

Title of Study: *Exploring Montessori Math Materials and Their Impact on Math Fluency: A Qualitative Action Research Study*

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Interview Questions

Use of Current Math Materials:

- a. Please describe the math materials currently in use for building math fluency in your Montessori classroom?
- b. How frequently are these materials used during math instruction?

Perceived Effectiveness of Existing Materials:

- a. In your opinion, how effective are the current math materials for building math fluency?
- b. How do you assess math fluency?
- c. Can you provide examples of student outcomes or improvements attributed to these materials?
- d. Are there any limitations or shortcomings you've observed with the current materials?

Specific Challenges in Teaching Math with Montessori Materials:

- a. What specific challenges or difficulties do you encounter when using Montessori materials to teach math fluency?
- b. Are there any particular concepts or skills that seem to be more challenging for students using these materials?
- c. How do you address these challenges in your teaching approach?

Suggestions for Updating or Supplementing Math Materials:

- a. Are there any changes or updates you would recommend for the current math materials?
- b. Do you believe that supplementing the existing materials with additional resources would be beneficial? If so, what type of materials?
- c. If so, how do you envision these updates or supplements improving the math education experience?

Emerging Trends or Innovations in Montessori Math Education:

- a. Have you come across any emerging trends or innovative approaches in Montessori math education recently?
- b. Are there any new technologies or teaching strategies that you think could enhance math instruction using Montessori principles?
- c. How open are you and your colleagues to incorporating these new trends or innovations into your teaching practices?
- d. Are you aware of any materials or programs being used by students outside of the classroom/at home to enhance math fluency? (e.g. math software, apps, tutoring etc). If so, please describe.

Overall Reflection on Montessori Math Education:

- a. What are the key strengths of Montessori math education in building math fluency?
- b. Are there any unique advantages that Montessori materials offer compared to other math teaching methods?