

Joe Lombardo
Governor

Richard Whitley, MS
Director



DEPARTMENT OF HEALTH AND HUMAN SERVICES

DIVISION OF WELFARE AND SUPPORTIVE SERVICES

Helping people. It's who we are and what we do.



Robert Thompson
Administrator

NOTICE OF PUBLIC HEARING

SIERRA NEVADA MONTESSORI DBA MOUNTAIN VIEW MONTESSORI, 565 ZOLEZZI LANE, RENO, NV 89511, IS REQUESTING A VARIANCE, CASE #785, FROM THE NEVADA STATE BOARD OF HEALTH REGULATIONS.

NOTICE IS HEREBY GIVEN THAT SIERRA NEVADA MONTESSORI DBA MOUNTAIN VIEW MONTESSORI, located at 565 Zolezzi Lane, Reno, NV 89511, has requested a variance from Nevada Administrative Code (NAC) 432A.5205.

A public hearing will be conducted on September 5, 2025, at 9:00 am by the Nevada State Board of Health to consider this request. This meeting will be held online and at physical locations, listed below.

Physical Locations:

Southern Nevada Health District (SNHD)
Red Rock Trail Rooms A and B
280 S. Decatur Boulevard; Las Vegas, Nevada 89107

Nevada Division of Public and Behavioral Health (DPBH)
Hearing Room No. 303, 3rd Floor
4150 Technology Way; Carson City, Nevada 89706

Virtual Information:

Meeting Link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjVmMTM4MTQtMmYyOC00NmVjLTg4NWQtOTVlZWU1MzUyZGZl%40thread.v2/0?context=%7b%22Tid%22%3a%22e4a340e6-b89e-4e68-8eaa-1544d2703980%22%2c%22Oid%22%3a%22768e443d-3be6-48f0-9bb0-7e72f1276b8d%22%7d

Please Note: If you experience technical difficulties connecting online, please call into the meeting to participate by phone.

Join by Phone:

1-775-321-6111

Phone Conference ID Number: 402 212 427#

SIERRA NEVADA MONTESSORI DBA MOUNTAIN VIEW MONTESSORI, 565 ZOLEZZI LANE, RENO, NV 89511, is requesting a variance from NAC 432A.5205 which states:

NAC 432A.5205 Minimum staffing ratios; staff required to remain awake during duty hours at night.

1. Except as otherwise provided in NAC32A.290 and 432A.546, a licensee of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility shall, between the hours of 6:30 a.m. and 9:00 p.m., abide by the following staffing levels in each classroom:

Age of Child	Required Staff to Child Ratio	Group Size
Less than 9 months of age	1 caregiver for every 4 children	8
9 months of age or older but less than 2 years of age	1 caregiver for every 6 children	12
2 years of age or older but less than 3 years of age	1 caregiver for every 9 children	18
3 years of age or older but less than 4 years of age	1 caregiver for every 12 children	24
4 years of age or older but less than 5 years of age	1 caregiver for every 13 children	26
5 years of age or older	1 caregiver for every 18 children	36

2. Except as otherwise provided in NAC 432A.546, a licensee of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility which is operated between the hours of 9:00 p.m. and 6:30 a.m. shall abide by the following staffing levels in each classroom:

Age of Child	Required Staff to Child Ratio	Group Size
Less than 3 years of age	1 caregiver for every 6 children	12
3 years of age or older	1 caregiver for every 10 children	20

3. Every member of the staff of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility who is on duty at night shall remain awake during duty hours.

4. A licensee of a child care facility is allowed to utilize all useable and measured square footage within a classroom to meet the requirements of NAC 432A.250 if the requirements for ratios and groups described in subsections 1 and 2 are maintained within such classrooms.

5. If a licensee of a child care facility care for children of different age groups as described in subsections 1 and 2, the licensee shall abide by the required staff to child ratio and group size based on the age of the youngest child in the group.

SIERRA NEVADA MONTESSORI DBA MOUNTAIN VIEW MONTESSORI (hereinafter "Applicant") current standards require larger groups of children 32-35 (ages 3-6) with one teacher and one assistant larger, allowing children to develop independence, self-sufficiency and capability. Applicant claims its system-based approach to teaching and learning where classrooms can maintain larger class sizes within a safe and orderly environment.

The authority of the State Board of Health to consider and grant a variance from the requirements of a regulation is set forth at NRS 439.200 and NAC 439.200 – 439.280.

[Persons wishing to comment upon the proposed variance may appear at the scheduled public hearing or may submit written testimony at least five days before the scheduled hearing to:](#)

Secretary, State Board of Health
Division of Public and Behavioral Health
4150 Technology Way, Suite 300

Carson City, NV 89706

Anyone wishing to testify for more than five minutes on the proposed variance must petition the Board of Health at the above address. Petitions shall contain the following: 1) a concise statement of the subject(s) on which the petitioner will present testimony; 2) the estimated time for the petitioner's presentation.

This notice has also been posted at the following locations:

DIVISION OF PUBLIC AND BEHAVIORAL HEALTH (DPBH), 4150 TECHNOLOGY WAY, CARSON CITY, NV
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH WEBSITE:

<http://dpbh.nv.gov/Boards/BOH/Meetings/Meetings/>



**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**
DIVISION OF WELFARE AND SUPPORTIVE SERVICES
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July 18, 2025

Memorandum

To: Jon Pennell, DVM, Chairperson
State Board of Health

From: Robert Thompson, Administrator
Division of Welfare and Supportive Services

RE: Variance Request # 785, for Sierra Nevada Montessori DBA Mountain View Montessori Variance
Request to enlarge higher adult to child ratios

Subject: Request for Variance to Nevada Administrative Code (NAC) 432A.5205 Minimum staffing ratios in
Montessori multiage classrooms with children ages 3 – 6 years old

REGULATIONS

NAC 432A.5205 states as follows,

1. Except as otherwise provided in NAC32A.290 and 432A.546, a licensee of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility shall, between the hours of 6:30 a.m. and 9:00 p.m., abide by the following staffing levels in each classroom:

Age of Child	Required Staff to Child Ratio	Group Size
Less than 9 months of age	1 caregiver for every 4 children	8
9 months of age or older but less than 2 years of age	1 caregiver for every 6 children	12
2 years of age or older but less than 3 years of age	1 caregiver for every 9 children	18
3 years of age or older but less than 4 years of age	1 caregiver for every 12 children	24
4 years of age or older but less than 5 years of age	1 caregiver for every 13 children	26

Age of Child	Required Staff to Child Ratio	Group Size
5 years of age or older	1 caregiver for every 18 children	36

2. Except as otherwise provided in NAC 432A.546, a licensee of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility which is operated between the hours of 9:00 p.m. and 6:30 a.m. shall abide by the following staffing levels in each classroom:

Age of Child	Required Staff to Child Ratio	Group Size
Less than 3 years of age	1 caregiver for every 6 children	12
3 years of age or older	1 caregiver for every 10 children	20

3. Every member of the staff of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility who is on duty at night shall remain awake during duty hours.

4. A licensee of a child care facility is allowed to utilize all useable and measured square footage within a classroom to meet the requirements of NAC 432A.250 if the requirements for ratios and groups described in subsections 1 and 2 are maintained within such classrooms.

5. If a licensee of a child care facility care for children of different age groups as described in subsections 1 and 2, the licensee shall abide by the required staff to child ratio and group size based on the age of the youngest child in the group.

See NAC 432A.5205.

STAFF REVIEW

Sara Lee, on behalf of Mountain View Montessori (hereinafter Applicant”), has submitted an application for a variance from Nevada Administrative Code (NAC) 432A.5205, relating to the ratio of caregivers to children ages 3-6 years old in Mountain View Montessori, a childcare facility, located at 565 Zolezzi Lane, Reno, NV 89511. Applicant asserts its standards require larger groups of 32-35 children with one teacher and one assistant, allowing children to develop independence, self-sufficiency and capability. Ms. Lee asserts that Montessori is a system-based approach to teaching and learning where classrooms can maintain larger class sizes within a safe and orderly environment.

BACKGROUND

A licensee of a child care center, child care institution, accommodation facility, facility for special events, nursery for infants and toddlers or special needs facility shall, between the hours of 6:30 a.m. and 9:00 p.m., abide by NAC 432A.5205 by maintaining appropriate staff-to-child ratios.

Children benefit from social interactions with peers. However, larger groups are generally associated with less positive interactions and developmental outcomes. Group size and ratio of children to adults are limited to allow for one-to-one interaction, intimate knowledge of individual children, and consistent caregiving (*Caring for Our*

The State of Nevada Child Care Licensing ratios for child care facilities are at or below National Health and Safety Performance Standards based on what children need for quality nurturing care. For children between the ages of 3-6 years old, *Caring for Our Children* recommends between a ratio of 1 caregiver for every 7 children to 1 caregiver for every 10 children; the National Association for the Education of Young Children (hereinafter “NAEYC”)) recommends between a ratio of 1 caregiver for every 9 children to 1 caregiver for every 12 children; the Nevada Ready! Preschool Development Grant (hereinafter “PDG”) recommends a ratio of 1 caregiver for every 10 children; and Head Start recommends between a ratio of 1 caregiver for every 8 children to 1 caregiver for every 10 children. State of Nevada Child Care Licensing requires that the age range a ratio between 1 caregiver for every 12 children to 1 caregiver for every 18 children.

Further, during the March 2017, Board of Health meeting, numerous providers, including those from Washoe County, responded to the new proposed regulation pertaining to ratios stating that increased supervision will have beneficial effects upon their business as it helps to ensure children’s safety.

ANALYSIS

NAC 439.240 provides:

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:

(a) There are circumstances or conditions which:

- (1) Are unique to the applicant;
- (2) Do not generally affect other persons subject to the regulation;
- (3) Make compliance with the regulation unduly burdensome; and
- (4) Cause a hardship to and abridge a substantial property right of the applicant;

and

(b) Granting the variance:

- (1) Is necessary to render substantial justice to the applicant and enable the applicant to preserve and enjoy his or her property right; and
- (2) Will not be detrimental or pose a danger to public health and safety.

2. Whenever an applicant for a variance alleges that he or she suffers or will suffer economic hardship by complying with the regulation, the applicant must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable.

See, NAC 4329.240.

In review of the Application, the findings the circumstances are unique to the Applicant. The State of Nevada currently licenses 18 Montessori schools. Other currently licensed Montessori schools have been successful utilizing the current ratio standards. These regulations are applicable to all licensed child care facilities and thus, do generally affect other persons subjected to the regulations.

Applicant’s issue of complying with current child to staff ratios and group sizes should not be construed as unduly burdensome as the facility may utilize all usable space for children present so that the facility may maintain current child enrollment numbers. Further, Applicant provides no evidence of circumstances that cause a hardship to and abridge a substantial property right of the applicant in relation to the licensed child care facility.

Granting the variance is not necessary to render substantial justice to Applicant and would pose danger to the safety of the children. NAC 432A.5205 sets standards for staffing and ratios within a licensed facility and helps to ensure adequate supervision of children. Varying these standards to allow a facility to provide services beyond the capacities set in regulation contemplates allowing the operation of other child care facilities in the State of Nevada without meeting the standards for ratios and supervision.

The applicant did not submit evidence of financial hardship, rather the hardship information is related to the Montessori standards that require larger groups of children to allow children to develop independence and self-sufficiency, alleging children in Montessori classroom learn from doing and watching which means opportunities would be lost by not fully implementing authentic Montessori pedagogy.

DEGREE OF RISK TO PUBLIC HEALTH AND SAFETY:

Allowing services to be provided for children that exceeds the staff to child ratios of the licensed child care facility creates a potential for inadequate supervision of the children and thus related safety concerns.

EXCEPTIONAL AND UNDUE HARDSHIP:

The applicant has not provided evidence to support an allegation of a hardship related to the operation of the licensed child care facility. The hardship as described by Applicant brings a major reduction in the integrity of the Montessori practice and significantly impacts Mountain View Montessori's ability to fully implement authentic Montessori pedagogy, strongly compromising their ability to meet the rigorous standards and requirements of their accrediting organizations.

STAFF RECOMMENDATION:

Staff recommend that the Board of Health deny the request for variance for the following reasons:

1. Less adult supervision would be a risk to child safety.
2. The ratio and group size as stipulated within the NAC432A.5205 was agreed upon by the industry through work groups that included Washoe County.
3. Nevada's NAC regulation regarding ratio and group size meets the qualifications of the Federal Child Care Development Block Grant needed for funding.

PUBLIC COMMENTS:

None

PRESENTER:

Latisha Brown, Social Services Chief II
Division of Welfare and Supportive Services

ATTACHMENTS:

None



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Please check the appropriate box that pertains to the NAC for which you are requesting a variance.

☐

Division Administration
(NAC 439, 441A, 452, 453A, & 629)

☐

Health Care Quality & Compliance
(NAC 449, 457, 459 & 652)

☒

Child, Family & Community Wellness
(NAC 392, 394, 432A, 439, 441A, & 442)

☐

Office of State Epidemiology
(NAC 440, 450B, 452, 453, 453A, & 695C)

☐

Public Health & Clinical Services
(NAC 211, 444, 446, 447, 583, & 585)

Date: April 21, 2025

Name of Applicant: Sierra Nevada Montessori DBA Mountain View Montessori

Phone: 775-852-6162

Mailing Address: 565 Zolezzi Lane

City: Reno State: NV Zip: 89511

We do hereby apply for a variance to
chapter/section NAC 432A.5205 of the Nevada
Administrative Code (NAC). (For example: NAC 449.204)

Title of section in
question: Minimum staffing ratios

Statement of existing or proposed conditions in violation of the NAC:

Multiaged classroom, including school age (kindergarten). The classrooms we request
the variance to apply to are ages 3-6.



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

Date of initial operation (if existing): August 1998

ATTENTION: Please read this section closely. Your request for variance will be examined against these criteria:

Any person who, because of unique circumstances, is unduly burdened by a regulation of the State Board of Health and thereby suffers a hardship and the abridgement of a substantial property right may apply for a variance from a regulation. (NAC 439.200(1))

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:
 - (a) There are circumstances or conditions which:
 - (1) Are unique to the applicant;
 - (2) Do not generally affect other persons subject to the regulation;
 - (3) Make compliance with the regulation unduly burdensome; and
 - (4) Cause a hardship to and abridge a substantial property right of the applicant; and
 - (b) Granting the variance:
 - (1) Is necessary to render substantial justice to the applicant and enable him to preserve and enjoy his property; and
 - (2) Will not be detrimental or pose a danger to public health and safety.
2. Whenever an applicant for a variance alleges that he/she/they suffers or will suffer economic hardship by complying with the regulation, they must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable. (NAC 439.240)

Therefore, it is important for your variance request to be as complete as possible. It is your responsibility to attach documentation supporting your variance request.

Statement of degree of risk of
health

Montessori education methods and practices are impacted by a lower ratio. The integrity of the Montessori practice is impacted as we would not have the ability to fully implement authentic Montessori pedagogy, strongly compromising our ability to meet the rigorous standards and requirements of our accrediting organizations, Association Montessori Internationale and Association Montessori USA.



NEVADA STATE BOARD OF HEALTH
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APPLICATION FOR VARIANCE

Please state in detail the circumstances or conditions which demonstrate that:

1. An exceptional and undue hardship results from a strict application of the Regulation:

Montessori standards require larger groups of children (32-35) with one teacher and
one assistant allowing children to develop independence, self-sufficiency, and
capability. When there are not enough children in the classroom, activities are limited.
Children in the Montessori classroom learn from doing and watching, this means that
opportunities would be lost.

2. The variance, if granted, would not:

- A. Cause substantial detriment to the public welfare.

The social experience of a group of children in a three-year age range includes the
development of positive social habits of politeness and respect, the patience to wait
one's turn and the ability to gain perspective from older peers to solve problems that
arise throughout the day.

- B. Impair substantially the purpose of the regulation from which the application seeks a variance.
Montessori is a system-based approach to teaching and learning. Montessori classrooms
can maintain larger class sizes within a safe and orderly environment.

The bureau may require the following supporting documents to be submitted with and as a part of this
application:

Specific Request:

We are requesting a variance for the minimum staffing ratio for our multiage classrooms. Additional
supporting documentation attached.



NEVADA STATE BOARD OF HEALTH
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APPLICATION FOR VARIANCE

1. Legal description of property concerned
- _ 2. General area identification map
- _ 3. Plot map showing locations of all pertinent items and appurtenances
- _ 4. Well log (if applicable)
- _ 5. Applicable lab reports
- _ 6. Applicable engineering or construction/remodeling information
- _ 7. Other items (see following pages)

This application must be accompanied by evidence demonstrating the costs of your compliance with regulations or specific statutory standards. Your request will be placed on the Board of Health agenda 40 days or more after receipt in this office if accompanied by the required fee (NAC 439.210). The application and supporting documentation will form the basis for the Division of Public and Behavioral Health staff report and recommendation(s) to the Board. Failure to respond to the above statements may cause the Board to deny consideration of the application at the requested Board meeting.

☒ I am/we are requesting this variance request be placed on the next regularly scheduled Board of Health agenda. It is understood that I/we can attend in person at either physical location in Carson City or Las Vegas or we may attend virtual.

Signature: _____

Printed Name: Sara Lee

Title: Personnel Coordinator

Date: April 21, 2025



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

APPLICATION FOR VARIANCE

**PLEASE SUBMIT YOUR APPLICATION FOR VARIANCE BY USING
ANY OF THE FOLLOWING METHODS:**

MAIL TO:

Secretary, Nevada State Board of Health
Division of Public and Behavioral Health
4150 Technology Way, Suite 300
Carson City, NV 89706

FAX:

775-687-7570

EMAIL:

DPBH@health.nv.gov

StateBOH@health.nv.gov



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The classrooms we request the variance to apply to are ages 3-6.



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Montessori education methods and practices
are impacted by a lower ratio. The integrity of the Montessori practice
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APPLICATION FOR VARIANCE

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2. The variance, if granted, would not:

A. Cause substantial detriment to the public welfare.

The social experience of a group of children in a three-year age range includes the development of positive social habits of politeness and respect, the patience to wait one's turn and the ability to gain perspective from older peers to solve problems that arise throughout the day.

B. Impair substantially the purpose of the regulation from which the application seeks a variance.

Montessori is a system-based approach to teaching and learning. Montessori classrooms can maintain larger class sizes within a safe and orderly environment.

The bureau may require the following supporting documents to be submitted with and as a part of this application:

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Signature: Sara Yee
Printed Name: Sara Lee
Title: Personnel Coordinator
Date: April 21, 2025



NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH



NEVADA STATE BOARD OF HEALTH
4150 Technology Way, Suite 300 CARSON CITY, NV 89706

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4150 Technology Way, Suite 300
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FAX:

775-687-7570

EMAIL:

DPBH@health.nv.gov
StateBOH@health.nv.gov

Mountain View Montessori is an independent school serving the Reno-Sparks area since 1970. Our students range in age from 1 to 14 years old, toddler through 8th grade. We have been licensed by Human Services for 54 years with a consistently excellent reputation for meeting or exceeding the highest standards for quality childcare. We are licensed by the State of Nevada Private School Licensing K-9 where we are recognized for our steadfast commitment to quality education.

As the change from County to State agencies move forward, we want to ensure Montessori education methods and practices are fully considered and equitably included. However, given the development of the measurement of those standards and the licensing regulations is done with more conventional early childhood environments in mind, there are areas where the Montessori community has pedagogical differences.

The current State of Nevada Child Care regulations bring a major reduction in the integrity of the Montessori practice and significantly impact Mountain View Montessori's ability to fully implement authentic Montessori pedagogy, strongly compromising our ability to meet the rigorous standards and requirements of our accrediting organizations, Association Montessori Internationale and Association Montessori USA.

The reason for our variance request is to provide documentation supporting higher adult to child ratios. Montessori standards require larger groups of children (32-35) with one teacher and one assistant allowing children to develop independence, self-sufficiency and capability. While it is possible to hire more staff to meet ratios, reducing group size limits the quality of the Montessori education we can provide. Montessori teachers are trained to teach class sizes of more than 30 children of this age. A trained teacher assistant facilitates the practical aspects of the classroom to maintain optimum health and safety standards. The teacher and assistant spend three years with the developing child allowing them to develop a consistent, trusting and well nurtured relationship with the child and the family.

Montessori is a systems-based approach to teaching and learning. This means that it's not the individual parts of the curriculum that are important, it is how those components come together. Montessori classrooms can maintain larger class sizes within a safe and orderly environment. Observant teachers guide children to independence where they can spend extended periods of time choosing, doing and putting away learning activities without adult assistance and effectively develop an internal locus of control.

When there are not enough children in the classroom, activities are limited. Children in the Montessori classroom learn from doing and watching, this means that opportunities would be lost. Few opportunities to practice their social interaction skills would occur in smaller groups. Research on the developing brain reveals early childhood experiences build the

foundation for a skilled workforce, a responsibility community and a thriving economy. New evidence-based data has identified a set of skills that are essential for school achievement, for the preparation and adaptability of our future workforce and for avoiding a wide range of mental health problems. These executive function and self-regulation capacities rely on working memory, mental flexibility and self-control. A larger class size led by a Montessori trained teacher provides a natural, authentic and safe environment to develop the executive functioning and self-regulation skills now recognized as critically important to success and well-being.

Montessori classrooms traditionally group children in 3-year multi-age developmental groupings, allowing children to naturally meet milestones and experience multiple dynamics that a single or two-year age classroom does not. These dynamics include, but are not limited to, diminished competition, increased motivation to learn, increased peer-mentorship allowing the teacher to work individually with children. The mentorship piece is particularly compelling. Research clearly shows children learn by imitation, they do so quite early, and they may be particularly apt to imitate older peers. Montessori education capitalizes on imitative learning in both the academic and social realms.

In the multi-age classroom children gain an understanding and responsibility for the well-being of their peers. Keeping children together during the 3-6 (K) developmental stage builds cohesion, shifting the focus from individual-ism to solidarity and collaboration. Children are encouraged to teach, work and help one another. 3-year old children have a selection of peers to choose from for guidance and direction and can practice what they have learned, cementing their knowledge and strengthening self-esteem. Isolating one end of the age spectrum creates disequilibrium. The social experience of a group of children in a three-year age range includes the development of positive social habits of politeness and respect, the patience to wait one's turn and the ability to gain perspective from older peers to solve problems that arise throughout the day.

Montessori schools in our state are few in number but remain valuable contributors to the education of young children as well as elementary and middle school students. Montessori has a significant opportunity for growth in Nevada and an important role to fulfill in educating Nevada's children.

We fully support and endeavor to work collaboratively with the state organizations that are working to increase quality in early childhood education. We endeavor to follow the standards and guidance of the Nevada Early Childhood Advisory Council, Nevada Registry, Office for Early Learning and Development, Strong Start Nevada, Nevada Division of Public and Behavioral Health, Child Care Advisory Council and various other state agencies

dedicating considerable time and resources toward this effort. We support quality early childhood care and education.

Thank you for your time in reviewing the supporting documentation to our variance request.

Respectfully submitted,

A handwritten signature in cursive script that reads "Sara Lee".

Sara Lee

Personnel Coordinator

Adult-Child Ratios & Class Sizes

Montessori Practice

Montessori best practices call for larger class sizes and higher adult-child ratios than state policies typically allow in early childhood settings.^{1,2} In fact, these expectations are reflected in international Montessori accreditors standards. With a unique instructional approach, involving a high level of student independence, individual rather than whole class instruction, collaboration, and peer tutoring, the larger group sizes of Montessori classrooms promote independence and provide a wider range of activities, more potential peer tutors and collaborators, and greater opportunity for social learning through peer interactions.³ Most states, however, enforce class size or student-teacher ratio limits in early childhood classrooms that compromise Montessori practice and standards.

What the Research Says

Surprisingly, after decades of research into the link between class sizes/ratios and student outcomes, no definitive conclusions can be drawn, and class size reduction (CSR) policies have been successful in some states but remarkably expensive disappointments in others.⁴ Some studies show that class size matters, but not ratios,⁵ while others support the opposite conclusion.⁶ Some research finds positive effects of low ratios or small classrooms,^{7,8} mostly in the lower elementary grades, while at least two recent meta-analyses reveal very small benefit to none at all in early childhood.^{9,10}

Collectively, research findings concerning class sizes and adult-child ratios are complex, mixed, and inconclusive. As a result, some researchers recommend that policymakers thoroughly consider alternative interventions that are more consistently supported,^{11,12} as well as qualitative contextual differences like teacher quality and instructional strategies that enable high-quality learning in classrooms of varying sizes.^{13,14}

For instance, some authors argue that smaller class sizes may positively impact student outcomes by allowing teachers in traditional settings to increase the proportion of individualized instruction.⁸ However, in Montessori

classrooms nearly *all* instruction is individualized, which raises the question of whether those findings remain relevant within Montessori contexts. In addition, in studies where benefits of small class size have been indicated, it does not follow that implications for teacher-led environments translate to child-centered Montessori classrooms where children's learning often occurs through interactions with peers and materials.³ In fact, data from an ongoing, national-scale study suggest a different trend; whereas in conventional ECE classrooms, larger class sizes and higher ratios did in fact predict lower CLASS® quality scores, the *opposite* was found in Montessori classrooms. There, larger class sizes correlated with *higher* CLASS® scores.¹⁵ Montessori, therefore, may prove to be one context in which student success is achieved within larger classrooms.

Class size is an exceptionally complicated construct which likely operates differently depending on the particular setting in which it is situated.¹³

“But what about the Tennessee STAR experiment?”

The most influential research in support of CSR stems from the Tennessee STAR experiment of the mid-1980's, which yielded compelling evidence that smaller class sizes (but not lower ratios) provided advantages for student achievement, behavior, and engagement, and that the benefits were greatest for minoritized students.⁵ Follow up studies suggested that many of the benefits persisted for years.^{16, 17}

Not all analyses of the STAR data draw the same conclusions, though, and important methodological critiques have been made.^{18, 19} More questionable, however, is the appropriateness of generalizing the findings to other contexts and into the realm of widespread educational policy recommendations.⁴ To that point, when California, inspired by the STAR findings, invested \$1B per year on class size reduction, the results were disappointing. Quite small gains were found in student achievement, and the move exacerbated teacher shortages, leading to a troubling decline in teacher quality, particularly in elementary schools and for already underserved students.²⁰ As a result, resource gaps widened, and inequities worsened due to California's class size reduction policy.⁴

Recommendation

Context matters, so flexible policy approaches that account for differences in qualitative components such as instructional strategies and teacher preparation are advisable given the lack of clarity around the effectiveness of reduced class sizes and ratios. Several states have already added increases to group size and ratio allowances specifically for Montessori programs in which the staff meet specific qualifications and other required aspects of the Montessori approach are present.

MPPI's Mission and Vision

MPPI envisions a world enriched and made equitable through widely accessible and fully-implemented Montessori education.

To make this vision a reality, MPPI champions a policy landscape that expands equitable access to high-fidelity Montessori education. This goal is advanced through building the capacity of state associations, bridging the work of advocates and policymakers, and promoting public awareness of the Montessori approach.

Mixed-Age Classrooms

Montessori Practice

Montessori classrooms are organized according to specific 3-year mixed-age groupings that allow children to interact with peers both younger and older than themselves, and therefore encourage natural and widely supported practices such as imitative learning, collaboration, and peer tutoring.¹ This mixed-age design is developmentally inclusive, allowing children to receive additional support or accelerate their learning while remaining in the classroom with their social peers. In many states, however, diverse policies related to teacher licensure, funding, and childcare licensing can prevent Montessori programs from grouping children in ways that align with the Montessori approach and provide tremendous benefits to students.

What the Research Says

Important developmental theorists, including Piaget and Vygotsky, have emphasized the importance of learning from peers. In particular, Vygotsky emphasized collaboration with just-older peers, who can help a child with tasks in their “zone of proximal development,” meaning anything that they can do with support but not yet independently.² That said, research on mixed-age classrooms in conventional settings, where the term typically refers to 2-year spans, is mixed, inconclusive, and not typically applicable to the structures and practices of Montessori classrooms. Some studies indicate benefits for all, or at least younger, students in such settings and others indicate drawbacks for older students. To illustrate, in support of mixed-age classrooms, some researchers have found advantages for children’s language development.³ While overall, gains are sometimes isolated to the younger children, teachers’ classroom management skill appear to be a crucial factor as to whether that is the case. In fact, one study found that the largest vocabulary gains of all (for both younger and older children) were found in mixed-age classrooms led by high-skilled teachers.⁴ This is an important nuance, given the fact that Montessori teachers receive specific training to manage larger, mixed-age groups of children. In some studies, only the younger students in mixed-age classrooms showed benefits like more goal-direction, peer interaction, and longer attention-spans,⁵ and exhibited fewer off-task behaviors and negative interactions with peers and teachers⁶ than students in same-age settings.

In other studies, social-emotional benefits extended to *all* ages of students, with children in 3-year mixed-age classrooms experiencing more extended peer interactions, more frequent positive (as well as fewer neutral to negative) interactions,⁷ and less loneliness, aggression, and behavioral problems⁸ than their same-age grouped peers.

Mixed-age classroom design allows children to interact with peers both younger and older than themselves, and therefore encourages widely supported practices such as imitative learning, collaboration, and peer tutoring.¹

Research specific to Montessori contexts has reinforced the notion that mixed-age settings bolster language development for younger students. Here, researchers hypothesized that the mixed-age grouping of Montessori classrooms may promote more frequent peer-to-peer talk on the part of younger students via modeling by older students.⁹ Montessori students do, in fact, consistently outperform their peers on tests of language and literacy,¹⁰ and while many factors might contribute to this advantage, mixed-age settings are one plausible reason. In addition, Montessori students have been found to exhibit advanced social understanding, a characteristic that researchers often

attribute to the fact that the mixed-age classroom requires students to assume a wider diversity of perspectives over the course of their day.¹¹

How do we reconcile this with research in typical environments that has found no significant differences in the outcomes of students from mixed-age vs. same-age groups,^{12, 13, 14, 15} and even some social, non-cognitive, and academic drawbacks,¹⁶ particularly for the older students?^{3, 5, 4, 17} A recent study suggests that some of those drawbacks are related to teachers' tailoring of the environment and learning materials to the perceived needs of younger students, and therefore neglecting those of the older ones.¹⁸ In Montessori classrooms, however, both the materials and instruction enable students to engage with concepts that extend well past expectations for their age, if they demonstrate readiness.¹⁹ Therefore, one would not predict the same disadvantages for the older children in mixed-age Montessori classrooms. On the contrary, existing research finds that Montessori kindergarteners (the oldest children in their preschool classrooms) typically outperform their peers on both academic and noncognitive measures.^{10, 20} Importantly, researchers point out that the predominance of mainstream mixed-age research focuses on narrow age bands (typically 18 months to 2 years), rather than the 3 years outlined in national Montessori school accreditation standards. As a three-year grouping allows children exposure to both older and younger classmates across their three years spent in a classroom, these researchers recommend further examination of varying degrees of age-variance.¹²

Furthermore, there are two salient features inherent to the mixed-age structure of Montessori classrooms that find broad and consistent support from research, namely the prevalence of peer-tutoring that occurs within this context, and the multi-year matching of child to teacher (sometimes referred to as "looping"). Regarding the former, opportunities for both formal and informal peer tutoring are an integral element of the Montessori approach to mixed-age classrooms. Younger students may observe, question, and imitate the work of older peers, for instance. Children may collaborate on work with a material; older students may even present some lessons to their younger classmates.¹ The effectiveness of peer tutoring is reliably supported by evidence demonstrating that peers make successful tutors,²¹ that benefits apply to a diverse range of contexts and students,²² across both academic^{23, 24} and social²⁵ domains for both learner and tutor, and that they persist through time.^{21, 26, 27}

In addition to peer learning, mixed-age groups also provide students with multi-year consistency of teacher, or "looping." The practice of looping is supported by evidence highlighting academic benefits^{28, 29} that appear

strongest amongst minoritized students,³⁰ as well as higher performance on measures of personal and social development,³¹ and lower rates of absenteeism and suspension.³² Furthermore, benefits to individual students increase in correlation with the proportion of looping students in a classroom,³¹ suggesting that Montessori classrooms (in which all students are looping) may reap maximum benefit from the practice. Research suggests that looping can benefit the classroom environment,³⁰ and that students, teachers, and principals credit the practice for both improved sense of community and increased academic achievement.³³ Importantly, most looping research examines a two-year match between teacher and student, leading some researchers to hypothesize that Montessori's 3-year match could confer additional benefits.³⁴

In summary, it is important to note that many researchers emphasize that a host of variables, such as classroom quality, level of teacher education,³⁵ level of peer skill,³⁶ classroom management,³ individual student engagement,⁶ and the degree of teacher-led activity,³⁷ need equal consideration as factors that shape whether and when mixed-age classrooms prove beneficial. Therefore, while studies that examine mixed-age groupings in isolation from other variables draw mixed and inconclusive results, research into some of the mechanisms known to facilitate the success of mixed-age groups (e.g., peer tutoring, teacher looping, student-lead learning, specially prepared teachers) may prove more enlightening. Given that those mechanisms are foundational to Montessori practice and teacher preparation, research supports the idea that Montessori classrooms are designed in ways that amplify benefits (and avoid suspected risks) of mixed-age groupings.

Recommendation

The wider body of educational research yields mixed results regarding multi-age groupings, but repeatedly emphasizes that *impacts are context specific*. Because Montessori classrooms implement the very practices known to optimize student success within mixed-age contexts (e.g., peer tutoring, looping, student-lead learning, targeted teacher preparation, individualized instruction), and avoid potentially problematic ones (catering to younger learners while neglecting to challenge older ones), **we recommend that policymakers allow Montessori schools to implement the 3-year age groupings aligned with their pedagogical standards.** This recommendation should be applied consistently across all regulatory agencies and within the parameters of all educational funding streams.

Evaluating Montessori Outcomes

Academic Research

- Expanding Access to Montessori Education: An opportunity for disadvantaged students available at www.amshq.org/research (CUNY Institute for Educational reform)
- Prosocial and academic effectiveness for ECE and Elementary by Angeline Lillard (looks at 5-year old and 12 year olds)
- Montessori schools consistently surpass norms in most districts on state tests (looking at largest districts around the country). Comparisons have been made between Montessori and non-Montessori student test scores in Milwaukee, Cincinnati, Harford, Chicago, and Denver.
- Montessori gains are evident even after 7 years of traditional schooling. In Milwaukee Public Montessori children are tracked from the ages 3-11 with a matching public school demographic. In high school Montessori students show equal test scores with peers in English and Social Studies and better than peers on math and science. Conclusion that Montessori has positive long-term impact on math and science. Students successfully move from Montessori to mainstream.
- Classic Montessori yields strong ECE results as researched by Angeline Lillard. She looked at fully implemented Montessori programs in comparison with those not fully implemented. 172 children aged 3-6 participated. Classic Montessori schools were determined by the use of prescribed Montessori materials. Classic Montessori students showed higher results in executive functions, reading, math, etc.
- A small scale experiment supports focus on "Classic" materials – 52 children in 3 Montessori classes with supplementary materials. When non-Montessori materials were removed advances were shown in early reading, the development of executive functions and early math.
- Latino children saw most benefits. 14,000 children in pre-K programs in Miami as compared with High Scope programs looked at socio-emotional and behavioral skill, and pre-academic academic skills. Latino Montessori children began at most risk, and had greatest gains.
- These findings were observed: comparing the means of the scores obtained from the IQ tests of children educated according to the Montessori method revealed they enjoyed a higher level of intelligence than the children educated according to the traditional method. Furthermore, the present study is in line with the findings of Lillard (2006, 2012), Dohrmann et al (2007), and Dohrmann (2003), who had shown that Montessori method helped students to have a significantly higher level of IQ compared to other students.

Non-Academic Skills Research

- Study in Turkey found cognitive style benefits of Montessori education. Looked at 63 children, 40 in the treatment group and 23 in the control group. Groups at the same school were similar at pre-test. At the year's end Montessori children increased reflection time and reduced number of errors. Results were still evident at a 6-week follow-up. Likely a result of attention and concentration that underlie the Montessori method.
- Montessori students had higher creativity scores. This was done in France, 40 children in elementary in the same socio economic group. The results found that Montessori students scored better than traditional and Freinet schools. Creativity in the Montessori environment is not taught directly, but likely due to socio-cognitive context in project work emphasizing self-initiative. The highly creative children in the study were Montessori students.
- Montessori preschoolers more active – 301 children in 9 Montessori and 8 traditional preschools in SC using accelerometers. Montessori kids more active both at school and when they went home. In private Montessori schools the activity is even higher.
- Montessori students show superior fine motor development – 50 five year olds in 4 Montessori schools and 50 in high performing suburban schools were studied. Moderate to large effects on fine motor development were shown. Accuracy, speed, consistent use of dominant hand were shown in the Montessori students.

Examining Like Montessori Practices in Non Montessori Schools

- An experiment of over 100 students in a traditional school found that when the students were shown how to trace numbers their math skills improved.
- The use of materials enhanced attention of students with ADHD – they performed the FTFK attention test. They measured then worked with them on Montessori materials and noted the improvement.
- Montessori models best practices using math manipulatives. Cognitive science finds four principles for maximizing the effective use of math manipulatives – use of manipulatives consistently over a long periods of time, begin with highly transparent concrete representations an move to more abstract representations over time, avoided manipulative that resemble everyday objects offering distracting, irrelevant features, (Sage Open), and explicitly explains the relations between the manipulatives and math concepts.
- Handwriting (cursive) is important for early recruitment of brain regions known to underlie successful reading. (James and Engleheart, 2012).

I. Ratios and Group Sizes

A. Lillard, A. & Else-Quest, N. (2006). Evaluating Montessori education. *Science*, (313), 1893-1894.

- We evaluated the social and academic impact of Montessori education. Children were studied near the end of the two most widely implemented levels of Montessori education: primary (3- to 6-children performed better on standardized tests of reading and math, engaged in more positive interaction on the playground and showed more advanced social cognition and executive control. They also showed more concern for fairness and justice. Montessori education has a fundamentally different structure from traditional education. At least when strictly implemented, Montessori education fosters social and academic skills that are equal or superior to those fostered by a pool of other types of schools.

B. Lillard, A. S. (2005). *Montessori: The science behind the genius*. New York: NY. Oxford University.

- "She believed that when there are not enough other children in the classroom, there are not enough different kinds of work out for children to learn sufficiently from watching each other work, nor are there enough personalities with whom children can practice their social interaction skills."
- "In traditional settings" in which class sizes are reduced, Lillard explains, "when one person is teaching the whole class simultaneously, that person would have more attention to devote to each child, and fewer children would conceivably allow for better teaching." By contrast, "when children are learning from materials and each other, having more varied possible tutors and tutees, a greater variety of people to collaborate with, and more different types of work out (inspiring one to do such work oneself) might be more beneficial."

C. Globalizing the Class Size Debate: Myths and Realities, Kevin Watson Boris, Handala Marguerite Maher, Erin McGinty University of Notre Dame, Australia, *Journal of International and Comparative Education*, 2013, Volume 2, Issue 2.

- Milesi and Gramoran (2006) analysed standardised test data from the Early Childhood Longitudinal Study – Kindergarten Class of 1998-99 and found no statistically significant relationship between class size and student achievement in either mathematics or reading. This was a national study which included 21,260 children enrolled in approximately 1,000 kindergartens and grouped according to three different class sizes: small (17 or fewer students), regular (between 18 and 23 students) and large (24 or more students). The study found no class size effects based on race or ethnicity and economic and academic background.

D. 2015 The class size paradox Boris Handal University of Notre Dame, boris.handal@nd.edu.au Marguerite Maher University of Notre Dame Australia, Marguerite.Maher@nd.edu.au Kevin Watson University of Notre Dame Australia, kevin.watson@nd.edu.au, University of Notre Dame Australia researchonline@ND.

- teachers say that quality teaching, irrespective of class size is a better way to enhance student academic performance.
- bottom line is that class size in isolation is a small factor in increasing student academic performance.

II. Multi-Aged Groups

A. Broome, J. L. (2009). A descriptive study of multi-age art education in Florida. *National Art Education Association*, 50(2), pp. 167-183.

- Broome in his study in multi-age art education stated, "Multi-age classrooms feature the purposeful grouping of students from two or more grade levels in order to form communities of learners" (p. 167).
- "Graded models offer an economical system that is easier monitored and organized by educators" (Broome, 2009, p.168).

- Broome stated, "In the case of attitude, students were found to have both a better attitude toward school and a better self-concept in over 75% of the studies that were reviewed" (p. 170).
- Broome agreed with Montessori with the following statement: "Strict segregation by age is rare in society; except in summer camps or schools where such segregation may benefit the adults who organize these institutions" (p.168).

B. Carter, P. (2005). The modern multi-age classroom. Educational Leadership. pp. 54-58.

- Studies have demonstrated that multi-aged classrooms have a positive impact on cognitive development. Paula Carter (2005) in her article "The Modern Multi-Age Classroom" compared Developmental Reading Assessment levels of third graders who had been in the multi-age classroom for two years to those with similar demographics who entered the school as new third graders. She reported, "Students who had spent the two previous years with us scored in the fluent range on average, whereas the new group of entering third graders scored in the transitional range" (p. 58).
- She further elaborated "This year, some of our first graders' developmental reading assessment scores already surpassed the scores of many of the third graders who were new to our class" (p.58).

C. Fu, D., Hartle, L., Lamme, L.L., Copenhaver, J. Adams, D., Harmon, C., & Reneke, S. (1999). A comfortable start for everyone: The first week of school in three multi-age (K2) classrooms. Human Science Press, 27(2). pp. 73-80.

- Fu et al (1999), noted that teachers at the beginning of the "second year all remarked how much easier it was to start the year in the multi-aged classrooms than it had been when they welcomed a whole class of same-age students" (p. 74).
- They went on to explain "One way or another, within the first 10 minutes of school each kindergartener had someone older to watch, be with, and question if the need should arise" (p.75)
- "Parents become more able and knowledgeable volunteers and are better able to support their children."
- "Greater opportunity for older children to teach younger children, providing instruction in a child's zone of proximal development."

D. Gerard, M. (2005). Bridging the Gap: Towards an understanding of young children's thinking in multiage groups. Journal of Research in Childhood Education 49(3).

- Gerard (2005) summarizes these benefits by explaining that effectively teaching "children of widely varying levels requires interactive curriculum experiences, fluid grouping strategies, and individualized planning" (p. 243).
- "multiage classrooms are multidimensional environments in which children have some real choices about what they do and when or how to do it; they are more likely to make ego-enhancing choices that lead to positive self-evaluations." (p. 243).

E. Kappler, E. & Roellke, C. (2002). The promise of multiage grouping. Kappa Delta Pi Record. Summer 2002.

- Kappler and Roellke (2002) stated "A child who is advanced academically but behind socially (and vice versa) can take advantage of the diverse peer resources available in a multi-age classroom" (p. 167).
- Kappler and Roellke (2002) point out the value of this diversity in mixed age classrooms saying, "One of the strongest appeals of these classes may be that variation in student ability and interest is the norm rather than the exception" (p. 167).
- Children in mixed age classrooms are able to avoid the stigma of retention, stay with their peers, and continue to work at their own academic level. Kappler and Roellke (2002) concur explaining that multi-age classrooms allow students to avoid "feeling different" if they excel or fall behind in any particular subject.
- The social advantages of multi-age grouping are similar to those we see in the large family. Older children help younger children, and in doing so, gain a sense of purpose. Kappler and Roellke (1999)

noted the additional benefit of older students modeling appropriate classroom behavior and social interactions for younger students.

F. Lillard, A. S. (2005). *Montessori: The science behind the genius*. New York: NY. Oxford University.

- Lillard (2005) stated children in the multi-age classrooms showed a marked improvement over the year versus children in the single aged classroom in terms of motor, cognitive, communication and overall development.
- Furthermore, when children are able to observe and interact with the older children they become motivated to learn. This in turn minimizes the need for behavioral intervention that would disturb the teachers instructional time (Lillard, 2005).

G. Lloyd, L. (1999). "Multi-age classes and high ability students." *Review of Educational Research*, 69(187).

- Lloyd (1999) reviewed research on the influence of multi-age classroom environments on high ability students. She reported that, "...arrangements most likely to have positive and significant results are those where the curriculum is differentiated" (p. 187). In these situations teachers may be "more likely to see their students as diverse than as similar and to provide developmentally appropriate (that is, differentiated) curricula" (p. 187).

H. McNichols, J.C. (1992). *The Montessori controversy*. Albany: NY. Delmar.

- McNichols (1992) explains that the Montessori "educational method is built on the idea that education must be developed to meet the specific needs and sensitivities of each age" (p. 41).

I. Montessori, M. (1967). *The discovery of the child*. New York: NY. Ballantine Books.

- From the inception of the first Casa dei Bambini in 1907, which housed children ages three through six in a single classroom, Montessori schools have been organized into multi-age classrooms (Montessori, 1967).

J. Montessori, M. (1979). *The Absorbent Mind*. New York: NY. Dell Publishing.

- Older children, then, have the opportunity to become leaders and teach. Montessori (1979) explained that the learning opportunity for the older children to teach helps them understand what they know "even better than before" because "older children have to analyze and rearrange their little store of knowledge before they can pass it on" (p. 227).
- The child's progress does not depend on his age, but also on being free to look about him. Our schools are alive. To understand what the older ones are doing fills the little ones with enthusiasm. The older ones are happy to teach what they know. There are no inferiority complexes, but everyone achieves a healthy normality through the mutual exchange of spiritual energy. (Montessori, 1979, p. 228)

K. Interventions Shown to Aid Executive Function Development in Children 4 to 12 Years Old Adele Diamond¹ * and Kathleen Lee *www.sciencemag.org*, August 19, 2011.

- "children take turns instructing or checking one another. Cross-age tutoring occurs in Montessori mixed 3-year age groups. Such child to-child teaching has been found repeatedly to produce better (often dramatically better) outcomes than teacher-led instruction (38–40)"
- "At age 5, Montessori children showed better EFs than peers attending other schools. They performed better in reading and math and showed more concern for fairness and justice."

L. Efficacy of Montessori and traditional method of education on self-concept development of children, Shivakumara K, 1Dhiksha J, and 2Nagaraj, O *International Journal of Educational Policy Research and Review*, Vol.3 (2), pp. 29-35 April, 2016.

- Most of the traditional schools have one age group for each class. On the contrary, Montessori classrooms consist of children of various ages. Montessori opined that having a three-year span of age grouping encourages the teacher, students and parents to develop supportive, collaborative, trusting relationships. The children constantly interact with each other that support their social

development. In the Montessori method children are encouraged to teach, collaborate and help each other. A number of research studies indicate that people learn better when working collaboratively than when working alone (Azmitia and Crowley, 2001, Lillard, 2005).

The Montessori Public Policy Initiative

Montessori Essentials

An authentic Montessori school will implement a philosophical approach that is consistent with the educational methods and areas of instruction as defined by the observations, research, writings and instruction of Dr. Maria Montessori. A Montessori school must allow the child to develop naturally—children are able to learn at their own pace and follow their own individual interests, learning primarily through the hands-on use of scientifically prepared auto-didactic materials, and interacting with the environment under the guidance of a specially trained adult. A Montessori environment promotes the child's ability to find things out independently, enabling motivation and knowledge-building through internal development rather than external teaching or rewards.

In addition, an authentic Montessori school will apply the following pedagogical elements. It is critical that all of these elements be present in order for the Montessori approach to be successfully implemented. Montessori schools should:

1. Implement the Montessori curriculum which must include:
 - a. A classroom design that is compatible with Montessori “prepared environment” principles.
 - b. A full complement of Montessori materials for each class and age group.
 - c. Uninterrupted Montessori daily work periods, with 3-hour work periods being the ideal.
 - d. Instruction characterized by a high degree of freedom given to the student to choose what to work on, where to work, how long to work.
 - e. Instruction that primarily takes place in small groups (Elementary & Secondary) or one-on-one (Early Childhood).
2. Have appropriately trained instructional staff defined as:
 - a. Having a lead teacher in each classroom with an AMI, AMS, NCME, and/or MACTE accredited teacher education program credential at the level being taught.
 - b. Having staff members engage in ongoing Montessori professional development.

3. Have classrooms

- a. With the appropriate multi-aged groupings: 2.5/3-6, 6-9, 9-12, or 6-12 years of age.
Children from birth to 3 years of age and 12-18 years of age may be grouped in varying multi- age configurations.
- b. With class sizes and adult/child ratios that align with Montessori principles. Montessori classroom standards require larger class sizes and higher student to teacher ratios than is typically seen in traditional classrooms. Adding additional teaching staff to a Primary classroom can interfere with, rather than encourage, child-directed learning. It would not be uncommon to see 30 or more children in a classroom at the early childhood and elementary levels.

4. Assess student progress through

- a. Teacher observation
- b. Detailed record keeping

The above statement was created by the Montessori Public Policy Initiative,
a collaborative project of Association Montessori International-USA (AMI-USA) and American
Montessori Society (AMS). For more information visit
www.montessoriadvocacy.org