

In the following report, Hanover Research compares two prominent models of Montessori education in the United States: the Association Montessori Internationale and the American Montessori Society. After an analysis of their similarities and differences, this report profiles several school districts that have implemented coherent and well-aligned Montessori programs.



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EXECUTIVE SUMMARY AND KEY FINDINGS

INTRODUCTION

The National Center for Montessori in the Public Sector currently identifies over 500 public Montessori schools in the United States. Over the last two decades, this number has grown considerably, with 300 new public Montessori schools opened since 2000. This rate of growth is largely equivalent to the growth rate of Montessori programs at charter and magnet schools. However, unlike these alternative school settings, public Montessori programs typically operate within larger, mainstream buildings. In South Carolina for example, 83 percent of all Montessori programs function within larger schools. The increasing number of Montessori programs in public school districts is supported by recent empirical literature that highlights the benefits of Montessori education on student outcomes. For instance, researchers find that students in Montessori programs have "significantly higher self-esteem and significantly lower academic anxiety compared to traditional school students."

To this end, this report examines the Montessori Method within the public school context. However, in the United States, two primary Montessori models often compete for students and have sparked pedagogical debate: the Association Montessori Internationale and the American Montessori Society. As such, this report assesses and compares the two models, aiming to understand how these practices may differ from one another and how these differences are likely to impact instruction. It is presented in two sections:

- Section I: Comparative Analysis of Montessori Models examines the similarities and differences between the two prominent U.S. Montessori models. It addresses topics such as teaching philosophy, learning environment, facilities, and training.
- Section II: Profiles of Montessori Programs at Similar School Districts presents indepth profiles of three school districts from across the country that operate Montessori programs. These profiles highlight student demographics, personnel, and unique initiatives surrounding Montessori programs.

¹ "Public Montessori Schools in the United States." National Center for Montessori in the Public Sector. http://www.public-montessori.org/census-project/schools-map

² "Growth of Public Montessori in the United States: 1975-2014." National Center for Montessori in the Public Sector. http://www.public-montessori.org/growth-public-montessori-united-states-1975-2014

³ Dhiksha, J. and A. Suresh. "Self-Esteem and Academic Anxiety of High School Students with Montessori and Traditional Method of Education." *Indian Journal of Health and Wellbeing*, 7:5, May 2016. Accessed via ProQuest.

KEY FINDINGS

- The AMS model appears to be more established in the Mid-Atlantic region than AMI. Indeed, there are three times as many affiliated AMS schools in Virginia and Maryland than there are AMI schools. Additionally, AMS maintains six dedicated training centers in the two-state region, while AMI operates only one. This suggests that AMS classrooms in the area may have more access to resources and support. Formal affiliation with either organization is dependent on the number of credentialed teachers at the school. Notably, though, AMS accreditation allows teachers to be trained in either model.
- Nonetheless, experts generally acknowledge the validity of both models, and no research was identified that directly compares outcomes between AMI and AMS. AMI is considered to be the orthodox Montessori model, and is highly static in terms of philosophy and pedagogy. Meanwhile, AMS is more likely to respond to and evolve with new education paradigms, and is thus a more fluid system. Despite their differences, both are working as advocates for the legitimacy of Montessori in the United States as an alternative to mainstream education models.
- The learning environment in AMI and AMS classrooms is very similar in terms of physical space and materials. For example, both models recommend a 1:15 adult-to-student ratio. In both classrooms, the space must be attractive, inviting, open, and accessible, such that students can easily retrieve their own materials and self-direct much of their learning. Differentiated spaces for various activities—such as group work or individual, quiet time—is also important for AMI and AMS systems. Finally, both classrooms are stocked with pre-approved materials that are designed to impart a single skill or concept at a time.
- Both models require classroom and practical components during educator training. This typically entails between 300 and 400 hours of classroom work along with a year-long practicum. Knowledge, pedagogy, and teaching style are all core elements of Montessori training. AMI formally qualifies Montessori Assistants, while AMS does not. Finally, ongoing professional development is an important aspect of both systems, but it is only required by AMS (50 hours every five years).
- Training facilities are staffed with model-specific trainers that are required to undergo dedicated preparation. AMI procedures are more standardized between facilities, while AMS centers are afforded more flexibility in terms of delivery, cost, and format. Both models operate centers that are affiliated with postsecondary institutions, which often confer degrees in education as well as specific Montessori credentials.

SECTION I: COMPARATIVE ANALYSIS OF MONTESSORI MODELS

In this section, Hanover Research provides a comparison analysis of the similarities and differences between the two prominent models of Montessori education: the American Montessori Society (AMS) and the Association Montessori Internationale (AMI). This section addresses a variety of topics, including the histories, training, administration, common practices, and classroom makeup of the two models.

HISTORY

In 1929, Dr. Maria Montessori founded AMI as a way to spread her pedagogy and philosophy beyond her first dedicated Montessori academy near Rome, Italy. Over time, AMI developed a comprehensive and formalized system for teaching children, and the Montessori pedagogy in the AMI tradition began to spread across Europe. In 1953, a U.S. educator named Nancy McCormick Rambusch brought the Montessori system to the United States and opened the first domestic academy in Greenwich, Connecticut. This marked the first acclimation of the European pedagogy in U.S. schools, with a slightly modified version of the traditional Montessori system gaining popularity by the late 1950s.

In 1960, Rambusch founded AMS, which was originally started as a branch of the larger, international AMI organization. However, pedagogical differences between AMI and AMS caused increasing tensions. In 1967, the U.S. Patent Office ruled that "Montessori" referred to a specific type of education, and not a proprietary nomenclature for AMI's academies. This ruling officially fragmented the two branches, leading to competition for official recognition in the United States throughout the next two decades. Since the 1990s, however, the two organizations have reconciled and now sometimes work together to promote Montessori education throughout the United States and the world. For example, one notable recent joint initiative is the Montessori Public Policy Initiative, which works to "support and advance the implementation of high quality Montessori education through advocacy action."

PEDAGOGY AND TEACHING PHILOSOPHY

Despite recent reconciliations between the two Montessori models in the United States, there still exists a distinction between the pedagogies and teaching philosophies of the two groups' schools. Indeed, AMI is considered the "orthodox" model of Montessori education, and "touts the continuity of instruction across its schools, and its resistance to fads [...]

⁴ Chertoff, E. "The Great Montessori Schism." *The Atlantic*, December 2012. http://www.theatlantic.com/national/archive/2012/12/the-great-montessori-schism/266217/

٥ Ibid.

⁶ "AMS and the Montessori Movement." American Montessori Society. https://amshq.org/About-AMS/Who-We-Are/~/link.aspx? id=D35252EDCD2244E484F283C62158E82D& z=z

⁷ "Montessori Public Policy Mission and Vision." Montessori Public Policy Initiative. 2015. http://www.montessoripublicpolicy.org/#!visionmission/c1xkt

Short-lived trends in education will [not] affect how your kid learns." On the other hand, the AMS model is often regarded as more modernized, operating under the assumption that not all "short-lived" trends in education are actually temporary; that is, AMS teachers generally believe that as researchers discover more about learning, the fundamental way that they teach children must evolve accordingly. According to some experts, "both interpretations are well thought out and valid, although they differ strongly on certain points."

The missions and vision of the two models highlight their similar goals, despite any pedagogical divisions (Figure 1.1). Namely, this entails the recognition and acceptance of Montessori education as a viable alternative to mainstream, traditional systems. Both AMI and AMS support the accessibility of and advocacy for Montessori education. For example, "in recent years, both AMS and AMI have made it a priority to extend Montessori education to greater numbers of children in the public sector." ¹¹

Figure 1.1: Missions and Vision Statements of AMI and AMS Models

Model	Mission	Vision
Association Montessori Internationale	AMI's mission is to support the natural development of the human being from birth to maturity, enabling children to become the transforming elements of society, leading to a harmonious and peaceful world.	AMI is recognized internationally as an authoritative voice regarding the unique nature of childhood, natural human development and the rights of the child. AMI is identified and sought after nationally and internationally as the custodian and cultivator of Montessori philosophy and pedagogy.
American Montessori Society	We provide the leadership and resources to make Montessori a significant and enduring voice in education. We serve our members, advocate for quality Montessori education, and champion Montessori principles.	We envision a world in which quality Montessori education is widely recognized, highly desired, and accessible to all.

Source: AMI and AMS Websites

Given the slight variations in Montessori education—in addition to AMI and AMS, for example, other organizations such as the North American Montessori Teachers' Association and Montessori Education Programs International also may differ in exact pedagogy—affiliated entities have developed some components of all Montessori models that are determined to be "essential elements" of a high-quality Montessori classroom. AMI, AMS, and a number of other Montessori organizations agree that the curriculum and broader classroom environment should:

⁸ Chertoff, Op. cit.

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[&]quot;Is Your School More Closely Aligned with AMI or AMS?" Montessori Answers. http://www.montessorianswers.com/ami-or-ams.html

¹¹ "AMS & the Montessori Movement," Op. cit.

- Offer a full complement of Montessori materials purchased from Montessori dealers;
- Develop a classroom design that is compatible with Montessori "prepared environment" principles;
- Create uninterrupted daily work periods of 90 minutes to three hours, considering the three-hour work cycle as ideal;
- Integrate specialty programs (music, art, physical education, etc.) around the uninterrupted work periods; and
- Apply the appropriate multi-age groupings—i.e., 2.5 to 6 years, 6 to 9 years, 9 to 12 years, 12 to 15 years, and 15 to 18 years—necessary for the diversity, flexibility, and reduced competition integral to Montessori.¹²

However, despite similar core missions and objectives, AMI and AMS differ in many regards over classroom pedagogy and certain learning topics. Being the "traditional" Montessori model, AMI adheres strictly the Dr. Montessori's learning philosophies, which have remained largely unchanged since the system's inception. However, by adapting the AMI system to meet the needs of the U.S. audience, Rambusch reimagined some central aspects of the traditional framework. AMS schools and teachers "continue the methods developed by Dr. Montessori while bringing in outside resources, materials, and ideas to extend or supplement the Montessori curriculum." ¹³ Prominent examples of AMS modifications to the orthodox AMI methods include *integration of technology* and *the study of current events*. In short, experts differentiate the two programs as follows:

If you are someone who wants their child to have computer skills (for example being taught how to make reports with Word and presentations with PowerPoint once they are ready for it) and knowledge about appropriate current events, then you need to look for a school that is more AMS minded.

On the other hand, if you want to insure that your child's Montessori experience is authentic without any outside influences, or 'watering down' you should look for schools that align themselves more with AMI.¹⁴

The AMI model for children aged 3 to 6 years (i.e., preschool and Kindergarten) divides the school day into four main areas: Practical Life, Sensorial, Language, and Mathematics. These primary disciplines are then supplemented with instruction in Creative Arts, Music, Science, Geography, and Cultural Studies.¹⁵ In early childhood AMS classrooms, teachers dedicate time to: Practical Life, Arts, and Crafts; Sensorial; Math; Language; and Culture (Geography, History, and Natural and Physical Sciences).¹⁶ In these AMS classrooms, the curriculum

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¹² "Essential Elements of Successful Montessori Schools in the Public School Sector." American Montessori Society. p.2. http://amshq.org/School-Resources/Public

^{13 &}quot;Is Your School More Closely Aligned with AMI or AMS?," Op. cit.

¹⁴ Ibid

¹⁵ "Montessori 3-6." Association Montessori Internationale. http://ami-global.org/montessori/montessori-3-6

^{16 &}quot;Early Childhood Classrooms." American Montessori Society. http://amshq.org/School-Resources/Starting-a-School/Classroom-Materials

further highlights a student-centered environment, similar in nature to AMI models, but thoughtfully incorporates additional learning modules that integrate 21st century topics with core areas (Figure 1.2).

Figure 1.2: AMS Early Childhood School Accreditation Standards: Teaching and Learning

Curriculum planning at the 2.5 – 6 year level integrates Montessori's fundamental philosophy of the child with the core areas of Practical Life (including grace and courtesy and care of self, others, and the environment), Sensorial, Math, Language, Peace and Cosmic Education, and Cultural Subjects (including Geography, History, Botany, Zoology, Physical Science, Art, and Music). The learning environment is student-centered and designed to promote the development of order, coordination, concentration, independence, cooperation, collaboration, inner discipline, self-motivation, self-regulation, and respect for self, others, and the environment. Self-directed learning includes choice, learning from built-in controls of error, and completing cycles of work by choosing, completing, and returning materials.

Source: AMS¹⁷

LEARNING ENVIRONMENT

The suggested learning environment has many of the same characteristics between the two Montessori models (Figure 1.3). In terms of both classroom composition and schedule, for example, both AMI and AMS generally recommend the same number of adults and the same dedicated learning blocks. Both models cap students in early education classrooms at 6 years of age, although AMS permits slightly younger students to be present as well (i.e., 2.5-years-old compared to 3-year-old in AMI classrooms). Similarly, the models equally suggest that early education classrooms hire both an accredited teacher and assistant in order to supply one adult to every 14 or 15 children. The similarities between AMI and AMS in these basic ways underscore the general cohesiveness of the two models.

Figure 1.3: Basic Composition of Early Childhood Education AMI and AMS Classrooms

PROGRAM ATTRIBUTE	AMI	AMS
Age Range for Preprimary Classrooms	3 to 6 years	2.5 to 6 years
Maximum Children per Classroom	28-35	30
Required Adult-Student Ratio	1:14	1:15
Credentialed Teacher?	Yes	Yes
Assistant?	Yes	Yes
Uninterrupted Work Cycle	2-3 hours per day 5 days per week	2-3 hours per day 5 days per week

Source: AMI and AMS Materials¹⁸

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¹⁷ "AMS School Accreditation Standards & Criteria." American Montessori Society, 2015. p.5. http://amshq.org/School-Resources/AMS-School-Accreditation

¹⁸ [1] "Standards for an AMI Montessori Classroom." Association Montessori Internationale/USA. p.1. http://amiusa.org/wp-content/uploads/2012/03/ami-school-standards-7092.pdf

^{[2] &}quot;AMS School Accreditation Standards & Criteria, Op. cit., pp.7–8.

CLASSROOM SPACE

In terms of the physical classroom space and design, the two Montessori models encourage many of the same qualities. For instance, both AMI and AMS philosophies believe that the classrooms should be attractive and inviting. The AMI website claims that "the classroom itself will typically be beautiful and enticing [...] This is achieved in three ways: beauty, order, and accessibility." AMS materials use very similar language to discuss classrooms: "Beautiful, inviting, and thoughtfully arranged, the room embodies each element of Maria Montessori's revolutionary approach. Natural lighting, soft colors, and uncluttered spaces set the stage for activity that is focused and calm."²⁰ Indeed, AMS models continue to emulate the AMI tradition in terms of the physical design of the learning spaces.

Beyond the broadly appealing aesthetic in both Montessori classrooms, both models further underscore the importance of accessibility. In classrooms of either tradition, materials are kept on low, open shelves. This allows students to independently access learning materials, in line with the central philosophies of both models. Figure 1.4 shows the similarities between AMI and AMS classrooms in terms of layout and student access to materials. According to AMS, "the design and flow of the Montessori classroom create a learning environment that accommodates choice."²¹



Figure 1.4: AMI and AMS Classroom Spaces

Source: AMI and AMS Websites

Further, the two models require differentiated classroom spaces to accommodate multiple types of learning. This can include open spaces for practical life exercises and movement, areas for small-group activities, and places for children to work both at desks/tables and on the floor. It is important for Montessori schools following either model to provide sufficient space for group activities and individual reflection or quiet time. In AMI classrooms, for example, "the classroom must be large enough to accommodate the number of children in

¹⁹ "Montessori Environments." Association Montessori Internationale. http://ami-global.org/montessori/montessorienvironments

²⁰ "Classrooms." American Montessori Society. https://amshq.org/Montessori-Education/Introduction-to-Montessori/Montessori-Classrooms

²¹ Ibid.

the group, bearing in mind the space needed for activities of practical life and exercises with sensorial materials, such as those done of the floor."²² The AMS websites uses very similar language to describe the classroom design requirements of those spaces, explaining that "there are spaces suited to group activity, and areas where a student can settle along. Parts of the room are open and spacious [...] children work at tables or on the floor, rolling out mats on which to work and define their work space."²³ AMS further delineates dedicated space for each content area (e.g., Language Arts, Math, and Culture). The AMS school accreditation standards specify that the physical environment:

- Is clean, orderly, and neat;
- Has logical organization of materials/resources/activities, by level of difficulty and sequence of skill development;
- Is aesthetically pleasing;
- Is appropriate in size (follows licensing regulations);
- Has adequate furnishing for size and ages of students;
- Has accessible, neat storage area for students' belongings;
- Has accessible, neat storage of teacher materials;
- Has a water source available;
- Allows for a variety of activities such as individual/group, floor/table, noisy/quiet, and active/sedentary; and
- Accommodates different learning styles and different kinds of work.²⁴

These ideals appear to be consistent in AMI classrooms as well. Moreover, AMI proposes that classrooms should be sufficiently large to cater to all the different learning styles of the students; namely, **they recommend that schools allot 40 square feet per child**.²⁵

MATERIALS

Like their similarities with regard to physical classroom spaces, AMI and AMS Montessori models share similar philosophies regarding learning materials. Most of these will be preapproved by the specific Montessori organization in order to maximize their effectiveness for the given age group. The AMI Montessori Classroom Standards posit that "each classroom will have a complete set of materials. All materials do not necessarily have to be on the shelves at one time, but must be readily available to the class should the need arise." AMI early childhood educators must even take a course during their training entitled "Montessori Materials and their Role in Assisting Child Development," which helps

²² "Standards for an AMI Montessori Classroom," Op. cit., p.2.

²³ "Classrooms," American Montessori Society, Op. cit.

²⁴ Bullet points taken verbatim from: "Standards for an AMI Montessori Classroom," Op. cit., p.9.

²⁵ "Standards for an AMI Montessori Classroom," Op. cit., p.2.

²⁶ Ibid.

instructors connect the materials with specific childhood and learning outcomes.²⁷ AMS classrooms similarly espouse the use and presentation of Montessori materials.

Importantly, both organizations' materials are intended to impart a single skill or concept, which ensures student mastery before the next item. Not only is the arrangement deliberate and important, but materials are crafted in such a way to make it self-evident to the child when he or she has succeeded. This facilitates large amounts of self-instruction and self-discovery in both AMI and AMS classrooms. For example, AMI states that "the Montessori materials are tools to stimulate the child into logical thought and discovery [...] Each piece of material presents one concept or idea at a time and has what is known as a 'control of error'." Likewise, AMS classrooms have "distinctive learning materials [that] are displayed on open, easily accessible shelves. They are arranged in order of their sequence in the curriculum, from the simplest to the most complex. Each material teaches a single skill at a time."

The "control of error" mechanism is particularly central in both classrooms' materials, as it provides a tangible and easily identifiable way for young students to notice their mistakes. AMI provides the following examples: "The geometric shape, for example, will [not] fit the hole; the water will spill on the table; or the last label will not match the last picture." These mechanisms allow children to assess and correct their mistakes without the help of a teacher in most instances. Summarizing their similar approaches, AMS states that "the concrete materials provide passages to abstraction, and introduce concepts that become increasingly complex. As student progress, the teacher replaces some materials with others, ensuring that the level of challenge continues to meet their needs." For context, a list of suggested materials for early childhood AMS classes can be found here.

FACILITIES AND AFFILIATED SCHOOLS

While the AMI Head Office is located in Amsterdam, the organization has offices, projects, approved resources, and affiliated societies throughout the world. It operates 68 affiliated training centers worldwide and maintains a strong presence in the United States.³² AMI recently launched an initiative called the Bold Goal Project, which seeks to "increase our social impact by tripling AMI's presence in U.S. education within five years."³³ While AMS began in the United States and maintains its headquarters in New York, it has supplanted AMI as "the largest Montessori organization in the world, with more than 1,300 member

²⁷ "AMI Montessori Diploma Children's House 3-6 Course Brochure." Association Montessori Internationale. p.4. http://ami-global.org/sites/ami-global.org/files/AMIMontessoriDiplomaChildrensHouse3-6.pdf

²⁸ "Montessori Environments," Association Montessori Internationale, Op. cit.

²⁹ "Classrooms," American Montessori Society, Op. cit.

³⁰ "Montessori Environments," Association Montessori Internationale, Op. cit.

³¹ "Classrooms," American Montessori Society, Op. cit.

³² "Association Montessori Internationale Global Presence." Association Montessori Internationale. http://ami-global.org/ami/what-is-ami/global-presence

^{33 &}quot;AMI's Bold Goal Project." Association Montessori Internationale. http://ami-global.org/bold-goal

schools, over 13,000 individual members, and close to 100 AMS-affiliated teacher education programs."³⁴

Generally, AMS appears to be more established in the region than AMI (Figure 1.5). Indeed, there are more than three times as many AMS-affiliated schools in Maryland and Virginia than AMI-affiliated schools, was well as six dedicated training centers compared to only one in the two-state area. As a result, area Montessori programs may have access to more AMS resources and nearby options for training and/or support. It should be noted that the AMI operates a specified U.S. branch called AMI/USA, which is the "primary operational affiliate of the Association Montessori Internationale in the United States." However, AMI/USA adheres to the traditional methods of the AMI model, and should not be equated with AMS.

Figure 1.5: AMI and AMS Facilities and Affiliated Schools

PROGRAM ATTRIBUTE	AMI	AMS
Members (Worldwide)	Not specified	13,000
Affiliated Training Centers/Programs (Worldwide)	68	100
Affiliated Training Centers/Programs (MD and VA)	1	6
Affiliated Schools (Worldwide)	Not Specified	1,300
Affiliated Schools (MD and VA)	25	78

Source: AMI and AMS Websites

Schools that wish to join AMI membership are recognized based on the training of their teachers; that is, affiliated schools in the AMI model have all proven that teachers have successfully completed training at an affiliated training center. This indicates that, for AMI, the primary factor that differentiates affiliated schools from other Montessori spaces is the quality and content of teacher training. AMI accredits schools at three different status levels, depending on the percentage of AMI-trained teachers and their compliance with AMI standards:

- **AMI Recognized:** There is an AMI teacher at the appropriate age level in every classroom.
- AMI/USA Affiliated: At least 80 percent of the classes are taught by an AMI trained teacher at the appropriate age level.
- AMI/USA Associated/Public Schools: At least 50 percent of the classes are taught by an AMI trained teacher and at least one must be teaching at the appropriate age level. Please note, most public schools apply for associated status since there is a special fee structure offered at this level. Many public schools exceed the minimum percentage.³⁶

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³⁴ "AMS and the Montessori Movement." American Montessori Society. Op. cit.

^{35 &}quot;About US." Association Montessori International / USA. http://amiusa.org/about-us/

³⁶ Bullet points taken verbatim from: "Standards for an AMI Montessori Classroom," Op. cit., p.2.

Affiliated and associated AMI schools are given a three-year grace period over which to meet the requirements for full recognition. Over this period, a consultation by an AMI consultant is required, as is an additional formal consultation every three years subsequent. Consultations provide assistance to teachers in implementing the AMI pedagogy, guidance for administrators, support for parents, and the public assurance that the school meets AMI standards.³⁷ To be formally recognized by AMI, schools need to meet the classroom standards described previously (e.g., no more than 28 to 32 children) and found in full here.

AMS also specifically accredits schools based on a specific set of accreditation standards, which include considerations for a school's: mission and vision; governance, leadership, and continuous improvement; teaching and learning; documenting and using results; personnel; facility resources; finances; records, resources, and support systems; and stakeholder communication and relationships.³⁸ The accreditation process for AMS consideration takes roughly two years, and involves an intensive self-study—including input from students, staff, faculty, administrators, and parents—and concludes with an on-site visit by AMS staff and a comprehensive review that examines governance, curriculum, fiscal and personnel policies, facilities, and teacher preparation.³⁹ Appendix A displays the full accreditation steps and timeline for AMS recognition.

Like AMI schools, accreditation is reviewed annually. To be eligible for accreditation, schools must meet the following requirements:

- In operation for at least three years;
- Is an AMS Full Member;
- Must be seeking accreditation for all program levels served by the Montessori school;
- Age groupings must adhere to AMS standards;
- For schools with Infant & Toddler and Early Childhood levels, a minimum of a halfday session must be taught by a qualifying Montessori-credentialed teacher;
- All lead teachers must hold a Montessori teaching credential for the age level taught; teaching credentials must be from an AMS-affiliated program, an AMIaccredited program, an NCME program, or a MACTE-accredited program; and
- Lead teachers who do not hold the requisite Montessori credential are required to be enrolled in **an AMS-, AMI-, or MACTE-accredited Montessori teacher education program** and to be actively working toward earning a Montessori credential for the level at which they teach.⁴⁰

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³⁷ "Becoming an AMI School." Association Montessori Internationale/USA. http://amiusa.org/becoming-an-amischool/

³⁸ "Standards for an AMI Montessori Classroom," Op. cit.

³⁹ "AMS School Accreditation." American Montessori Society. https://amshq.org/School-Resources/AMS-School-Accreditation

⁴⁰ Bullet points taken verbatim from: Ibid. Emphasis added.

Of note, AMS schools can be accredited if educators are trained in *either* an AMI *or* an AMS training center. This suggests that, ultimately, the two models' goals are not so different as to require teachers to be re-certified (at least, according to AMS standards). In accepting the credentials of AMI-trained teachers, AMS schools may be able to attract a wider range of candidates.

Importantly, AMS also requests that schools undergoing significant changes resubmit materials in order to remain accredited by the organization. This can include a change of ownership, a change of legal status, turnover of 51 percent or more of the governing body, or the addition of a new program or age level. **Most relevant to APS, however, is the AMS requirement that stipulates that the acquisition of a new school or merger with another school/program requires notification.** Newly merged or acquired programs must submit a form to AMS affirming that all the AMS accreditation standards are still being met, along with supplementary documentation (Figure 1.6).

Figure 1.6: Required Documentation for Merger or Acquisition of New AMS Program

REQUIRED DOCUMENT	DOCUMENT INCLUDED
Legal documents verifying the acquisition or merger, including a statement of	o Yes
the legal name of the school.	O No
A statement of the school's current class groupings and ages served.	o Yes
A statement of the school's current class groupings and ages served.	O No
	o Yes
Teacher Verification Forms for any new teachers.	O No
	O N/A
Description of the physical location, including address, of the surviving school	o Yes
Description of the physical location, including address, of the surviving school.	O No
Undeted Head of School information	o Yes
Updated Head of School information.	O No
Description of changes in governance and legal status of the school.	O Yes
Description of changes in governance and legal status of the school.	O No

Source: American Montessori Society⁴²

TRAINING PROGRAMS

Both AMI and AMS training programs rely on accreditation standards to be recognized by their respective organizations. Both models defer to the Montessori Accreditation Council for Teacher Education (MACTE), which "accredits certification programs based on (1) the evidence they have that they prepare competent, caring, and qualified professional Montessori educators and (2) their capacity to monitor and improve the program's

⁴¹ Ibid

⁴² Adapted from: "Acquisition of a New School or Merger with Another School/Program." American Montessori Society. p.1. https://amshq.org/School-Resources/AMS-School-Accreditation

quality."⁴³ Because the two models are both associated with MACTE, it is able to accredit programs according to each organization's direction. This means that MACTE specifically regards the curriculum content and other program requirements of a particular center when it is completing its review of a program.⁴⁴ Thus, an accreditation from MACTE does not imply similar processes necessarily.

TRAINING FACILITIES

The goal of both AMI and AMS training facilities is to impart successful candidates with organization-specific credentials needed to teach at an affiliated school. As evidenced above, AMI only maintains one accredited training center in the area – the Washington Montessori Institute (WMI) hosted at Loyola University Maryland. According to AMI, all affiliated training centers provide AMI diploma courses that adhere to the same set of standards across all locations. WMI offers four different training options for AMI candidates:

- M.Ed. in Primary Montessori Education (Ages 3 to 6) Academic Year format
- M.Ed. in Primary Montessori Education (Ages 3 to 6) Summer format
- M.Ed. in Elementary Montessori Education (Ages 6 to 12) Academic Year format
- Certificate of Advanced Study (CAS) in Montessori Education⁴⁶

Notably, WMI does not offer programs for teachers for the Infancy (ages 0 to 3) or First Plane (ages 0 to 6) levels. All centers for AMI teacher training "are staffed by highly qualified AMI teacher trainers supported by a pedagogical team of experienced advisors to ensure that the objectives of Maria Montessori's pedagogical principles are upheld." The AMI teacher trainers undergo a rigorous training process themselves, ensuring that they possess considerable knowledge of AMI principles and pedagogy. For example, trainers for the Primary level must hold an AMI Primary diploma, have a minimum of five years of Montessori teaching experience, possess a bachelor's degree, and be a member of AMI. AMI

In contrast to AMI's limited regional offerings, AMS offers six different training centers—called Teacher Education Programs (TEP)—in Virginia and Maryland, all of which have training for Early Childhood (ages 2.5 to 6) levels (Figure 1.7). Unlike AMI's training centers, which are highly standardized across locations, TEPs in the AMS tradition are provided relatively more flexibility in their design. Indeed, "each AMS-affiliated TEP is unique and has

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⁴³ "About MACTE." Montessori Accreditation Council for Teacher Education. http://www.macte.org/about-macte/

^{44 &}quot;FAQs." Montessori Accreditation Council for Teacher Education. http://www.macte.org/faqs/

⁴⁵ [1] "Washington Montessori Institute." Association Montessori Internationale. http://amiglobal.org/training/centres/washington-montessori-institute

^{[2] &}quot;The Washington Montessori Institute (WMI)." Loyola University Maryland. http://www.loyola.edu/academics/washington-montessori-institute

⁴⁶ Bullet points taken verbatim from: "Program Options." Loyola University Maryland. http://www.loyola.edu/academics/washington-montessori-institute/program-options

⁴⁷ "AMI Teacher Training." Association Montessori Internationale. http://ami-global.org/training

⁴⁸ "AMI Training of Trainers Programme. Association Montessori Internationale. http://ami-global.org/training/training-of-trainers

its own academic schedule and tuition, [but] all are rigorously designed with the goal of ensuring that [candidates] receive an education consistent with standards for entry into practice."⁴⁹ Given this flexibility, AMS recognizes two types of TEP:

- Independent/free-standing programs (some of which enable students to also earn credits towards a bachelor's or master's degree from select colleges/universities); or
- College/university programs (some of which also offer a master's degree in Montessori education).⁵⁰

After completion of the program at a TEP, teacher candidates are issued AMS credentials provided that they hold a bachelor's degree. If candidates do not hold a bachelor's degree, they can earn associate accreditation for the Infant and Toddler and Early Childhood levels.

Figure 1.7: AMS-Affiliated TEPs in Virginia and Maryland

TEP	LOCATION	Course Levels	DEGREES OFFERED	SOURCE OF CREDITS	CREDITS OFFERED
Northern Virginia Montessori Institute	Ashburn, VA	■ Early Childhood	■ AMS certification	N/A	N/A
Virginia Center for Montessori Studies	Richmond, VA	Infant and ToddlerEarly Childhood	AMS certification	N/A	N/A
Virginia Montessori Teacher Education Center	Chesapeake, VA	■ Early Childhood	 AMS certification 	Hampton University	Graduate credits
Institute for Advanced Montessori Studies	Silver Spring, MD	Infant and ToddlerEarly ChildhoodElementary IElementary I-II	Master of Arts in TeachingState teaching licensure	Trinity Washington University	Graduate credits (15)
Maryland Center for Montessori Studies	Lutherville, MD	■ Early Childhood	M.Ed. in Montessori Studies	Goucher College	Graduate credits
Montgomery Montessori Institute	Rockville, MD	 Infant and Toddler Early Childhood 	AMS certification	N/A	N/A

Source: American Montessori Society⁵¹

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⁴⁹ "AMS-Affiliated Teacher Education Programs." American Montessori Society. https://amshq.org/Teacher-Resources/AMS-Teacher-Education-Programs

⁵⁰ Bullet points taken verbatim from: Ibid.

⁵¹ "Find a Teacher Education Program." American Montessori Society. https://amshq.org/Teacher-Resources/AMS-Teacher-Education-Programs/Find-a-Teacher-Education-Program

TEACHER PREPARATION AND CERTIFICATION

Both AMI and AMS models require that certified teachers complete supervised training that entails both classroom and practical components. For AMI certification, this includes 400 hours of classroom-based training, compared to 300 hours for AMS teachers at the Early Childhood level. Similarly, AMI teachers complete 140 hours of supervised practice with Montessori materials and 170 hours of observed teaching practicums. AMS teachers must complete a year-long internship that is guided by an AMS-credentialed teacher and an outside consultant. In general, MACTE requires that Early Childhood credentials total at least 600 academic and practicum hours (Figure 1.8).

Figure 1.8: MACTE Teacher Education Level Cumulative Hours Breakdown

Program	Ages	TOTAL MINUTES OF DIRECT HOURS OF INSTRUCTION	Academic In-Class	ACADEMIC OUT-OF- CLASS	Practicum In-Class	Practicum Out-of- Class	Additional Required Hours	TOTAL
Infant/ Toddler	0-3	600	200	400	400	240	0	1,240
Early Childhood	3-6	600	200	400	400	240	0	1,240
Elementary I	6-9	800	200	400	400	240	320	1,560
Elementary I- II	6-12	1,200	375	750	400	240	680	2,445
Secondary I	12-15	1,200	200	400	1,000	600	0	2,200
Secondary I-II	12-18	1,500	500	1,000	1,000	600	0	3,100

Source: Montessori Accreditation Council for Teacher Education 54

MACTE defines core Montessori competencies in terms of knowledge, pedagogy, and teaching style (Figure 1.9). Although the specific properties of each model are considered by MACTE, the central components of teacher training must be met by all AMI and AMS facilities. For Early Childhood teachers, specific subject matter and instructional experiences include: practical life; sensorial; mathematics; language; science; physical geography; cultural studies; physical education; music; and arts education. 55

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⁵² [1] "AMI Montessori Diploma Children's House 3-6," Op. cit., p.2.

^{[2] &}quot;AMS-Affiliated Teacher Education Programs," Op. cit.

^{**}M Policy Maker's Guide to Montessori Teacher Recognition: Becoming Policy Inclusive in Early Childhood Education Workforce Registries and Career Pathways." Montessori Accreditation Council for Teacher Education, August 2015. p.22. http://www.macte.org/wp-content/uploads/2015/06/MACTE-Policy-Makers-Guide-to-Montessori-Teacher-Recognition1.pdf

⁵⁴ Adapted from: Ibid., p.24.

⁵⁵ Ibid., p.20.

Figure 1.9: Quality Principles and Competencies for Montessori Teacher Candidates

CATEGORY	Indicator	EXAMPLES OF POSSIBLE EVIDENCE
Knowledge	Montessori philosophy Human growth and development Subject matter for each course level	Evaluations of written and oral assignmentsExamination results
Pedagogy	Correct use of Montessori materials Scope and sequence of curriculum The prepared environment Parent/teacher/family/community partnership The purpose and methods of observation Planning for instruction Assessment and documentation Reflective practice Support and intervention for learning differences Culturally responsive methods	 Mentor evaluations of teaching Evaluations of written and oral assignments Examination results Mentor evaluations of teaching Evaluations of demonstrations
Teaching with Grade and Courtesy	Classroom leadership Authentic assessment The Montessori philosophy and methods (materials) Parent/teacher/family partnership Professional responsibilities Innovation and flexibility	 Employer, field consultant, supervising teacher observation and evaluation Children's learning and progress Post-graduate professional performance Surveys of employers and alumni

Source: Montessori Accreditation Council for Teacher Education 56

Finally, MACTE provides an overview of the basic, minimum topics that Montessori teacher training programs should meet. Again, although there may be slight variations between the AMI and AMS models, since both organizations adhere to MACTE standards, it is likely that their respective training opportunities touch on these foundational requirements. Because AMS classrooms accept both AMS and AMI certified teachers, these base courses should be sufficient to prepare candidates for Montessori instruction in both philosophies:

Montessori Philosophy, Pedagogy, and Methodology: A historical review of the development of the method; foundations and key concepts and principles of the method providing a philosophical framework; design of the Prepared Environment; interaction and communication techniques; classroom management through integrated, multi-disciplinary curriculum.

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⁵⁶ Adapted from: Ibid., pp.19–20.

- Child Development: Theories of development; physical, cognitive, emotional, and social developmental stages- typical and atypical; brain development; current research in child development and neuroscience; natural process of human development.
- **Observations:** Techniques and strategies; interpretative, and formative assessment; rationale and record keeping; communication
- Community Involvement and Partnership with Families: Parent relationships, partnership, communication, and involvement; collaboration strategies; community awareness and resources; understanding, respect, and responsiveness to cultural diversity.
- Classroom Leadership and Program Administration: Classroom management techniques and strategies; positive interactions; communication and problem solving; classroom design, curriculum planning, daily scheduling; providing for cultural diversity and special needs learners; alignment with standards and regulations
- **Practical Life:** Rationale and developmental aims; development of executive functioning; grace and courtesy; materials and lessons for self-care, gross and fine motor sills, care of the environment; differentiated instruction
- **Sensorial:** Rationale and developmental aims; development of sensory discriminations (sorting, grading, memory, attention); materials and lessons in the education of the senses.
- Language and Literacy: Rationale and developmental aims; materials and lessons in receptive and expressive language; phonics and word analysis; vocabulary development; grammar; handwriting; composition; literature; and reading
- Mathematics: Rationale and developmental aims; materials and lessons in number concepts, linear counting, basic number processes, whole and fractional numbers, measurement, time, money, and math applications.
- **Science:** Rationale and developmental aims; materials and lessons in biology-botany and zoology, physical science, earth science, ecology; supervised lab work.
- Cultural Studies: Rationale and developmental aims; materials and lessons in physical geography, cultural geography, history- time, calendars, seasons; understanding and respect for cultural diversity.
- Art, Music, Movement: Rationale and developmental aims; materials and lessons for skill development, history, appreciation and awareness.⁵⁷

Appendix B provides the required course units needed to obtain AMI certification. These core courses mirror many of the expectations of the MACTE requirements, and highlight the alignment between AMI, AMS, and MACTE standards in many cases.

One major difference between AMS and AMI is the fact that AMI offers two levels of qualifications that result in certification as a Montessori Teacher or Montessori Assistant.

⁵⁷ Bullet points taken verbatim from: Ibid., p.22.

Assistant-level courses are designed to "help interested adults become informed, capable, and supportive assistants" in Montessori Nidos or Infant Communities, Childhood Centers or preschool classrooms, or to work in support of elementary school Montessori teachers. Teacher courses specialize in Montessori instruction for children ages zero to 12. ⁵⁸

After certification, the two Montessori models also both offer continued training and professional development opportunities. For AMI teachers, Refresher Courses and the Educators without Borders work to further develop and disseminate the AMI message, and "aims to champion the cause of all children and to revisit Montessori principles and practices from the perspective of society at large." However, there is no indication that AMI educators *must* participate in the Refresher Courses.

On the other hand, AMS requires that all affiliated teachers complete 50 hours of professional development every five years in order for their credentials to remain active. Indeed, "the credential holder must keep a record of his or her professional development and be able to provide, upon AMS request, print or electronic verification of the event host, location, date, topic, presenter(s), and number of hours attended." TEP trainers and AMS program administrators must similarly complete 30 hours of professional development every three years. AMS educators do not need to attend pre-approved events, and generally, any activity hosted by a school, TEP, or other Montessori organizations is applicable to the requirement. Topics that meet AMS standards for professional development include:

- Montessori education and philosophy/pedagogy
- Curriculum
- Classroom management
- Child development
- Health, safety, and nutrition
- Peace education
- Service learning

- Professionalism
- Leadership skills
- Social/emotional issues
- Special education and learning differences
- Education research
- Public or education policy
- Technology training⁶¹

⁵⁸ "Qualifications." Association Montessori Internationale. http://ami-global.org/training/qualifications

⁵⁹ "Why Take AMI Training?" Association Montessori Internationale. http://ami-global.org/training/why-take-ami-training

⁶⁰ "Professional Development." American Montessori Society. https://amshq.org/Teacher-Resources/Professional-Development

⁶¹ Bullet points adapted from: Ibid.

SECTION II: PROFILES OF MONTESSORI PROGRAMS AT SIMILAR SCHOOL DISTRICTS

In this section, Hanover Research benchmarks several schools districts identified by APS that operate Montessori programs. This section will discuss how these districts administer and oversee their Montessori programs.

KALAMAZOO PUBLIC SCHOOLS

Kalamazoo Public Schools (KPS) is a large school district in south-west Michigan that currently serves approximately 12,200 students across 25 different school buildings. The District offers many special programs through magnet and specialty schools – for example, El Sol Elementary School is an entirely dual-language building and Prairie Ridge Elementary School is Michigan's first LEED Gold Certified school.⁶²

Notably, KPS started the Kalamazoo Promise scholarship in 2005, a program that provides resident graduates with up to 100 percent of their tuition and fees for four years at one of the state's public universities or two-year institutions. Students that have attended KPS from Kindergarten to Grade 12 receive full postsecondary funding, while students who only attended from Grades 9 to 12 receive 65 percent funding through the Kalamazoo Promise. Since its inception, the District has increased enrollment by 2,100 students.

MISSION AND STUDENT DEMOGRAPHICS

Given the increasing enrollment across KPS and the demand for specialty programming, the District operates **Northglade Montessori Magnet School** (NMMS) for students in Pre-Kindergarten through Grade 5. The majority of students are African-American or White, and more than half are female (Figure 2.1). According to NMMS, the mission of the school is "to prepare each student to become a well-educated, responsible, and respectful contributor to family and community by enhancing academic achievement through a literature rich curriculum that integrates technology, [and] addresses individual needs and unique talents."

⁶² "Overview and Demographics." Kalamazoo Public Schools.

http://www.kalamazoopublicschools.com/ExploreKPS/OverviewandDemographics.aspx

⁶³ "The Kalamazoo Promise." Kalamazoo Public Schools.

http://www.kalamazoopublicschools.com/KalamazooPromise.aspx

⁶⁴ "Annual Education Report: Northglade Montessori Magnet School." Kalamazoo Public Schools, April 2016. p.1. http://www.kalamazoopublicschools.com/Portals/0/KPS%20Site%20Docs/Annual%20Reports%2001/2015-16/Northglade.pdf

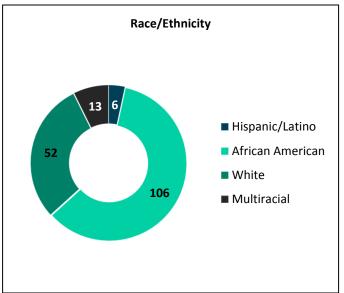
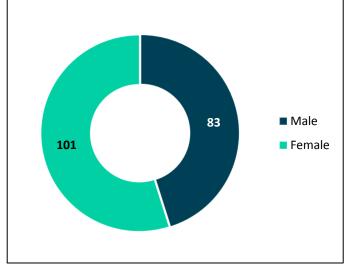


Figure 2.1: Demographic Information for Northglade Montessori, 2015



Gender

Source: Kalamazoo Public Schools⁶⁵

In this way, Northglade Montessori adheres to the AMS model by infusing traditional Montessori principles with 21st century technology integration. Indeed, in 2008, Northglade Montessori became one of the first two public schools in the United States to receive formal accreditation from AMS.⁶⁶ The school observes a traditional set of Montessori beliefs and guiding principles, as follows:

- In a safe and nurturing environment, all students can learn at their own pace and in their areas of interest and ability.
- To assist students in reaching their full potential, the school, parents, and the greater community must unite as a team of collaborators in sharing the responsibility of planning, implementing, and evaluating social/emotional, educational, and physical activities using all resources available for the development of the whole child.
- In a prepared environment, we will offer every child quality educational opportunities that honor and promote choice, freedom, and independence, and will address various learning styles.
- We provide a nurturing environment where all students feel safe and respected through teaching and modeling the three rules/expectations: respect for self, respect for others, and respect for the environment.
- We celebrate diversity by encouraging research and presenting global lessons that promote cosmic awareness and lead the child to acquire a sense of thankfulness to those who have come before us.

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⁶⁵ Adapted from: Ibid., p.3.

⁶⁶ Barr, J. "Northglade Montessori Continues Path Forward." *Kalamazoo Gazette*, February 2008. http://www.mlive.com/news/index.ssf/2008/02/northglade_montessori_continue.html

- We will teach all students to become positive and productive contributors to society.
- We commit to continuous school improvement in order to respond to the needs of the school-community.⁶⁷

NMMS incorporates the KPS district-wide standards-based curriculum (which is aligned with the Common Core State Standards) within the Montessori framework. Most obviously, this manifests through classroom composition, which adheres to the Montessori philosophy of multi-aged spaces. In the Children's House, students remain with the same teacher for three years (Grades 1 through 3), and complete the next two years (Grades 4 and 5) together in the Lower Elementary Classrooms. Because it is a magnet school with KPS, any student from across the District is eligible to attend. A lottery system determines acceptance (or not) into the school.

PERSONNEL

In total, NMMS employs 13 teachers that are state-certified by the Michigan Department of Education (MDOE). Of those, the eight Montessori classroom lead teachers hold AMS credentials. Additionally, the school has four co-curricular area teachers in vocal music, instrumental music, art, and physical education, along with a speech therapist, early childhood special education teacher, and school psychologist. Besides the lead AMS teachers, each Montessori classrooms has one to two teacher assistants as well (10 in total). There is no indication that Northglade Montessori accepts Montessori credentials from organizations other than AMS.

The school further highlights the administration, in particular Principal Dale Mogaji, as a key factor in NMMS's success and turnaround after low 2010-2011 performance. According to the school, Principal Mogaji "demonstrated the ability to identify the students that are in need of additional support and is working to quickly realign the continuous improvement process to address challenge areas." Specifically, Northglade Montessori indicates that Principal Mogaji met five "turnaround competencies" established by the MDOE that instigated the school's broad-based improvements (Figure 2.2). These priorities underscored the importance of effective methods of identifying and supporting at-risk students through effective data usage and ensuring that staff received adequate training and professional development opportunities in the Montessori system. It further shows the important role that strong leadership can play in supporting a Montessori school in a public school district, where conflicting priorities and learning goals must often be met.

⁶⁷ Bullet points taken verbatim from: Mogaji, D.D. "Redesign Plan: Northglade Montessori School." Michigan Department of Education, 2014. p.4.

https://www.michigan.gov/documents/sro/Kalamazoo.Northglade.Plan.4.1.2015_503219_7.pdf

 $^{^{68}}$ "Annual Education Report: Northglade Montessori Magnet School," Op. cit. p.3.

⁶⁹ Mogaji, Op. cit., p.3.

⁷⁰ Ibid., p.18.

Figure 2.2: Turnaround Competencies Demonstrated by NMMS Leadership

Identify and focus on early wins and big payoffs

• Principal Mogaji led the school improvement team, and identified four focus areas: instructional improvements through Professional Learning Communities; improved core instruction for all students; provision of interventions (when necessary); and support for children's learning by staff, family, and community.

Break organizational norms

•She focused on the alignment and integration of the Montessori instructional program with the district curriculum and the state standards, thus strengthening core instruction.

Act quickly in a fast cycle

•Upon her appointment, she scheduled and held "data meetings" with all classroom teachers as well as school-wide data analysis and instructional action planning.

Collect and analyze data

- •She provided training to staff in the interpretation of student data, as well as the use of data walls. This extensive use of data has become a focus for her staff and is helping to inform the curriculum and instructional changes.
- •Staff is making use of student data, benchmark, and classroom assessments to determine students in need of additional support.

Galvanize staff around big ideas

- •She developed more student-centered scheduling, which allows for common planning time, data analysis, and grade level team planning. Changes in the budget allow for onsite and off-site Montessori professional development opportunities for both classroom teachers and assistants.
- •Since becoming principal, she has supported staff in their development of cultural literacy and facilitated the staff development of "Community of Care" norms, as well as supported the development of school level content area and grade level leadership.

Source: Northglade Montessori Magnet School⁷¹

SPECIAL INITIATIVES

Notably, in 2014, Northglade Montessori submitted a redesign plan to the MDOE to allow the school "to reflect on how it provides teaching and learning on a day-to-day basis."

This is because the school was identified by the MDOE as a "Priority School," indicating that NMMS had been in the lowest 5 percent of all public schools in the state at some points within the previous four years (2010 to 2014) – indeed, "Priority Schools carry the status for

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⁷¹ Adapted from: Ibid., pp.18–19.

⁷² Ibid., p.2.

four years regardless of their ranking during that time period."⁷³ The school's redesign plan addressed four specific areas of transformation:

- Developing teacher and school leader effectiveness;
- Implementing comprehensive instructional reform strategies;
- Extending learning and teacher planning time and creating community-oriented schools; and
- Providing operating flexibility and sustained support.⁷⁴

To address these key areas of need, Northglade Montessori assembled a working group of personnel from various departments. This included Principal Mogaji, the Director of School Improvement and Assessments of KPS, the Title I and School Improvement Coordinator of KPS, and several teachers and parents from the school community. Together, the team participated in several "data dialogues" to identify the most important challenges facing the school.⁷⁵ Ultimately, the school's redesign was centered on two main ideas (Figure 2.2).

Figure 2.3: Guiding Ideas for NMMS's Redesign Effort

"Big Ideas"

- Reduce the achievement gap in reading and mathematics while maintaining our commitment to our Montessori approach.
- Develop and implement a Multi-Tiered System of support for all students.

Source: Northglade Montessori Magnet School⁷⁶

Of the transformation areas, Northglade Montessori seemed to focus on developing staff effectiveness to perform within the dual frameworks of Michigan-mandated standards and the Montessori method. One key initiative that was presented in the redesign plan, for example, was a reexamination of teacher and administrator evaluation policies. The change increased the role that student growth plays in these performance assessments; during the 2015-2016 school year, NMMS adopted an evaluation model that considers: planning and preparation; classroom environment; classroom instruction; professional responsibility; and student growth. Importantly, "teachers and administrators collaborate to create goals based on raising student achievement as part of the continuous school improvement process." This collaborative process ensures that goals are aligned with both state and Montessori standards.

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⁷³ "Priority Schools List." Michigan Department of Technology, Management, and Budget. http://www.michigan.gov/sro/0,5916,7-340-71975---,00.html

⁷⁴ Bullet points adapted from: Mogaji, Op. cit., p.15.

⁷⁵ Ibid., p.17.

⁷⁶ Adapted from: Ibid.

⁷⁷ Ibid., p.20.

The school further emphasized intensive staff professional development between 2011 and 2014, aimed largely at ensuring that teachers and administrators possessed the capacity to implement school improvement strategies. Much of this training for teachers focused on pedagogical strategies that would improve student performance. Specifically, NMMS provided professional learning opportunities for reading comprehension, vocabulary/word study, and math fluency. For example, the school provided the following explicit training to improve comprehension strategies in their classrooms:

- Professional development in high quality reading instruction, conducting effective Guided Reading groups, managing 90-minute reading blocks, and administering running/reading records correctly.
- Classroom teachers are expected to implement instructional strategies gained through professional learning.
- Classroom teachers can complete professional learning surveys following the training.
- Teachers will receive individual support through observations and feedback from the school principal, district-level Reading coaches, and a Montessori coach.
- Professional learning opportunities will be provided through district and school level professional development opportunities, grade level and staff meetings, as well as individual conferences with coaches and school level instructional leadership.
- A Montessori reading block walk-through tool will be created in order to determine all the required components are included in the day-to-day practice.⁷⁸

In total, Northglade Montessori teachers are expected to complete 35 hours of professional development each year, to be accrued in monthly sessions.

MILWAUKEE PUBLIC SCHOOLS

Milwaukee Public Schools (MPS) is the second-largest school district in Wisconsin with over 75,500 students across 158 school options (including neighborhood, specialty, and charter schools). The District enrolled large proportions of minority students, including 86 percent students of color, 70 percent economically disadvantaged students, and 20 percent special needs students during the 2015-2016 academic year. Despite these challenges, MPS boasts eight public high schools named in the top high schools in the country by *U.S. News & World Report*.⁷⁹

In recent years, the District has taken particular care to raise achievement and opportunity for its students. For example, through relationship building and leadership skills development, the class of 2016 earned more than \$49 million in postsecondary

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⁷⁸ Bullet points adapted from: Ibid., p.23.

⁷⁹ "District Fact Sheet." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/District/About-MPS/At-A-Glance.htm

scholarships. Similarly, MPS enrolled 800 additional students in college-level classes in 2015-2016 compared to 2013-2014, reflecting a commitment to increasing college readiness.⁸⁰ The District's "Eight Big Ideas" guide strategic planning across MPS, helping to account for recent improvements in academic achievement, student and community engagement, and efficient operations:

- Close the Gap: MPS is a national symbol of excellence for educating all students, providing a rigorous academic program that ensures equitable opportunities for all children to reach their full potential.
- Educate the Whole Child: MPS provides a nurturing, consistent and validating experience for every child so that both educational and social-emotional needs are met.
- Redefine the MPS Experience: Every MPS school provides a robust extracurricular experience that engages and inspires every child.
- Rethink High Schools: Every MPS student graduates on time with a personalized pathway to success in college, career and life.
- Re-envision Partnerships: MPS cultivates and maintains mutually beneficial partnerships and collective impact efforts to maximize resources that promote greater student outcomes.
- Strengthen Communications Systems and Outreach Strategies: The community is engaged in, understands and supports the work of MPS and families choose our district as a trusted and valued education provider.
- Develop our Workforce: As an organization respected for supporting diverse, healthy, highly skilled and engaged employees, MPS is an employer of choice.
- Improve Organizational Processes: MPS is a leader in using best practices, systems and processes equitably and efficiently to align and maximize resources in support of our strategic objectives.81

MISSION AND STUDENT DEMOGRAPHICS

Of note, MPS operates the nation's largest collection of public Montessori schools, offering seven such schools across the District with plans to open the state's first duallanguage Montessori school next year (Figure 2.4).82 All schools start at the K3 level, and the majority has programming through Grade 8. One school goes from K3 to Grade 12 (MacDowell Montessori School), while another only instructs early elementary students through Grade 1 (Howard Montessori School). This variety ensures that students from a variety of backgrounds and needs can find a Montessori education that supports them.

⁸¹ "Eight Big Ideas." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/District/Initiatives/8-big-

^{82 &}quot;Montessori." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Programs/Montessori.htm

Figure 2.4: Montessori Schools in MPS

School	SCHOOL TYPE	TRANSPORTATION	GRADES	Special Programs
Barbee Montessori School	Citywide Specialty	Yes; students within 5 miles	K3-6	 Growing Minds program for mindfulness strategies and socio-emotional wellbeing Mad Hot Ballroom and Tap educational dance program Before and after school care
Craig Montessori School	Citywide Specialty	Yes; students within 5 miles	КЗ-8	 Positive Behavioral Interventions and Supports (PBIS) Individualized Education Plans (IEP) for special education students Before and after school care
Fernwood Montessori School	Citywide Specialty	Yes; students within 5 miles	КЗ-8	 Both AMI and AMS certified teachers Physical Education curriculum Positive Behavioral Interventions and Supports (PBIS) Junior Achievement of Wisconsin program
Highland Community School	Charter	No	КЗ-8	 Children's House Extended Care for Kids (CHECK) A variety of clubs and enrichment opportunities (e.g., piano lessons, Lego Robotics Club, etc.) Before, after, and summer school care
Howard Montessori School	Citywide Specialty	Yes; students within 5 miles	K3-1	Positive Behavioral Interventions and Supports (PBIS)Before and after school care
MacDowell Montessori School	Citywide Specialty	Yes; students within 5 miles	K3-12	 International Baccalaureate (IB) Positive Behavioral Interventions and Supports (PBIS) Outdoor Education Experiences, Peace Education, Mindfulness Curriculum Mad Hot Ballroom and Tap educational dance program
Maryland Av Montessori	Citywide Specialty	Yes; students within 5 miles	КЗ-8	 Neighborhood Environmental Education Project (NEEP) Positive Behavioral Interventions and Supports (PBIS) Junior Achievement of Wisconsin program Mad Hot Ballroom and Tap educational dance program

Source: Milwaukee Public Schools⁸³

⁸³ Adapted from: "Find a School." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Schools/Find-a-School.htm?FB_Values=F1_C42_A11!

The preponderance of the Montessori schools in MPS are classified as "Citywide Specialty" schools, meaning that these schools "offer special programs or areas of study [...] Some Citywide Specialty schools offer preferences for students living within the school's neighborhood/attendance area." ⁸⁴ Only one Montessori school is classified differently (Highland Community School; charter school status), meaning that it operates relatively more independently than the other Montessori buildings. Among the Citywide Specialty Montessori buildings, eligibility guidelines stipulate that:

- Any child age 3 or 4 by September 1 is eligible to apply for the Montessori program.
- Students older than age 4 are eligible if they have had continuous previous Montessori experience in an AMI or AMS classroom.
- Students must apply for fall enrollment during the designated application period each year.
- Seats are assigned through a random computer process. The number of openings, racial balance, and sibling preference determine that students selected.
- Automatic admission is granted to the Montessori middle school for those students successfully completing year six of the Montessori elementary program.⁸⁵

This random lottery system for admittance ensures that the Montessori programs at MPS are representative of the District's student composition. Although families are given preferred access to neighborhood schools and specialty schools near their homes, parents select up to three schools of choice during the application process. Because Highland Community School is a charter school, parents of interested students must apply directly to the school. Across all Montessori sites, the schools specify that students are ineligible for admittance in later grades without continuous Montessori enrollment above K4.

PERSONNEL

Montessori schools in MPS do not restrict teachers based on their training; **indeed, the District accepts Montessori teachers provided they hold either AMI or AMS credentials.** Of course, all teachers must be certified by Wisconsin as well.⁸⁷ However, there is no indication whether the various Montessori schools in the District strictly adhere to one model over the other. On the MPS Montessori website, it indicates that "Montessori teachers are taught to observe carefully and how to give just the right amount of help. The give new lessons when the children are ready for them." That is, teachers' responsibilities and the curriculum are described in broad, Montessori-based terms.

^{84 &}quot;School Types." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Schools/How-to-Select-a-School/School-Types.htm

⁸⁵ Bullet points taken verbatim from: "Montessori," Milwaukee Public Schools, Op. cit.

⁸⁶ "Schools: Enroll." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Schools.htm

⁸⁷ "Teachers." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Programs/Montessori/Teachers.htm ⁸⁸ Ibid.

Each year, MPS hosts a Montessori Summit for teachers and administrators in the District to participate in workshops, observe Montessori classrooms, and attend a keynote speech. Highlighting the District's commitment to Montessori education following either system, the teacher training portion of the event states that:

For prospective Montessori teachers, Montessori trainers will be on hand to share information about enrolling in Montessori teacher training programs. Trainers from the Montessori Institute of Milwaukee (accredited by AMI) and Seton Montessori Institute (accredited by AMS) will provide resources and information.⁸⁹

In this case, teacher candidates receive information from both AMI- and AMS-accredited teacher training centers, suggesting that MPS is willing to hire educators from both models. There is no additional publically available information on the composition of the Montessori teaching staff, though. It appears that each school, beyond a guiding and centralized Montessori ideology and help from the District in facilitating both Montessori and Wisconsin instruction, is individually managed. For example, Barbee Montessori School, which operates K3 through Grade 6, employs 12 dedicated Montessori classroom teachers, along with additional support and co-curricular staff:

- Primary Teacher K3-K5 (six)
- Elementary Teacher 1-3 (four)
- Elementary Teacher 3-5 (one)
- Elementary Teacher 4-6 (one)
- Resource Teacher (three)
- Music Teacher (one)
- Physical Education Teacher (one)
- Art Teacher (one)⁹⁰

Figure 2.5 provides the teaching staff at the other six Montessori schools in the District. The schools range in size between nine teachers (Howard Montessori School; K3-1) to 29 teachers (MacDowell Montessori School; K3-12). Most schools similarly employ additional co-curricular staff—which lead instruction in other areas such as special education, music, art, and physical education—and a number of support positions that can range from Parent Engagement Coordinator to Library Media Specialist and Handicap Child Assistant. ⁹¹ This highlights the range of positions that Montessori schools in MPS maintain.

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⁸⁹ "Montessori Summit." Milwaukee Public Schools.

http://mps.milwaukee.k12.wi.us/en/Programs/Montessori/Montessori-Summit.htm

⁹⁰ Bullet points adapted from: Loss, C. "Family School Manual 2015-2016: Lloyd Barbee Montessori School."
Milwaukee Public Schools. p.5. http://www5.milwaukee.k12.wi.us/school/barbee/files/2015/08/LLoyd-Barbee-Montessori-School-Family-School-Manual-2015-16.pdf

⁹¹ "Staff." Maryland Av Montessori School, Milwaukee Public Schools. http://www5.milwaukee.k12.wi.us/school/maryland/staff/

Figure 2.5: Teaching Staff at Montessori Schools in MPS

School	PRIMARY	LOWER ELEMENTARY	UPPER ELEMENTARY	ADOLESCENTS	High School	TOTAL
Craig Montessori School	7	4	4	2		17
Fernwood Montessori School	8	7	6	3		24
Highland Community School						
Howard Montessori School	4	4				8
MacDowell Montessori School	7	5	3		14	29
Maryland Av Montessori	5	5	3	2		15

Source: School Websites

SPECIAL INITIATIVES

MPS is currently in the process of rolling out a new Montessori offering for dual-language learners. The South Side Dual Language Montessori School is slated to open for the 2017-2018 school year, starting with children aged 3 and 4 and growing each year until it is a K3-8 building. According to the District, "the school will accept students who are either native English or Spanish speakers, and students will become proficient in both languages." The bilingual Montessori approach highlights several traditional, as well as unique, features of Montessori education. These include:

- Instruction in Spanish and English (most instruction in Spanish in early childhood);
- All children fluent in Spanish and English in elementary levels;
- Montessori multi-age classrooms support the child's natural academic, social, emotional, and cultural development;
- Children taught individually or in small groups, meeting students at their level and working together to achieve goals;
- Differentiated instruction provided based on student's ability; and
- Hand-on Montessori materials used for students to learn and apply complex concepts through independent and small-group activities and projects.⁹³

MPS administrators are beginning to implement plans for the new school, which include continued teacher recruitment drives and the determination of a final location for the school. During this early phase, the District is performing dedicated community outreach to build buy-in and interest in the dual-language Montessori program. Indeed, MPS has scheduled several community meetings in both the morning and evening to attract parents and other community members. Each community meeting (there are four scheduled through October 19, 2016) provides light refreshments, a program presentation, and time

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⁹² "New South Side Dual Language Montessori School." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Schools/Southside-Montessori.htm

⁹³ Bullet points taken verbatim from: "New MPS Dual-Language Montessori School." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/MPS-Public/COS/Resources/Recruitment-Retention/MPS_DualLanguageFlyer_8.5x11_9161.pdf

for questions.⁹⁴ This suggests that districts may consider community buy-in an important aspect of new Montessori programming. The District's Montessori programs even encourage parents "to participate through classroom observation, material making, and chaperoning school trips." ⁹⁵

To this end, the Montessori programs in MPS highly recommend community involvement, and have established a number of community partnerships across the seven Montessori schools. For example, several schools partner with Danceworks Mad Hot Ballroom and Tap (MHBT) program, which is "an educational dance program for schoolchildren in the Greater Milwaukee area targeting primarily very low-income schools." This includes Barbee Montessori School, Highland Community School, MacDowell Montessori School, and Maryland Av Montessori. Other schools maintain community partnerships with the YMCA, Boy Scouts of America, and Girl Scouts. This highlights the effects and opportunities that positive community relationships can have on Montessori programs, and subsequently, their students. Partnerships at other schools include:

- Educators Credit Union at Craig Montessori School: ECU established a Reading Pals partnership with the Craig Montessori elementary classrooms; each week, an ECU volunteer visits the school for one hour to read one-on-one with a student.⁹⁷
- **Growing Power, Inc. at Craig Montessori School:** Grade 7 and 8 students volunteer at Growing Power, Inc. one day each month; students care for animals and help planting and harvesting fruits and vegetables. 98
- Marquette University and the University of Wisconsin-Milwaukee at Fernwood Montessori School: Fernwood adolescents visit Marquette and UWM to meet with the various departments for educational tours and workshops in such areas as biomedical engineering, civil engineering, composition, poetry, physical therapy, history, and computers. ⁹⁹
- Urban Ecology Center at Maryland Av Montessori School: Schools partners with the UEC for an entire year, transforming the experience from just another field trip to a permanent outdoor classroom where they can reinforce science concepts with hands-on outdoor activities.¹⁰⁰

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⁹⁴ "New South Side MPS Dual Language Montessori School." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/MPS-Public/COS/Resources/Recruitment-

Retention/MPS SouthSideMontessoriFlyer 8.5x11 MQ1.pdf

^{95 &}quot;Parents." Milwaukee Public Schools. http://mps.milwaukee.k12.wi.us/en/Programs/Montessori/Parents.htm

⁹⁶ "Programs." Maryland Av Montessori School, Milwaukee Public Schools.

http://www5.milwaukee.k12.wi.us/school/maryland/programs/

^{97 &}quot;Partnerships." Craig Montessori School, Milwaukee Public Schools.

http://www5.milwaukee.k12.wi.us/school/craig/programs/partnerships/

Ibid

⁹⁹ "Community Partnerships." Fernwood Montessori School, Milwaukee Public Schools. http://www5.milwaukee.k12.wi.us/school/fernwood/programs/community-partnerships/

¹⁰⁰ "Programs," Maryland Av Montessori School, Op. cit.

DALLAS INDEPENDENT SCHOOL DISTRICT

Dallas Independent School District (Dallas ISD) is a very large school district serving a 12-county region in North Central Texas, making it the second-largest district in the state. The District enrolls more than 160,000 students across 227 buildings from Pre-Kindergarten through Grade 12. Moreover, it employs almost 20,000 staff. Over the last four years, Dallas ISD has worked to increase a number of key metrics, including number of graduates (up by more than 2,000), four-year graduation rate (up by 7 percentage points), and dropout rate (down by 3 percentage points). ¹⁰¹

Notably, in 2008, the District approved a \$1.35 billion construction program to upgrade, renovate, and expand existing facilities and build new schools. The plan includes the construction of eight new career and technical high schools, as well as new classroom space across 19 schools. These significant investments in the District's schools underline Dallas ISD's key priorities moving into the 2016-2017 school year:

- **Early Childhood Education:** Increase kindergarten readiness; expand enrollment and facilities; increase program quality and rigor; improve teacher effectiveness.
- **Teacher Excellence Initiative:** Identify, define, support, and reward the best teachers.
- **Public School Choice:** Engage students in a "best-fit" school; expand school options (35 new choice schools by 2020).
- Career Tech Education: Increase career certification for students (4,000 by 2020); expand Career and Technical Education programs. 103

Many of these objectives and strategic priorities have helped to increase the status and recognition of the District's Montessori schools. By expanding access to quality early childhood education and the availability of public schools of choice, for instance, Dallas ISD is increasingly providing a range of school options for families with children at various levels of need.

MISSION AND STUDENT DEMOGRAPHICS

Dallas ISD currently operates three Montessori schools throughout the county: George B. Dealey Montessori Vanguard; Harry Stone Montessori Academy; and Eduardo Mata Elementary School. According to the District's website, "Montessori emphasizes student self-discovery and independence. Teachers will determine a range of options from which the students can choose and then students choose learning activities that best fir their interests."

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^{101 &}quot;Dallas ISD Brag Sheet." Dallas Independent School District. http://www.dallasisd.org/Page/20300

Hobbs, T.D. "Voters Back Dallas ISD's \$1.6 Billion Bond Plan." *The Dallas Morning News*, November 2015. http://www.dallasnews.com/news/news/2015/11/03/dallas-isd-bond-passing-in-early-results

¹⁰³ Bullet points adapted from: "Dallas ISD Brag Sheet," Op. cit.

^{104 &}quot;Montessori." Dallas Independent School District. http://www.dallasisd.org/Page/32982

The three Montessori programs in Dallas ISD enroll a diverse range of students (Figure 2.6). For example, Dealey Montessori Vanguard enrolls large populations of Hispanic and White students, while approximately half of Stone Montessori Academy's students identify as Black and two-thirds of Mata Elementary School's students identify as Hispanic. Mata Elementary School does not have any specific entry requirements and students who wish to participate in the Montessori program are selected through "a blind, randomized, computerized lottery." ¹⁰⁵ Both Dealey Montessori Vanguard and Stone Montessori Academy, as magnet schools, require an application for admittance including previous student report cards, observation of student behavior (for younger students), proof of residency, and other documentation. ¹⁰⁶

Figure 2.6: Student Demographics at Dallas ISD's Montessori Schools, 2015-2016

School	GRADES		% of Total			
		ENROLLMENT	Black	Hispanic	White	Other
Dealey Montessori Vanguard	PK3-5	440	10%	34%	37%	19%
Stone Montessori Academy	PK-6	335	49%	39%	10%	3%
Mata Elementary School*	PK-6	371	6%	68%	23%	3%

Source: Dallas Independent School District 107

However, there is no indication regarding whether or not Dallas ISD Montessori programs specifically adhere to one model or another (i.e., AMI or AMS accreditation). Neither of the two organizations officially accredits any of the public Montessori schools in Dallas, and school websites do not offer any specific information regarding their orientations. For instance, Dealey Montessori Vanguard only states that the school "uses the Montessori materials and works by the Montessori philosophy to provide an optimal education for students." Similarly, Stone Montessori Academy does not provide any concrete indication of whether the school adheres to AMI or AMS, simply stating broadly that "the Montessori method is child-centered. In a Montessori classroom, one will find the 'triad' of child, material, and guide (teacher) – each part providing balance."

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^{*}Note that Mata Elementary School's Montessori program currently only serves Grades PK-4.

 $^{^{105}}$ "Applying to a Choice School." Dallas Independent School District. p.1.

http://www.dallasisd.org/cms/lib/TX01001475/Centricity/Domain/12299/ApplyingtoaChoice.FAQ3.2.2016.pdf "Magnet School Information: Application Process." Dallas Independent School District. http://www.dallasisd.org/Page/182

^{107 [1] &}quot;2015-16 School Profile George B. Dealey Montessori Vanguard." Dallas Independent School District. http://www.dallasisd.org/cms/lib/TX01001475/Centricity/Shared//SchoolProfiles/SCHOOL_PROFILE_134.pdf

^{[2] &}quot;2015-16 School Profile Harry Stone Montessori Vanguard." Dallas Independent School District. http://www.dallasisd.org/cms/lib/TX01001475/Centricity/Shared//SchoolProfiles/SCHOOL_PROFILE_212.pdf

^{[3] &}quot;2015-16 School Profile Eduardo Mata Elementary School." Dallas Independent School District. http://www.dallasisd.org/cms/lib/TX01001475/Centricity/Shared//SchoolProfiles/SCHOOL PROFILE 270.pdf

[&]quot;General Information." Dealey Montessori Vanguard, Dallas Independent School District. http://www.dallasisd.org/Page/3803

¹⁰⁹ "The Montessori Philosophy." Stone Montessori Academy, Dallas Independent School District. http://www.dallasisd.org/Page/20797

PERSONNEL

Dallas ISD does not provide detailed information about staffing at their Montessori schools. For example, Stone Montessori Academy does not provide a teacher list, while Mata Elementary School does not differentiate between Montessori and mainstream faculty. Given the lack of information about Montessori models, it may be assumed that the District accepts teachers with either AMI or AMS credentials.

SPECIAL INITIATIVES

The Montessori schools in Dallas ISD are classified as "Public School Choice" buildings, which the District provides to ensure that all children graduate from a "best-fit school." At these schools, "educators can more meaningfully and deeply engage students by tapping into their specific interests, aspirations, and preferred learning styles. Choice Schools will showcase a single, school-wide 'anchor model' around which all teaching and learning happens." Beyond Montessori models, for example, this can include IB, single-gender, military, dual-language, or leadership academies. Dallas ISD classifies Public School Choice offerings in three ways:

- Magnet Schools: This is a pre-existing list. The schools will stay the same as well as the academic entry requirements. The success of the District's Magnet offerings is a key driver in the District's commitment to expand a "best-fit" school for every child in Dallas ISD without academic entry requirements.
- Transformation Schools (Choice School): These are start-up campuses that design and implement a new school-wide Choice model. They do not have academic or parental entry requirements and showcase district-wide open enrollment procedures. They will open in previously vacant buildings, new school buildings, or in non-traditional spaces such as a co-location with a community college.
- Innovation Schools (Choice School): These are existing neighborhood schools that re-purpose the existing campus into a school-wide Choice model. They do not have academic or parental entry requirements. They stay in their existing facilities with current staff and continue to enroll students from their traditional attendance zones, maintaining their traditional neighborhood identities.¹¹¹

Both Dealey Montessori Vanguard and Stone Montessori Academy are magnet schools, indicating that they adopt a school-wide Montessori model and have certain academic or parental entry requirements. Conversely, Mata Elementary School is a Transformation School, which means that it is a smaller-scale Montessori program that exists within a school – this implies that not all students participate and there may or may not be entry requirements. By 2020, Dallas ISD hopes to open 35 new Choice Schools. 112 The range of

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¹¹⁰ "Public School Choice: General Information." Dallas Independent School District. p.1.

 $http://www.dallasisd.org/cms/lib/TX01001475/Centricity/Domain/12299/GeneralInformation. FAQ 3.2.2016. pdf \\^{111} Bullet points taken verbatim from: Ibid.$

¹¹² Ibid., p.3.

school options that follow the Montessori model allow parents to send their children to a campus that best suits their needs.

For example, both of the magnet Montessori schools in Dallas ISD offer school-wide, consistent programming between classrooms. This can ensure that all students at Dealey Montessori Vanguard and Stone Montessori Academy are completely immersed in the Montessori philosophy. On the other hand, these schools require an in-depth application process, which means that many families will not be selected for admittance. The intensive application process may also dissuade parents from considering these magnet schools. At Dealey Montessori Vanguard, the application often involves myriad components. For young students (Pre-K through Grade 1), for instance, selection is based on an on-site assessment, observation, and a parental letter of interest, with 80 points needed to be considered:

On-Site Assessment (60 points)

- NNAT-Reasoning and Problem Solving
- Math
- Basic readiness skills (identification of colors, numbers, body parts, familiar objects in the environment, knowledge of personal information, etc.).
 Assessments will be scheduled when applications are submitted.

Observation (30 points)

- Follows direction (adheres to instruction from interviewer)
- Works during interview without disturbing others (works quietly)
- Self-control (appropriate, self-directed movement)
- Separated from adult willingly or with minimal resistance before interview
- Cooperation during interview (complies with interview requests)

Parental Letter of Interest (10 points)

- Brief description of the child
- Description of child's previous formal education (i.e., Day Care, Head Start, public or private preschool, etc.)
- Age of acquisition of developmental milestones (e.g., walking, talking, toileting)
- Areas of concern
- Parental expectations of the Montessori program¹¹³

Meanwhile, Mata Elementary School functions as a Transformation School, making it relatively more accessible to students in the community. This is particularly beneficial given the school's enrollment, which is made up of over 70 percent low socio-economic status students and 45 percent at-risk students. This student population, which may not apply to magnet schools, has the opportunity to enroll at Mata Elementary School in a Montessori

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[&]quot;Application Requirements and Selection Criteria." Dealey Montessori Vanguard, Dallas Independent School District. http://www.dallasisd.org/Page/40208

¹¹⁴ "2015-16 School Profile Eduardo Mata Elementary School," Op. cit., p.1.

program in their neighborhood. According to Dallas ISD, Transformation Schools like Mata Elementary School serve three key functions in the District that facilitate 21st century preparation, equity, and diversity (Figure 2.7).

Figure 2.7: Benefits of Choice School Options for Dallas ISD Students

21st Century Preparation

•As Dallas continues to grow and transform, so must its public education system. Thriving in the future requires the ability to think critically and creatively, solve problems with no obvious solutions, make judgments about alternative points of view, and communicate effectively. Choice Shools, by tapping into student interests, learning styles, and aspirations, can help produce these desired outcomes.

Equity

• Dallas ISD has some of the best magnet schools in the country, largely because magnet schools tap into what makes kids tick. Unfortunately, admission criteria and space limitations preclude many students from attending. Choice Schools expand public school choice options for all students, regardless of their academic abilities or geographic constraints.

Diversity

•Transformation Schools are new, district-run, open enrollmetn Choice Schools. If they offer attractive instructional options to families from all backgrounds, are open to all students across the entire district regardless of academic ability, and provide free transportation, you open up the possibility of students voluntarily moving from all areas of the city to attend school together.

Source: Dallas Independent School District 115

To establish the Montessori program at Mata Elementary School and classify it as a Transformation School, Dallas ISD solicited Letters of Intent (LOI) from current teachers and administrators. Applicant Teams could consist of:

- An Applicant Team made up of existing Dallas ISD employees with at least three individuals (including the Lead Applicant) who plan to hold full-time positions at the campus;
- An Applicant Team made up of a mix of District employees and out-of-district educators/partners who are looking to launch a Choice School with at least three individuals (including the Lead Applicant) who plan to hold full-time positions at the campus; or

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¹¹⁵ "Public School Choice: General Information," Op. cit., p.3.

An Applicant Team made up of only out-of-district educators/partners who are looking to design and launch a Transformation School in Dallas ISD with at least three individuals (including the Lead Applicant) who plan to hold full-time positions at the campus. 116

By outsourcing the initial conceptualization of these schools to teachers and the wider community, Dallas ISD ensures that all interested stakeholders can be considered in the school system. Moreover, Transformation Schools are explicitly purposed to oversee the renovation, reuse, or merger of existing district spaces (in this way, similar to APS's intentions with the Patrick Henry building). Indeed, "Dallas ISD has several vacant school buildings that, with some renovations, could become schools again, as well as new building projects on the horizon over the coming years." 117

¹¹⁷ Ibid.

[&]quot;Transformation Schools." Dallas Independent School District. http://publicschoolchoiceapplication-dallasisd.org/transformationschools-2/

APPENDIX A: AMS ACCREDITATION TIMELINE

This appendix presents the standard steps and timeline for AMS recognition. Note that this timeline is can be amended based on the needs and capacities of individual schools.

Figure A.1: AMS Accreditation Steps and Timeline

Initial Planning

Approximately 36 months from projected end date

- •School reviews the AMS Accredited School Standards & Criteria to determine readiness and eligibility for accreditation.
- •School orders the Accreditation Information Packet (\$120).
- •School participates in the Accreditation 101 Webcast*.

 *Complimentary with purchase of Accreditation Information Packet

Accreditation Application, Candidacy, and Self-Study Process

28 to 30 months

- •School submits the AMS application for initial accreditation, all required documentation, and fee (\$725 plus additional \$600 for each satellite site).
- School contacts both AMS and the cooperating agency if plans are to engage in a cooperative process.
- AMS Office of School Accreditation reviews the application and approves accreditation candidacy. School receives written notification of the decision.
- School participates in the accreditation self-study writing teleconference if candidacy is approved.
- •School engages the entire school community in the self-study process, culminating in the self-study report.

Self-Study Report Review

10 to 18 months

- •School submits the self-study report along with the review fee (\$230) to the AMS Office of School Accreditation.
- July 1 in order to host a fall accreditation onsite visit
- •October 1 in order to host a spring accreditation onsite visit
- AMS Office of School Accreditation reviews the self-study report for completeness and requests revisions as necessary.

Accreditation Onsite Visit Coordination

6 to 8 months

- AMS Office of School Accreditation contacts the school to identify potential dates for the accreditation onsite visit.
- AMS Office of School Accreditation appoints a team chair and team members to the accreditation onsite team from the pool of qualified volunteers.

Accreditation Onsite Visit and Team Report Review

4 to 6 months

- •School hosts the accreditation onsite visit, during which the Accreditation Onsite Team verifies the school's compliance with AMS Standards & Criteria and validates content of the self-study report through observations, interviews, and document review.
- •Accreditation onsite team summarizes its findings in a team report, which is submitted to the AMS Office of School Accreditation within one month of the conclusion of the accreditation onsite visit.

School Accreditation Commission and AMS Board of **Directors Review**

2 to 4 months

- AMS Office of School Accreditation and a member of the AMS School Accreditation Commission review the team report.
- AMS Office of School Accreditation schedules the school's review at an upcoming School Accreditation Commission meeting; there are 3 school review meetings per year - January, April/May, June.
- •School Accreditation Commission members review the school and vote
- •recommend the school for AMS accreditation to the AMS Board of Directors OR
- defer school accreditation until the school demonstrates full compliance with AMS Standards & Criteria.
- Members of the AMS Board of Directors review the recommendation of the School Accreditation Commission and vote to award school accreditation or deny school accreditation.

Accreditation **Decision Notification**

1 month

• AMS Office of School Accreditation notifies the school of the final decison of the AMS Board of Directors. If the school has been awarded AMS school accreditation, an accreditation certificate will be issued.

Source: American Montessori Society 118

 $^{^{118}}$ Taken verbatim from: "Initial Accreditation Steps & Timeline." American Montessori Society. https://amshq.org/School-Resources/AMS-School-Accreditation

APPENDIX B: AMI TEACHER CERTIFICATION UNITS

This appendix presents the required course units for teacher certification in the AMI model at the Early Childhood level. Prospective teachers must complete all the courses along with required reading, and have a 90 percent attendance rate.

Figure B.1: Course Units for AMI Teacher Certification

TITLE	CODE	Description
The Montessori Philosophy, Psychology, and Child Development	AMID201	This course component introduces Dr Maria Montessori's philosophy and psychology of human development, focusing on early learning and child development from three to six years of age.
The Child's Acquisition of Fundamental Learning Skills	AMID202	This course component introduces the exercises of daily life (practical life). These exercises promote coordination of movement, independent function, social grace, self-esteem, impulse control, empathy, attention and concentration through the integration of mind and body.
The Development and Education of the Senses	AMID203	This course component introduces the activities known in Montessori education known as Exercises for the Education of the Senses. These are designed to lead the child to an intelligent and imaginative exploration of the world. Content includes identification of a child's process of classifying his world, problem solving, decision making and critical thinking. This area includes extensions in the areas of music, geometry, geography and botany.
Language and Literacy	AMID204	This course component introduces exercises for the development of spoken and written language, reading readiness, pre-reading and reading skills appropriate for children ages 3-6. Content includes a focus on self-confidence and self-expression within a social setting. There is also emphasis on spoken and written language in the areas of daily life, storytelling, composition, literature, geography, history, biology, science, music, art, as well as the functional aspects of grammar, syntax and reading analysis.
Mathematics	AMID205	This course component is designed to explore the way in which a young child develops their 'mathematical mind' and to show by demonstration and lecture the Montessori activities that provide sensorial foundations for geometry and algebra, counting and arithmetic.
Montessori Materials and their Role in Assisting Child Development	AMID206	The aim of this subject is to acquire a deep understanding of the qualities of the Montessori materials and their function as aids to child development.

TITLE	CODE	Description
The Critical Role of Observation	AMID207	The aim of this subject is to observe children in Montessori classrooms in order to appreciate the role of observation as a major source of information about the child. Through the experience the student will come to realize the role of exact, detailed, objective observations in facilitating a greater understanding of the Montessori theory of growth and development. An additional aim is to raise awareness of the importance and nature of the interactions between the child, the adult and the prepared environment.
Montessori Professional Experience	AMID208	The aim of this subject is to provide the opportunity to work under the direction of a qualified and experienced Montessori teacher, to apply the acquired theoretical knowledge of child growth and development to practical situations in established Montessori classrooms.
Educational Theory and Practice	AMID209	This subject will introduce students to a selection of theories of education and child development. The students will be introduced to the profound nature and effects of parent/child issues on the development of young children.
Administration	AMID210	This subject will assist in informing and preparing students for the administrative and professional environment in which they are likely to be working.
Legal Issues and OHS	AMID211	This subject will assist in informing and preparing students for the administrative and professional environment in which they are likely to be working.
Reading and Discussions Sessions	AMID212	The students are to read books and make use of them for both their written work/essays as well as practice with material and related discussions. The course reading list includes required and recommended titles.
Written Work	AMID213	Each student shall compile an individual manual for each area of the Course. These manuals should include an introduction to each area; a description of each piece of material; the age of the child working with the material; and the aims and purposes of the material. The manuals are the student's personal record of their course work; the work is supervised with a final assessment at the end of the Course. In order to clarify the basic points connected with Montessori child psychology the students are to write essays on topics supplied by the Course.
Material Making	AMID214	Under supervision students will also engage in material making. All such materials are checked by the Trainer(s).

Source: Association Montessori Internationale 119

 119 "AMI Montessori Diploma Children's House 3-6," Op. cit., pp.3–5.

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CAVEAT

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