A Comparison of Elementary Classroom Practices Based on Montessori Certification

Carolyn Daoust, Ph.D. & Angela Murray, Ph.D.

KU THE UNIVERSITY OF KANSAS

Introduction

Are there differences in classroom practices due to type of Montessori credential?

This study surveyed public Montessori elementary teachers in the United States to investigate their classroom teaching practices. The responses of a subset of AMI certified teachers were compared to those credentialed by AMS to assess implementation similarities and differences.

Research Questions

1. Do public elementary Montessori teachers with AMS and AMI certification differ in their classroom practices? If so, in what way?

2. Do AMI and AMS certified teachers differ in the extent they have modified and value practices typically associated with Montessori education? If so, in what way?

Background

While no known Montessori studies directly assess implementation differences by credential type, a few suggest variation related to teacher certification.

In Lillard's (2012) examination of outcomes in classic and supplemented Montessori early childhood classrooms, children in the 3 high-fidelity classrooms with AMI teachers out performed participants in the supplemented classrooms led by 6 AMS and 3 AMI credentialed teachers. Although no significant relationship was found between teacher training and student outcomes, type of credential may still have played a role.

Daoust (2004) interviewed 66 early childhood Montessori teachers to assess implementation practices and identified 4 subgroups of educators. Teachers in the highest fidelity subgroup were significantly more likely to be AMI certified than teachers in the other 3 subgroups. Although neither study was conducted with elementary teachers, these findings suggest Montessori implementation differences may to some extent be related to credential type.

Method

In 2010, 444 lead teachers in public Montessori elementary schools completed an online survey assessing dimensions of practice related to Montessori elementary teaching. In this study the responses of the two largest groups of participants by certification type – 215 AMS and 40 AMI credentialed teachers – were compared.

Results

Credential Type Similarities

Consistent with Montessori practice, most AMS and AMI teachers indicated they:	Mean*	
	AMI	AMS
• Present the Creation of Earth story each fall	5.23	5.01
• Integrate curriculum areas	5.45	5.24
• Encourage regular participation in art, music, etc.	5.38	5.45
• Establish a job chart for maintenance	5.13	5.50
• Introduce math concepts w/ Montessori materials	5.58	5.42
• Maintain a clean, well-organized environment	5.10	5.09
• Allow children to assist one another	5.63	5.59
• Let children decide where they will work	5.35	5.22
• Allow working together in self-selected groups	5.48	5.19

*Scale: 1 = completely unlike me, 6 = completely like me

The majority of AMS and AMI teachers also indicated they:	Mean*	
	AMI	AMS
• Let children decide how long to use a material	5.05	4.77
• Give the Great Lessons during the fall	4.78	4.28
• Make sure children engage in practical life	4.53	4.32
• Have a 3-hr uninterrupted work period each day	4.05	3.99
• Take notes daily on children's activities	4.05	3.88
• Provide opportunities for community service	4.95	4.61
• Allow children to decide when to have snack	4.37	4.48
• Permit children to correct their own work	4.23	4.21
• Have children help develop their work plans	4.24	4.08

Credential Type Differences

AMI teachers were significantly more likely to indicate they:	Mean*	
	AMI	AMS
• Encourage investigations based on interest	5.05	4.38
• Organize history around fundamental needs	5.13	4.36
• Give key Montessori science lessons	5.36	4.86
• Permit children to replicate science experiments	5.03	3.85
• Have children record activities in a work journal	4.48	3.82

AMS teachers were significantly more likely to indicate they:	Mean*	
	AMI	AMS
• Give due dates for class assignments	3.80	4.48
• Have children take grade level spelling tests	2.31	4.15
• Assign children to research groups for projects	3.05	3.81
• Require completion of specific follow-up activities	3.90	4.57
• Have children cross-off work on daily checklists	3.45	4.73

Similarities and Differences in Values and Extent of Modification

Both groups indicated valuing these practices to a *similar* extent:	Mean*	
	AMI	AMS
• Mixed age grouping across at least 3 years	4.33	3.96
• 3-hour uninterrupted work period	4.26	4.08
• Providing a full range of Montessori materials	4.40	4.44
• Allowing children to choose to work with others	4.15	3.84
• Letting children choose where they work	4.00	3.83
• Allowing choice of when to have snack	3.21	2.99
• Allowing choice of work order	4.08	3.95
• Maintaining a clean, well-organized environment	4.08	4.35

*Scale: 1 = not important, 3 = important, 5 = essential

AMS and AMI teachers *differed* significantly in how strongly they valued:	Mean*	
	AMI	AMS
• Using work plans to organize work	2.90	3.51
• Supplementing with text/workbooks, worksheets	1.73	2.20
• Giving lessons to grade levels or the whole class	2.00	2.66
• Infusing teaching with cosmic education	4.20	3.79
• Allowing children to arrange going-out excursions	3.45	3.00
• Permitting choice of follow-up activities	3.77	3.37
• Allowing children to choose their work each day	3.95	3.50
• Having children bring work to me for correction	2.49	2.88

Both groups indicated *similar* low levels of modification to these practices due to choice or necessity:	Mean*	
	AMI	AMS
• Disciplining children in a Montessori way	1.64	1.88
• Individualizing instruction	1.65	1.89

*Scale: 1 = little or no modification, 3 = moderate modification, 5 = completely modified

AMI and AMS teachers *differed* significantly in their indicated level of modification to:	Mean*	
	AMI	AMS
• Providing children w/ opportunities for choice	1.73	2.34
• Implementing aspects of cosmic education	1.59	2.13
• Instructing with traditional Montessori materials	1.38	1.80
• Providing uninterrupted time	2.00	2.45
• Traditional Montessori practices and principles	2.25	2.66

Discussion

AMI trained teachers tend to focus more on classic Montessori curricular approaches especially for science and history while AMS credentialed teachers are significantly more supportive of traditional educational practices such as giving children due dates and spelling tests and assigning research groups.

AMI teachers tend to place more value on classic Montessori priorities like student choice, cosmic education, and "going out" while AMS teachers are more accepting of whole class activities, workbooks, textbooks, and teachers correcting students' work.

Finally, AMS teachers report significantly more modification in the areas of cosmic education, Montessori materials, uninterrupted work time, and following Montessori practices and principles while AMI teachers report less modification across the board.

Conclusions

While it is easy to focus on the differences between teachers with AMS and AMI training, it is important to note the general direction of responses to all of these questions is toward what would be expected for quality Montessori environments. If non-Montessori educators were asked about individualization, child led learning and autonomy, the results would likely be very different.

Limitations

This is an initial analysis with a small sample of teachers from 2010 so additional study is warranted to further explore these areas of similarities and differences as well as their causes and implications.

References

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Lillard, A. S. (2012). Preschool Children's Development in Classic Montessori, Supplemented Montessori, and Conventional Programs. *Journal of School Psychology*, 50, 379-401.