



Rediscovering the Child: Review of Montessori Educator Research Projects 2023–2024

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Abstract: Maria Montessori’s early emphasis on systematic observation and experimentation to understand children’s learning predates the formal recognition of the “teacher as researcher” role, which emerged in the 1950s. This article explores the use of action research today in Montessori education, focusing on classroom-based action research (CBAR) and practitioner inquiry as key methodologies for enhancing teaching practices. We begin by defining classroom-based action research and its application in Montessori teacher education, highlighting its role in fostering reflective, evidence-based investigations that improve classroom practices. Two CBAR studies from the University of Wisconsin-River Falls are presented: (1) Kaul’s exploration of student choice in math practice and (2) Thompson’s investigation of structured literacy in a Montessori Children’s House. The article also discusses practitioner inquiry projects from Loyola University Maryland, which examine the inclusion of students with attention deficit-hyperactivity disorder (ADHD) and the effectiveness of Montessori Math materials in promoting math fluency.

Montessori utilized systematic approaches to experimentation and observation to understand and support children’s learning, long before the concept of teacher as researcher is cited to have first emerged in the 1950s (Carver & Hassebroek, 2023; Henthorn et al. 2024). Today, research conducted by teachers to inform and improve their teaching practices is referred to by many names, including *classroom-based action research* and *practitioner inquiry*. Both types of action research are common in Montessori teacher education programs. In this second article of a series titled, “Rediscovering the Child,” we begin with describing classroom-based action research in the context of Montessori teachers as practitioners. Then, we highlight two classroom-based studies from the University of Wisconsin-River Falls.

Next, we explain how practitioner inquiry projects can deepen educators’ understanding of issues and lead to action. Finally, we highlight two practitioner inquiry studies from Loyola University Maryland.

Classroom-based Action Research

The overarching term *action research* refers to an investigative approach that uses ongoing cycles of observation, reflection, and action to identify solutions to challenges people experience in their everyday lives (Stringer & Aragón, 2020). A variety of phrases and terms are used to describe various types of action research. The following two studies are classroom-based action research (CBAR) projects. CBAR “involves teachers conducting collaborative, evidence-based investigations into their

own classroom routines and relationships with a view to understanding and improving the quality and justice of their practices in the classroom” (Coghlan & Brydon-Miller, 2014, p. 103).

Montessori teachers are taught the importance of deep self-awareness and time for reflection as crucial to their role as teachers. CBAR builds on this aspect of Montessori teaching and requires teachers to actively collect evidence from their classrooms to focus their reflections. The power of CBAR is not only in classroom investigations but also in sharing the findings with a larger audience (Coghlan & Brydon-Miller, 2014). As such, this review supports the sharing of Montessori CBAR projects and describes two such studies below.

Kaul, A. (2024). *An exploration of upper elementary students’ experiences with math practice using choice, self-checking, and non-didactic manipulatives* [Master’s paper, University of Wisconsin-River Falls]. <https://minds.wisconsin.edu/handle/1793/85705>

Kaul, an Elementary teacher, conducted an action research project at a public charter Montessori school. The purpose of her project was to explore how Upper Elementary students in a Montessori classroom experience being offered choice in their Math practice materials. Aimed at amplifying the voices of her 9- to 12-year-old students, her research sought to better understand their needs while addressing local district math requirements for all learners. Kaul designed her study to capture her students’ experiences through a mix of closed and open-ended survey questions. Ultimately, her action research aimed to empower students to make informed choices and develop self-awareness in learning math, providing valuable insights into their learning experiences. The study revealed that Upper Elementary Montessori students appreciate having options among various learning materials and can effectively reflect on why a specific choice resonates with them personally.

Thompson, S. (2024). *Reading development in a Montessori pre-K and kindergarten classroom* [Master’s paper, University of Wisconsin-River Falls]. <https://minds.wisconsin.edu/handle/1793/85540>

Thompson’s action research project explores the effects of introducing structured literacy in a public Montessori Children’s House. Thompson hypothesized that applying structured literacy with 4- and 5-year-olds would enhance their literacy development. Through her research, Thompson discovered that providing a reading chair, where students could read to one another or to a

teacher, motivated them to advance their skills in spelling variations and high-frequency words. Her study showed that combining encoding practices with the movable alphabet and image cards, along with offering a choice of phonetic readers, enhanced students’ learning and enjoyment. This approach created a feedback loop that was more effective than using traditional two-part image and word label cards. When children used the movable alphabet alongside label cards, they could identify and correct their own mistakes, thereby refining their encoding skills and progressing further than if they had focused solely on decoding from booklets. The findings of this study highlight the compatibility of Montessori methods and practices for reading instruction with the principles of the science of reading. Additionally, the findings emphasize the positive effects of adhering to the Montessori scope and sequence on children’s reading development.

Practitioner Inquiry

Practitioner inquiry is similar to CBAR, as they are both conducted by educators in relation to their own teaching practices (Rutten and Wolkenhauer, 2023). Practitioner inquiry, however, does not always take place in the classroom. The two studies featured below are practitioner inquiry projects that explored topics the individual researchers experience in their practices: (1) inclusion of students with ADHD in a Montessori Elementary classroom and (2) the effectiveness of Montessori Math materials in fostering math fluency.

Josloff, R. (2024). *ADHD in the Montessori Elementary classroom: Teacher perspectives on alignment with Montessori philosophy, methods, and the prepared environment* [Master’s paper, Loyola University Maryland].

Josloff investigated Montessori teachers’ perspectives on their ability to meet the needs of first- through sixth-grade students with ADHD, using both quantitative and qualitative survey data. Their study explored the alignment of Montessori philosophy and methods used to teach learners with ADHD. Further, the study assessed teachers’ understanding of ADHD’s positive attributes, like creativity and higher-order thinking. Key findings of this study reveal a need for increased ADHD professional development for Montessori educators. Additionally, the importance of movement, flexibility, and individualization in teaching students with ADHD is in alignment with core principles of Montessori education. Yet, these key components of Montessori may be

perceived by educators as both challenging and beneficial. Josloff's research aimed to enhance the effectiveness of Montessori education for children with ADHD and provided insights into maximizing the potential of Montessori education to serve children with ADHD.

Rojas-Rispoli, V. (2024). *Exploring Montessori Math materials and their impact on math fluency* [Master's paper, Loyola University Maryland]. <https://www.montessorimathtoday.com/>

Rojas-Rispoli explored Elementary Montessori educators' perceptions of the effectiveness of Montessori materials in enhancing math fluency among students, through interviews with seven Lower Elementary-trained Montessori teachers actively engaged in teaching Math. The findings present a nuanced view of Montessori Math education, showcasing many positive aspects while also recognizing opportunities for improvement. Montessori educators largely support Montessori Math materials for their effectiveness in fostering math fluency, but they also encourage the inclusion of additional resources and methods to fill gaps and enrich the learning experience. Rojas-Rispoli's study includes actionable suggestions for incorporating math education research findings into how children learn math through a dynamic approach to Montessori education that addresses the needs of today's learners.

Conclusion

Montessori's pioneering work laid the foundation for a systematic approach to understanding children's learning, evolving into action research practices such as classroom-based research and practitioner inquiry. These methodologies empower educators to engage in reflective cycles of observation and action, fostering a deeper understanding of their teaching practices and students' diverse needs. The studies from the University

of Wisconsin-River Falls and Loyola University Maryland exemplify how teacher research enhances educational outcomes and promotes continuous improvement in classrooms. We encourage you to also explore additional teacher research projects in the American Montessori Society's research library online.

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