (Rathunde & Csikszentmihalyi, 2005), and increased achievement in reading, math, vocabulary, and social problem-solving (Lillard, 2005; Lillard, 2012). Other studies have found positive outcomes for students in public Montessori programs, including improved executive function, applied math skills, science achievement, and pro-social problem-solving (Dohrmann et al., 2007; Lillard & Else-Quest, 2006). Another growing category of research suggests that Montessori may be effective as a culturally responsive teaching approach (Schonlebler, 2011; Sykes, 2006).

## Special Populations in Urban Schools

Urban school systems are often characterized by high rates of poverty as well as racial, ethnic, and linguistic diversity (Ahram, Stembridge, Fergus, & Noguera, n.d.). Students of color and low-income students, who are often the majority in urban schools (Ahram et al., n.d.), are overrepresented in special education (Hibel, Farkas, & Morgan, 2010) and school disciplinary sanctions (Skiba, Michael, Nardo, & Peterson, 2002) and underrepresented in gifted and talented programs (Elhoweris, 2008; Ford, 2012). Urban schools also have high concentrations of linguistically diverse students (Ahram et al., n.d.), with their own unique skills and educational needs. The Montessori method can address these issues.

## Methodology

This study was conducted using a synthesis of the research on outcomes for students in Montessori classrooms, specifically in the areas of special education, gifted education, second language learners, and school discipline. Relevant literature is referenced when available; where there are gaps in the literature, a theoretical analysis of the Montessori method for the special population is applied.

### **Findings**

### **Special Education**

While the overrepresentation of students of color and low-income students in special education is undoubtedly due to some extent to misidentification and cultural incompetence, the Montessori method is extremely well-suited for an inclusion classroom (Cossentino, 2010; Lillard, 2005; Pickering, 2003b). There is anecdotal evidence that Montessori classrooms may actually attract higher-than-average numbers of students with learning disabilities; parents of these students find the individualization of Montessori instruction attractive (Pickering, 2003b). Some have argued that the Casa dei Bambini was one of the best early models of an inclusion classroom; after all, Dr. Montessori's method originated from her work with children with disabilities (Cossentino, 2010; McKenzie & Zascavage, 2012). Cossentino (2010) highlights how instruction in a Montessori classroom is inherently differentiated and thus compatible with a multi-tiered intervention system like Response to Intervention. Montessori teachers are already trained to tailor their instruction to the needs of each individual child, and each student works at his or her own pace. Byun, Blair, and Pate (2013) found that Montessori preschool students spent less time being sedentary than students in traditional preschool classrooms; this may be helpful for students with Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder. McKenzie and Zascavage (2012) meticulously catalogue the ways in which the Montessori curriculum meets all of the criteria for highquality special education instruction in the areas of Scope and Sequence, Curriculum, Pacing, and types of learning. The same qualities that make Montessori education effective for non-disabled students, then, also make it appropriate for students with special needs.

### **Gifted Education**

The other side of this coin is the potential benefit of Montessori for gifted students. Although little has been written about gifted students in the Montessori context, the method would be appropriate for gifted students for all the same reasons that it works well for students with disabilities. Gifted students in a Montessori classroom are not held back by the pace of their teachers' instruction, their peers' learning, or the curriculum guide. Being in a multiage classroom grants them exposure to materials, concepts, and peers that are chronologically above their grade level. If some gifted students in urban contexts are not being identified due to bias or cultural incompetence, or have simply not been identified at the preschool level, then the Montessori method allows them to reap the benefits of acceleration and differentiation that characterize gifted education, even if they are not given the label. While this does not negate or fix the problem of underrepresentation, it would at least better meet the needs of unidentified gifted students whose talents are not being properly developed.

## **Linguistically Diverse Students**

Little has been written about teaching linguistically diverse students in the Montessori classroom. However, there are several aspects of Montessori instruction that theoretically would be beneficial for students acquiring a new language in school. First, the Montessori emphasis on concrete materials and a kinesthetic learning style stands in stark contrast to instruction in traditional schools, which relies heavily on language to appeal to visual and auditory learning styles. This means that a student's limited language proficiency would not necessarily hamper him or her in math, science, and other subjects. Second, the collaboration that is so common in Montessori classrooms gives students ample opportunities to engage in authentic speaking and listening activities in the language they are learning. These opportunities may be rarer in traditional classrooms, where teachers often do most of the speaking in monologues. Lastly, of course, the differentiation that serves gifted students and students with disabilities so well would also be helpful for linguistically diverse students. This analysis, however, is purely theoretical; closer study of language acquisition and the Montessori curriculum is needed.

### **School Discipline**

School discipline is another area where urban schools often face challenges. Montessori offers possible solutions for discipline problems through the process of normalization<sup>2</sup>. Normalization is said to occur when a child learns how to concentrate deeply on his or her work for an extended period of time; acquiring this skill leads to significant development in self-regulation (Lillard, 2005). Students with greater self-regulation are less impulsive and less likely to experience problems with school discipline (Pickering, 2003a). Educators have long known that students who are deeply engaged in their work are less likely to experience disciplinary sanctions (Lillard, 2005). Ervin, Wash, and Mecca (2010) found that Montessori students exhibited better self-regulation than non-Montessori students. Multiage classrooms facilitate this process because older students have already normalized; they model and maintain a positive and productive classroom climate for younger students (Lillard, 2005).

# Significance

There is evidence to suggest that the Montessori approach can benefit students with learning disabilities, gifted students, linguistically diverse students, and can address discipline problems for students in urban preschool settings. This finding is a significant contribution to the debate surrounding public ECE and indicates that Montessori merits consideration as a model for urban public preschool programs. Further research is needed, however, to document outcomes for urban students in public Montessori ECE programs.

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