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I, Heather Gerker, hereby submit this original work as a part of the requirements for the degree of Doctor of Philosophy in Educational Studies.

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“Why Aren’t We Speaking Up?” A Mixed Methods Study on the Political Efficacy and Advocacy Engagement of Montessori Teachers

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“Why Aren’t We Speaking Up?” A Mixed Methods Study on the Political Efficacy and Advocacy Engagement of Montessori Teachers

A dissertation submitted to the Graduate School of the

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Doctor of Philosophy

In the School of Education

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Abstract

Advocacy for Montessori education is increasingly vital to guarantee accessible opportunities to Montessori for all students and families. This calls for a deeper understanding of how teachers engage in advocacy and respond to policy mandates. Existing research explores how Montessori educators integrate their pedagogy with policy requirements, yet gaps persist in understanding their responses to policies that shape Montessori education and their involvement in advocacy efforts. This dissertation research explores the political efficacy of Montessori teachers and how, if at all, Montessori teachers engage in policy advocacy. Further, this study underscores the critical importance of teacher voice and experiences, with participants contributing to recommendations for action through a Group Level Assessment (GLA) participatory method.

The research questions were explored through an explanatory sequential mixed methods study. In the first phase of the study, data was collected through the use of a quantitative survey. The aim of this phase was to examine the political efficacy of Montessori teachers, defined as any action intended to influence the policy process and an individual's perception of whether their engagement in policy matters is meaningful. In the second phase of the study, data was collected and analyzed through a GLA. GLA is a participatory method that facilitates the collaborative generation and analysis of participant data, leading to the co-development of action plans based on those findings. The aim of the second phase was to explore teacher experiences with policies and to co-develop potential recommendations for educational leaders, policymakers, and Montessori teacher education programs. The two phases were connected through sampling, phase two built on phase one by using results to build the GLA prompts, and then the GLA results in phase two were used to help explain the quantitative results from phase one.

Key findings reveal that Montessori teachers feel underprepared to engage in policy advocacy, yet they believe collective action can drive meaningful change in educational policy. The study also highlights the need for improved support systems for Montessori teachers, suggesting that enhancing their understanding of policy processes could strengthen their advocacy efforts. Participants also identified recommendations for conditions needed to support their engagement in advocacy efforts.

This research fills a gap in the literature on Montessori teacher educator political efficacy and their involvement with advocacy for the Montessori Method. Additionally, the study offers actionable insights for educational leaders, Montessori teacher training programs, and educational policymakers.

Keywords: Montessori education, education policy, teacher advocates, teacher political efficacy, Montessori teachers

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Dedication

To my sweet Madz, who would cheer, “You can do it, Mama!”

as they passed by my desk each day.

To my boo, Henry, who would simply say, “You got this!”

To my spirited Clara, who would occasionally ask for a little dance party.

To my favorite human, forever and always, Matt.

I don’t know how I got so lucky, but I do know this work would

not have been possible without the support and encouragement of my sweet family.

Thank you for understanding why I needed to write almost every weekend,

on holidays, during summer break, on camping trips, and even while on vacation.

Thank you for it all.

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Dr. Vicki Plano Clark, you have not only provided opportunities for me to expand my passion and knowledge for research methodologies, but you sparked an interest that will, no doubt, be ongoing for me. Thank you for your in-depth feedback and for encouraging me to be a "mixed methods enthusiast!" Thank you to Dr. Angela Murray, who taught me more about quantitative data analysis than any class could ever have. A heartfelt thank you to my committee members – Drs. Sarah Stitzlein, Amy Farley, and Vanessa Rigaud – for their time and expertise in making this research and writing the best it could be.

And my writing group! Danny and Elsheika, is it odd to say I will miss our weekend writing sessions? I don't know if the two of you realize how much those mornings got me through. Maybe now we will have time to write that manuscript together. Also, Mindy, I'd be happy to join you on another writing retreat anytime—writing retreat buddies forever!

Lastly, I want to acknowledge the teacher participants whose generosity in sharing their time and experiences made this work possible. I am committed to amplifying teachers' voices in policy and finding ways to lighten teacher workloads rather than add to them.

Thank you all for your invaluable contributions to my academic journey.

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Chapter 1: Introduction

I grew up with two older brothers in rural Kentucky. We spent most of our time outside. When we were not outside, we were inside fighting over who got to lay in front of our single-box fan when the heat was too much to handle. Our house was 30 minutes from "town," and going anywhere was an outing we had to plan. Living 30 minutes from town meant accessing resources and services could be challenging. For example, the closest hospital was 45 minutes away, and we used a water cistern system as pipes were not yet available for city water. My brothers and I spent a lot of time alone in our house and on our land. We learned the value of independence from an early age, mostly by default, not necessarily with intention. Although we sometimes struggled financially, our parents modeled the importance and beauty of a solid work ethic.

We attended public school from kindergarten through twelfth grade. Discussions about which school we would go to were non-existent; we went to the public school assigned to us. The school bus picked us up when it was still dark outside and dropped us off at school an hour or so later.

The old English adage "children are to be seen, not heard" sums up what life was like as a child in our family. We ran wild on our land, but when in the company of adults, we were mostly obedient. My most fond memories of childhood are of being independent and free in the woods surrounding our house. There we could make our own decisions and follow our inquisitive minds wherever they would lead us. Sometimes this meant building a raft together for floating in our small pond, other times we explored the animal life that we could find in the creek. Either way, we were left on our own to not only explore and have fun, but to also problem solve and communicate effectively with each other.

So, when I first stepped into an early childhood Montessori classroom over twenty years ago, it makes sense that I was immediately captivated. Freedom of choice was a natural part of my childhood, while feeling respected as someone in the family with real opinions and concerns was not. Montessori educators regard children as full human beings, recognizing and respecting their opinions, questions, and experiences (D'Cruz Ramos, 2023). Maria Montessori referred to the child as the "forgotten citizen" (Montessori, 2007), meaning that too often, children are disregarded. While this was my experience as a child, I also see another forgotten citizen—the teacher.

The first Montessori school that I worked at was a small school with one early childhood and one lower elementary classroom in Freeport, Maine. The school itself was located in an old home that was renovated to include one classroom on the first floor and one on the second floor. Children, between the ages of 2.5 and 9 years old, from communities in southern Maine attended the private school. It was a predominately White community with families of higher socio-economic status. My love for the Montessori pedagogy was instilled here, where I worked as an assistant teacher and then a lead teacher for several years. During my time as a lead teacher, I had very few issues with policies shaping my teaching pedagogy. We were a small school, privately funded (tuition based), and did not participate in any "quality rating" programs with the State of Maine. The only issues I can recall are those that we encountered with state licensing (sharp or small objects were not allowed in the classroom). However, the owner of the school knew our licensing representative well and she often "looked the other way" when these issues came up.

The second Montessori school I worked at was a small private school in Northern Kentucky. Similar to the first, the community was a predominately White community with

families of higher socio-economic status and we were a privately funded (tuition based) school. Also similar to the first, the only issues with policies I can recall were related to environment or material concerns from our licensing representative. It was at this school that I started to realize my love of the Montessori pedagogy is rooted in not only respect for the child, but respect for the child that may not always receive it. Afterall, the Montessori Method began as a teaching and learning method for underprivileged children in Rome. Yet, I had become part of the Montessori private school movement here in the United States. I realized I needed to make a change.

I began working in a leadership role with an early childhood organization that owned and operated several full day year round childcare programs, two of which were Montessori programs. Different from the previous schools I had worked, these programs participated in the state quality rating and improvement system (QRIS) so that we could accept state funding and allow increased access to our programs. Doing so was important to our mission—that all children deserve high-quality early childhood education experiences. At the same time, doing so created many problems with policies. For example, QRIS mandated the use of approved curricula and Montessori was not on the approved list. We also experienced issues with licensing representatives telling teachers to remove items from the classroom that were crucial to the Montessori pedagogy but deemed unsafe by the state. Put simply, implementing the Montessori pedagogy with fidelity to the Method was close to impossible. This is where my love of advocacy was born.

Since I worked in a leadership role, I had more time to advocate at the state level. For years, I served on state committees to work toward the recognition of the Montessori Method as a curriculum, to recognize Montessori teaching credentials as valid, and to raise overall awareness of Montessori education. We would experience a win (Montessori as an approved

curriculum), only to lose that win when the QRIS was redeveloped and new leaders were put in place. During this time, I also co-founded the Kentucky Montessori Alliance, a community of schools, teachers and families supporting high quality Montessori education with goals that included to speak with one voice, promoting, supporting, and advocating for high quality Montessori education in Kentucky.

My family had started to grow and we now had three children, three year old twins and a five year old. We could not afford to send them to the private Montessori school I had once worked at and they attended the Montessori programs that I oversaw at that time. This created more challenges since I knew the Montessori method was not being implemented with fidelity due to policy constraints. Thus, our family made the decision to move to Cincinnati, Ohio. Cincinnati Public Schools have a strong history of Montessori magnet programs, where we hoped to send our three children. I was shocked to see, soon after my children began attending public Montessori schools in Cincinnati, the various ways the Montessori Method was implemented. Sometimes shifts to the Method were large, such as an upper elementary classroom only including 4th and 5th graders (as opposed to 4-6th grades). Other times, shifts to the Method were minimal, such as using worksheets or textbooks rather than focusing solely on didactic materials. And yet, there remained classrooms where the Montessori Method was implemented with authenticity and fidelity in the public school programs. It seemed clear to me then, that teachers were responding to and engaging in policy mandates differently.

My children have attended public Montessori school now for seven years. During this time, I have continued my advocacy efforts through serving on leadership committees with the district, supporting teachers and administrators, speaking at school board meetings, and chairing parent/teacher decision making committees. I have observed that teachers, including Montessori

teachers, are consistently left out of the policymaking process at all levels, from the school board to the federal level, teachers are "forgotten citizens."

Through my experiences, I have learned that educational advocacy is a marathon, it is constant, it shifts directions often, and expecting teachers to add it to their already full plates is not feasible. Entering my PhD program, I yearned to better understand how Montessori teachers experience policy mandates and engage in advocacy for the Montessori pedagogy. I longed for Montessori educators to feel supported in advocating for the rights of the child and for Montessori education. This, I believe, is a path to making Montessori education more accessible, a path to all children being recognized as full human beings and treated with respect.

Montessori Education

Based on a belief that children have natural instincts to explore their environment and become independent of adults, Maria Montessori opened the first Montessori classroom in 1907. This Casa dei Bambini was a single room in a housing project located in a slum district of Rome (Wentworth, 2013; Whitescarver & Cossentino, 2008). Here, Maria Montessori further developed her method of education that would ultimately span 154 countries (Debs et al., 2022).

The Montessori Method is a child-centered approach to education centered on the idea that children learn best when they are free to explore and learn at their own pace, with guidance from a trained teacher and a carefully prepared environment (Montessori, 1965). It began as a teaching and learning method for underprivileged children in Rome, but became a private school movement when it first came to the United States (Brown, 2015; Debs, 2018; Meyer, 1975). Tailoring to affluent families, the first Montessori school in the United States was a private preschool opened in 1958 in Greenwich, Connecticut (Moretti, 2021; Wentworth, 2013;

Whitescarver & Cossentino, 2008). Since then, private Montessori schools in the United States have flourished, with approximately 2,913 schools currently (NCMPS, n.d.-a).

Nancy McCormick Rambusch is credited with leading the way at the beginning when Montessori education first started to take shape successfully in the United States (AMS, n.d.-a). Whitescarver and Cossentino (2008) describe Rambusch's efforts as "looking to an educated elite for nurture and support" (p. 2582). She leaned into the Montessori Method's emphasis on children's intellectual and spiritual growth to garner the attention of Catholic, middle-class mothers who were seeking something different than public schools at the time (Whitescarver & Cossentino, 2008). With this support, the first private Montessori school opened in 1958, and a private school Montessori movement was born.

The push for Montessori in public schools began in the United States in the late 1960s when, in response to the Civil Rights movement, Montessori education gained support from large urban school districts (Ackerman, 2019). For example, in 1967, Roslyn Williams founded the Central Harlem Association of Montessori Parents to integrate Montessori preschools in New York. Williams believed that Montessori education should not be the "rich child's right"; instead, it should be the "poor child's opportunity" (Debs, 2018, para. 5). Since then, the Montessori Method has become one of the most prominent alternative approaches to education in the American public school system (Borgman, 2021; Brown, 2015; Debs, 2021; Murray & Peyton, 2008). There are approximately 602 public Montessori schools in the United States (NCMPS, n.d.-a). At the same time, many challenges over the years limited the growth of Montessori education in schools, particularly challenges related to policies that inhibit the ability to implement high-fidelity Montessori education, such as class size, mixed age groupings, and teacher licensure (Ackerman, 2019; MPPI, 2017).

Many Montessori tenets are now part of national education systems. For example, typical approaches to education today are student-centered, use child-size furniture when appropriate, and include multi-sensorial materials (Lillard, 2019; Moretti, 2021). However, the Montessori Method still radically differs from typical educational approaches. As such, authentically implementing Montessori education in public schools can be challenging (Chattin-McNichols, 2016; Lillard, 2019; Whitescarver & Cossentino, 2008). The differences in educational approaches are exacerbated by policy mandates placed on public schools that do not align with Montessori teaching and learning. As a result, Montessori public school teachers navigate an educational policy system daily that often does not align with their pedagogy (Block, 2015; Gerker, 2023; Suchman, 2008).

Interestingly, Maria Montessori did not aim to develop a method of education—her goal was global peace. At the core of her work, she was an advocate. Moretti (2021) describes Montessori as "an educator who staunchly advocated for the freedom of the child" and "a dreamer of radical transformation of the rights of children" (p. 13). Montessori is well known for quotes, such as, "Preventing conflicts is the work of politics; establishing peace is the work of education" (Montessori, 1992, p. 25). She was an advocate, a pacifist, a justice warrior. Yet, Montessori educators are often unaware of the extent of Maria Montessori's advocacy work. In this dissertation study, I aim to understand how Montessori teachers understand their role as advocates for children in the context of their role as a Montessori educator.

Statement of the Problem

Education policies shape the work of all Montessori teachers, regardless of the type of school or the education method. I recently conducted a pilot study to understand Montessori public school teachers' experiences with policies that influence their pedagogy (Gerker, 2023).

Many of the policy challenges public school Montessori teachers face are also common in private education systems across the country, such as accountability mandates and lack of teacher voice in the policymaking process. At the same time, Montessori teachers also face unique challenges. For example, policymakers and administration often do not have a thorough understanding of the Montessori Method which then causes the creation of mismatched policies.

In today's educational landscape, the voice of Montessori educators advocating for the Montessori pedagogy has never been more crucial. Yet, to empower Montessori teachers to voice their opinions and take action, it is imperative to understand their involvement in advocacy – when, how, and if they participate. Firmly rooted in the belief that teachers should be integral to shaping policy, I set out to understand how Montessori teachers respond to externally imposed policies and how, if at all, they have engaged in policy advocacy at the local, state, or national levels. Further, I aim to identify what types of support Montessori educators need in order to be advocates as well as areas where Montessori educators could voice their support or opposition regarding policies that influence their Montessori teaching methods.

Purpose and Research Questions

I conducted an explanatory sequential mixed methods study to understand how Montessori teachers respond to education policies and how if at all, they have engaged in policy advocacy at the local, state, or national levels. I also utilized a participatory method to identify what Montessori educators need in order to speak up for or against policies that shape their Montessori pedagogy. Specific research questions for each phase of the study were:

Phase 1 – Survey

Teacher Political Efficacy (TPE)

1. How politically efficacious are Montessori teachers?

2. How do teacher, school, and district characteristics relate to the level of TPE?
3. How do different types of schools (public, charter, private) correlate to TPE?
4. How have teachers' experiences with policies shaped their Montessori pedagogy in relation to their TPE?

Phase 2 – Participatory

Teacher Experiences with Policies and Advocacy

5. What conditions and strategies have supported teachers in effectively navigating policies that shape their Montessori pedagogy?
6. What do Montessori teachers need in order to advocate for Montessori education?
7. What conditions and strategies are needed to support Montessori teachers in their policy advocacy?

Integration

8. How do the national trends on TPE findings and teacher experiences with policies combine to improve teacher policy advocacy in Montessori schools?

Study Significance

Supporting alternative education pedagogies can be complex. To better support the Montessori pedagogy, school administration should listen to Montessori teachers' experiences and expertise and include them as part of the decision-making processes (Gerker, 2023). At the same time, education policies pressure schools to conform to strict and often narrow measures of success (Block, 2015). Hall and Ryan (2011) call for more mixed methods studies in education policy, explaining that other study designs "neither fully capture the implications of educational accountability, nor do they fully depict the unique demographics, histories, and daily functions that characterize an individual school and the context within which it operates" (p. 105). As such,

this dissertation study combined multiple research approaches in an explanatory sequential mixed methods study.

To my knowledge, this study is the first empirical research solely focused on Montessori teachers as advocates. We can encourage educators to play a more significant role in shaping policy regulations by applying mixed methods approaches that include participatory methods. Further, despite the disparities between educational policy and classroom practices, policymakers continue to impose policies through a top-down approach with little or no teacher input (Chimbi & Jita, 2021; Dunn, 2020; Hinnant-Crawford, 2016; Valli & Buese, 2007). It is a recurrent theme that policies, research, and practice are often disconnected. Hammersley (2002) describes the tension between educational researchers and policymakers as the two groups living in "different worlds," each blaming the other for the disconnect (p. 61). Hara and Good (2023) found that when talking with teachers, conversations usually began policy related conversations "believing that their encounters with policy are minimal, only to conclude that policy is, in fact, everywhere" (p. 7). The participatory method utilized in this study recognizes the voice of teachers and also supports the creation of actionable steps teacher education programs, administration, district leaders, and policymakers can take to improve advocacy for Montessori education. For example, implications of this research include the role of teacher education programs in preparing Montessori teachers to be advocates, suggestions for administration in how the Montessori pedagogy is supported, and ways policymakers can elevate Montessori school teacher voice and expertise.

Definitions of Key Terms

The following definitions lay the groundwork for understanding this dissertation's essential terms and ideas. By establishing a shared understanding of these terms, I aim to ensure readers can engage with the content with clarity and depth.

Advocacy

I lean on Good et al. (2020) for a foundational understanding of the term advocacy; they describe it as the "critical efforts" of teachers to influence education policy. Further, the Alliance for Justice (AFJ, 2008) defines advocacy as any action that argues for a cause, supports, defends, or pleads on behalf of others. It is the act of promoting an issue or cause by organizing people or educating policymakers and the community to influence decisions and bring about change (AFJ, 2008; Merriam-Webster, n.d.).

Montessori Education

American Montessori Society (AMS, n.d.-a) explains Montessori education as an approach to learning that emphasizes student-centered, self-directed learning within a prepared environment. It encourages independence, freedom within limits, and respect for a child's natural psychological, physical, and social development. Chapter two outlines the challenges of defining Montessori education, both in a policy and practitioner context.

Policy

I built on several policy definitions to ground this research in a common understanding of the term. For this study, I define education policy as guidelines, rules, regulations, and laws that educational organizations, schools, school districts, or state and federal governments put into place in an attempt to improve the quality of education and performance of teachers (Ball, 2003; Hara, 2017; Sanchez & Patel, 2017). Policy may also be referred to as "public policy" in this

study. Public policy is policy made on behalf of the public, and it often pertains to both public and private institutions (MPPI, 2015). Further, external policies were defined for study participants as any policy, rule, or regulation imposed on a teacher from outside their classroom (e.g., policies from district leadership/administration, states, federal governments, accrediting bodies, etc.).

Policymakers

A policymaker is a person who is responsible for creating policy. In this study, a policymaker may be a legislator (or member of a government body) at the state or federal level, a school board member, a district administrator, or a principal.

Political Efficacy

Political efficacy is one the most frequently used indicators of general political attitudes (Niemi et al., 1991). It refers to political action that aims to impact the policy process and the feeling an individual has as to whether or not their policy engagement is worthwhile (Campbell et al., 1954; Hammon, 2010). It was initially introduced by Campbell et al. (1954) during their analysis of voter behavior and attitudes in the 1952 United States presidential election and was defined as the "feeling that individual action does have, or can have, an impact upon the political process" (Appendix A). Thus, the political efficacy of teachers ultimately determines their interpretation and response to policies as part of their engagement in political advocacy. Additional dimensions of political efficacy, such as internal, external, and collective political efficacy, are further explained in chapters two and three of this dissertation.

Research Foundations

This section includes the study's personal, philosophical, and conceptual foundations. As a researcher, my ultimate interest in learning more about Montessori teacher experiences with

policies includes determining how teacher voice may be elevated and made more meaningful in policymaking. Figure 1.1 provides a visual representation of how I conceptualize my work with the overarching belief that my experiences influence each area of the study.

Figure 1.1

Visual Representation of Research Foundations

Note. SLB refers to Street Level Bureaucracy, SM refers to Sensemaking Theory, and RCT refers to Relational Cultural Theory.

Personal Experiences

Montessori education has been part of my professional and personal life for over 15 years. I have worked as a Montessori early childhood teacher, a Montessori teacher educator, and a Montessori teacher education program director. My three children have attended Montessori school for seven years. Montessori education is part of who I am.

I believe Montessori education should be accessible to all children and families. To this end, I cofounded the Kentucky Montessori Alliance (KMA) in 2007. KMA is a nonprofit organization advocating for state policies that support Montessori education in publicly funded childcare. I also serve on the Montessori Public Policy Initiative (MPPI) board and am currently the Vice-President. MPPI is a national organization advocating for a policy landscape that expands equitable access to high-fidelity Montessori education. Additionally, I have been coordinating Montessori educators in Ohio for several years to advocate for policies supporting Montessori education in public schools.

As a parent of three students at a public Montessori school, I have noticed several changes in how the Montessori Method is applied, and these changes do not always align with the Method's fundamental principles. In the same school district, my children have also experienced public Montessori classrooms where the Montessori Method is practiced with all of the essential components intact. It seems clear to me then, that teachers are responding to and engaging in policy mandates differently. Our local school district also invites parents to serve on decision-making committees at each school. I have served on these committees for the last seven years and am currently the Clark Montessori School Foundation President.

My experiences teaching and advocating for Montessori education have solidified my personal beliefs in the critical importance of amplifying teachers' voices. Yet, I have also observed that teachers are often unsure how to engage in advocacy or speak up when policies push their Montessori pedagogy astray. It is these experiences and fundamental beliefs that guide how I understand how or why a Montessori teacher's pedagogy shifts, how Montessori teachers engage with policy, and how their experiences may be elevated for Montessori education to be more supported in educational systems.

Philosophical Worldview: Critical Realism

I believe perceptions of reality are strongly influenced and constructed by one's experiences. Teachers experience multiple realities influenced by their surroundings and relationships with others. A key insight from critical realism is "A complex reality exists independently of our ideas about it, and this reality is knowable, although imperfectly" (Brunson et al., 2023, p. 4). Political systems and policies imposed on teachers are a complex reality, and it is possible to know and understand the reality. As such, my perspective is through a critical realism lens.

Critical realism is a powerful reminder that knowledge emerges from the dynamic interplay between ideas and action. It is about reflecting on our thoughts and experiences after an experience, and observing the outcomes. This process not only deepens our understanding but also enriches our understanding, allowing us to adapt and grow based on what we learn. A critical realism worldview recognizes social, economic, and political situations' influence on individual beliefs and perspectives (Maxwell & Mittapalli, 2010). I believe teachers work in a system with seemingly set rules, but individually, teachers may consider the structures and mechanisms of the system before simply "following the rules." McEvoy and Richards (2006) describe the goal of critical realists as "to develop deeper levels of explanation and understanding" (p. 69). To develop this understanding, I believe people hold the knowledge of their own experiences, and I, as the researcher, should listen closely to that knowledge. Further, critical realism emphasizes that knowledge in social science can uncover opportunities for social transformation, creating a moral responsibility to apply that knowledge for the greater good (Brunson et al., 2023).

Critical realists include the researcher's values as part of the research (Plano Clark & Ivankova, 2016). To reiterate, Montessori education is part of who I am – making it a significant value in my life. I will continue to be aware of the value I emphasize in Montessori education as it applies to teachers' experiences.

Conceptual Framework

Teachers are the critical connection between policy and practice (Hohmann, 2016). At the same time, there is often a disparity between what the policy says and how teachers teach (Chimbi & Jita, 2021). Nevertheless, educational policies continue to be imposed top-down, with little teacher input (Dunn, 2020; Hinnant-Crawford, 2016; Valli & Buese, 2007). Teachers must then reconcile policies with their beliefs, pedagogy, and commitment to students. This process of reconciliation occurs in the space between policy and practice. In this space, teachers navigate the tension of balancing teaching and learning with mandated policies.

Marz and Kelchtermans (2013) point to the importance of the implementation process as crucial to understanding how a policy is perceived and, in turn, to explain the outcomes of the policy. Perception of policies depends on many facets of the educator's role; as Louis et al. (2005) describe, "what appears to be a straightforward initiative to a legislator may be perceived quite differently by practitioners in a poor, urban school than by those in a wealthy, suburban setting" (p. 180). I integrated three theories to create a conceptual framework that can support investigating how teachers respond to educational policies and advocate against policies that may harm the Montessori pedagogy in schools: street-level bureaucracy, sensemaking theory, and relational cultural theory. Utilizing insights from all three theoretical approaches, I offer a way to engage with policy implementation research to understand teacher discretionary decisions and

advocacy. Below, I define the three theories separately and then describe their integration and how they are integrated for my dissertation study.

Street-level Bureaucracy

Street-level bureaucrats are the frontline workers who work directly with citizens through government service agencies, such as schools or police departments (Anagnostopoulos, 2003; Lipsky, 2010). Lipsky's (2010) theory of street-level bureaucracy investigates "the realities of work for those directly engaged in policy delivery at the front lines" (Brodkin, 2015, p. 30). Teachers, for example, experience external demands of policies, rules, and regulations imposed by many levels: their principals, district leadership, state legislators, and federal education mandates. While a teacher's work is "rule saturated," it is not necessarily "rule bound" (Maynard-Moody & Musheno, 2003, p. 10). According to street-level bureaucracy, it is the teacher's discretion to stretch and bend the rules without breaking them. At the same time, teachers work in conditions with inadequate resources to effectively meet the needs of all students in their classrooms (Hohmann, 2016; Lipsky, 2010; Weatherley & Lipsky, 1977). Lipsky (2010) describes how teachers must find ways to accommodate the external demands placed on them while also working in "overcrowded classrooms with meager supplies" (p. 30). Thus, street-level bureaucracy is a paradox, which Lipsky (2010) describes as:

> On one hand, service is delivered by people to people, invoking a model of human interaction, caring, and responsibility. On the other hand, service is delivered through a bureaucracy, invoking a model of detachment and equal treatment under conditions of resource limitations and constraints, making care and responsibility conditional. (p. 71)

Due to the paradoxical nature of a street-level bureaucrat's work, teachers develop coping mechanisms to adapt or adopt policy requirements to fit their teaching pedagogies (Lipsky, 2010;

Robinson, 2012). For example, Weatherley and Lipsky (1977) explain potential coping mechanisms teachers may develop, including setting new routines, shifting goals, limiting services, or identifying priorities. Coping mechanisms and decisions in response to mandated policies, Lipsky (2010) argues, "effectively become public policies they [teachers] carry out" (p. xiii). Teachers make inherently discretionary decisions influenced by their pedagogies and the behaviors of other teachers in their schools (Brodkin, 2015; Hardy, 2013). Complicating the process further, the organization's behaviors, combined with the accommodations a teacher makes, are what is delivered to the public, making street-level bureaucrats the policymakers—not just implementors of the policies mandated on them (Brodkin, 2015; Lipsky, 2010; Weatherley & Lipsky, 1977). As such, street-level bureaucracy turns the study of policy implementation upside down (Hohmann, 2016; Hupe & Kooten, 2015). It asks not what teachers should do with policy but what they implement at the street level. In other words, the meaning of policy cannot be known until we see it implemented in practice on the front lines (Weatherley & Lipsky, 1977).

Lipsky (2010) explained two interrelated aspects of a street-level bureaucrat's position: 1) relative autonomy from organizational authority and 2) a high degree of discretion. For teachers, relative autonomy references a head of school or district leader who supports the teacher by trusting their pedagogical decisions. The second condition of street-level bureaucracy theory is the level of discretion teachers have in their daily decisions. For example, teachers make decisions based on individual students' needs, which may only emerge through their relationship with the student (Akosa & Asare, 2017; Hohmann, 2016; Lipsky, 2010). Considering the two interrelated aspects of street-level bureaucracy in the context of Ingersoll's (2003) work, which shows teachers' minimal control in making decisions, led me to the

sensemaking theory. That is, how can teachers both be street-level bureaucrats exercising autonomy and discretion while also holding little control over the decisions they make in their classrooms? Sensemaking theory supports understanding how teachers make sense of policies as they implement them at the "street level."

Sensemaking Theory

Most policy implementation theories fail to recognize the complexities of human behavior (Spillane et al., 2002). Many policymakers assume that teachers respond to "the ideas intended by policymakers, which they either ignore or modify" (Spillane et al., 2002, p. 391). However, how teachers make meaning of policies is filtered through their preexisting beliefs and practices, social contexts of their work environment, available skills and resources, and past experiences (Chimbi & Jita, 2021; Coburn, 2004, 2005; Weick, 1995). Sensemaking theory is based on these aspects and provides a framework for understanding how people act in response to their meaning making (Coburn, 2005; Hodge & Stosich, 2022). Additionally, sensemaking clarifies why people may give different meanings to the same event or the same meaning to different events (Helms Mills et al., 2010; Rom & Eyal, 2019;).

Spillane et al. (2002) describe sensemaking as "fraught with ambiguity and difficulties" (p. 391). Indeed, the process of making meaning is prompted by uncertainty. It takes place when people notice a shift in their usual routine and then must use their experiences to make meaning of the shift to consider what action to take. Drawing on the example of a Montessori teacher in a public school, I explain the seven interrelated properties of sensemaking (Helms Mills et al., 2010; Weick, 1995) below.

- **Grounded in identity construction**: sensemaking begins with the person making sense of a situation or experience and is closely related to the individual's identity. Nardon and

Hari (2022) explain that "how we see ourselves in a particular situation influences how we make sense of these situations and the information we learn in connection with our interactions with others" (pp. 18-19). Montessori teacher preparation pays substantial attention to the inner preparation and identity of the teacher, transforming the adult's thoughts and ideas toward learning, thinking, and human relationships (Christensen, 2019; Cossentino, 2009). At the same time, identity is continually redefined based on experiences.

- **Retrospective:** To give meaning to an event, we see it through the lens of past events. As such, if a Montessori teacher has yet to engage with external policy mandates, it may be more difficult for them to make sense of the situation.
- **Focused on and by extracted cues:** Extracted cues are the pieces of information we use as a starting point to make sense of a situation or experience. Past experiences will provide cues as to which elements will be extracted to make sense of the situation. A Montessori teacher with negative experiences with external policy mandates (e.g., a principal who layers additional requirements on the teacher rather than giving them autonomy) will likely transfer the negative cues to their response to a new policy mandate.
- **Driven by plausibility rather than accuracy:** As we decide which cues to extract, we look for the ones that seem plausible. This way, we may ignore the more accurate cues and potentially make an incorrect decision.
- **Enactive of the environment:** Much like the Montessori classroom, the environment plays a crucial role in making sense of an experience. The environment includes situations or stimuli out of the teacher's control, such as policies that are forced on them.

Teachers respond to these policies and "reinforce or resist environmental pressures, and in turn, contribute to or produce the environment they are in" (Nardon & Hari, 2022, p. 19). District policy mandates add constraints on a teacher's role. The teacher shapes her subsequent policy experiences by ignoring or responding to policies.

- **Ongoing:** This property of sensemaking may seem to contradict the idea that uncertainty prompts sensemaking. However, Weick (1995) maintains that we constantly make sense of what is happening around us by isolating specific moments (the uncertainty) and cues. For example, a Montessori teacher working in a public school is aware of the federal and state required standardized tests while also making sense of the district requirements that are multi-layered and constantly shifting (Allen & Penuel, 2015; Gerker, 2023).
- **Social:** While sensemaking often occurs on the individual level, it is also a collective process and emerges from regular informal communication that results in shared actions or mutually agreed-upon activities (Louis et al., 2005). When a school leader encourages cross-team collaboration, teachers are set up to make sense of policies together more successfully.

To put the principles of sensemaking theory together, a Montessori teacher leans on her interactions and the support of others (social) to decide how to respond to policies (enactment). She implements her response (cue) and constructs a narrative (retrospective). Policies shift (ongoing,) affirming her narrative (plausible) and reinforcing or shifting her identity as a Montessori teacher (identity construction).

Relational Cultural Theory

At the inception of relational cultural theory (RCT), Miller (1986) and her colleagues challenged the psychological view that healthy development is reliant on autonomy and

individuality and instead argued that complex, genuine relationships are core to healthy human development (Jordan, 1997). RCT has evolved from a model grounded in psychology and feminist theory to an "expansive theory of social justice that seeks to improve inequality and disconnection for individuals and communities" (Cannon et al., 2012, p. 3). Still, the idea of growth-fostering relationships remains at the core of RCT—it is through the development of mutually empathetic connections that these relationships grow and supports human development throughout life.

Growth fostering relationships are marked by mutual empathy, authenticity, and mutual empowerment (Miller, 1986). Miller (1986) explained the result of growth fostering relationships as "five good things," which include a sense of zest, clarity about oneself and the relationship, a sense of personal worth, the capacity to be creative and productive, and the desire for more connection. When growth fostering relationships are absent, RCT posits that disconnection occurs, causing withdrawal, an inability to act productively, and a decreased sense of self-worth (Comstock et al., 2008; Jordan, 2008). Disconnection can occur in all relationships, but a growth-fostering relationship recognizes and mitigates the disconnection through empathic understanding (Jordan, 2008).

RCT also explicitly addresses relationships at a larger societal level. Jordan (2008) contends that disconnections result from power dynamics that silence some groups of people. Comstock et al. (2008) further argue that acknowledging broader disconnection is important because it focuses on the larger context where relationships develop and function. For example, the disconnection between a principal and a teacher could be amplified by more considerable social expectations, such as the principal being in "power." While exploring the political efficacy

of Montessori teachers may seem to be more on an individual level, it is the collective political efficacy where RCT is most evident.

Miller and Stiver (1997) suggest that when people are in connection with each other, "zest" is improved. In other words, feelings of "vitality, aliveness, and energy" are apparent when relationships are based on mutual empowerment (p. 30). Collective political efficacy is the belief that policymakers are responsive to the collective needs of teachers (Balch, 1974). As such, when teachers collectively advocate for Montessori education their emotional "zest" is improved and they believe policymakers are more responsive. At the same time, Miller and Stiver (1997) define disconnection in relationships as "not mutually empathic and mutually empowering" (p. 51). Disconnection between teachers, between teachers and administrators, and between teachers and policymakers can cause a "decrease in energy, a sense of being stuck or unable to act, confusion or cloudy thinking, a reduced sense of self-worth, and waning desire to remain in relationships" (Raider-Roth, 2017, p.28). When disconnection occurs, repair is needed (Miller & Stiver, 1997).

Integrating Street-level Bureaucracy, Sensemaking Theory, and Relational Cultural Theory

Combining Lipsky's (2010) theory of street-level bureaucracy (SLB), Weick's (1995) sensemaking theory (ST), and Miller's (1986) relational cultural theory (RCT) can provide a comprehensive framework that integrates individual, collective, societal, and sociocultural perspectives to investigate how teachers respond to educational policies and engage in advocacy. Through understanding the foundational concepts of each theory, I determined areas where the theories can intersect and complement each other, as shown in Table 1.1.

Table 1.1

Conceptual Framework Combining SLB, ST, and RCT

Theory	Foundational Concept	Common Overlapping Themes	Integration
Street-Level Bureaucracy (SLB)	Examines how teachers interpret and implement policies within the context of their school, district, and everyday interactions	The role of meaning-making, relationships, and social contexts in shaping teacher behavior in their policy response and advocacy experiences. SLB contends that the meaning of policy can only be known once we see it implemented in practice on the front lines (Weatherley & Lipsky, 1977), while ST requires principles of retrospection and extracted cues from previous experiences for subsequent actions. According to RCT, disconnection resulting from power connections in societal contexts leads to withdrawal, an inability to act productively, and a decreased sense of self-worth. A principle of ST is the social aspect of sensemaking, which goes beyond the individual lens of SLB. These lenses of RCT, ST, and SLB should be considered for a collective process such as advocacy.	ST can provide insights into how teachers, as SLBs, interpret and make sense of policy, while RCT can shed light on the relational dynamics between teachers and principals or district leadership, between teachers with other teachers, and between teachers and policymakers.
Sensemaking Theory (ST)	Explores the process through which teachers make sense of new, ambiguous, or unclear policies.		
Relational Cultural Theory (RCT)	Understands the importance of relational connections, mutual empathy, and empowerment and what happens when disconnections occur.		

Developing a conceptual framework that combines elements from all three theories captures the interplay between each, further exploring how relational cultural theory can inform a teacher's sensemaking process that influences them as street-level bureaucrats. Bringing together street-level bureaucracy, sensemaking theory, and relational cultural theory can maximize the

chance of new insights in my dissertation research and improve understanding for researchers, policymakers, and teachers.

Organization of Dissertation

A study that combines multiple research approaches in an explanatory sequential mixed methods design has many steps. This section provides details on the organization of this study and its multiple steps. Table 1.2 summarizes research activities, including research questions aligned to specific phases of the study, procedures conducted in each phase, analysis processes, and products for each phase.

Table 1.2

Summary of Research Activities

Research Questions	Procedures	Analysis	Products
Phase 1 - Survey: Teacher Political Efficacy (TPE)			
1. How politically efficacious are Montessori teachers? 2. How do teacher, school, and district characteristics relate to (or predict) the level of TPE? 3. How do different types of schools (public, charter, private) correlate to TPE? 4. How have teachers' experiences with policies shaped their Montessori pedagogy in relation to their TPE?	Recruit Montessori teachers, administer TPE mixed methods survey, clean data, and analyze.	Descriptive statistics. Correlations between TPE levels. Comparisons between teacher, school, or district characteristics. Thematic analysis of qualitative responses.	Dissertation Chapter 3: Methods and Chapter 4: Results Findings inform phase two
Connecting & Building between Phases 1 and 2			
	Identify a subset of teachers for (phase 2) from phase 1. Develop GLA prompts and guide, informed by quantitative results and qualitative question analysis.	Explore TPE levels and individual experiences to identify sub-sample for GLA. Review descriptive statistics, correlations, and comparisons to co-develop GLA prompts with small survey sample. Inductive coding of qualitative questions in survey.	Sample for phase two GLA guide Joint display Dissertation Chapter 3: Methods
Phase 2 - Participatory: Teacher Experiences with Policy & Advocacy			
5. What conditions and strategies have supported teachers in effectively navigating policies that shape their Montessori pedagogy? 6. What do Montessori teachers need in order to advocate for Montessori education? 7. What conditions and strategies are needed to support Montessori teachers in their policy advocacy?	Conduct modified virtual GLA with subphases: 1) asynchronous and 2) synchronous.	Participants analyze data during the GLA. Coding & Thematic Analysis of GLA responses/discussion Review and synthesize data.	Chapter 3: Methods and Chapter 4: Results Co-created list of recommendations or strategies Joint displays
Integration			
8. How do the national trends on TPE findings and teacher experiences with policies combine to improve teacher policy advocacy in Montessori schools?	Review all findings Identify inferences Member checking	Develop and review joint displays based on findings from all phases. Compare findings from all phases for similarities or explanations of findings.	Dissertation Chapter 3: Methods, Chapter 4: Results, Chapter 5: Discussion

Note. This Research Plan Overview table is adapted from Fetters (2020) implementation matrix.

Chapter 1 Summary

This chapter introduced an explanatory sequential mixed methods study that I conducted to understand how Montessori teachers respond to education policies and how if at all, they have engaged in policy advocacy at the local, state, or national levels. I also utilized a participatory method to identify what Montessori educators need to speak up for or against policies that shape their Montessori pedagogy. I outlined Montessori education in the United States, leading to the explaining the problem I aimed to explore. In addition, I offered definitions of key terms used throughout this dissertation.

The study is grounded on research foundations that include my personal experiences as a Montessori teacher, teacher educator, parent, and researcher. The study is also positioned within the context of my philosophical worldview of Critical Realism, including my belief that people hold the knowledge of their own experiences, and I, as the researcher, should listen closely to that knowledge. The conceptual framework for this study includes three different theories, Lipsky's (2010) theory of street-level bureaucracy (SLB), Weick's (1995) sensemaking theory (ST), and Miller's (1986) relational cultural theory (RCT) to provide a comprehensive framework that integrates individual, collective, societal, and sociocultural perspectives that support investigating how teachers respond to educational policies and engage in advocacy.

The final section of chapter one offers a summary of the research activities included in this dissertation.

Chapter 2: Literature Review

To situate the study, this section first explains the core tenets of the pedagogy and the tensions that exist with defining the Montessori Method. Then, I describe policies and the obstacles they create for Montessori teachers and outline the details of a systematic literature review that I conducted to examine Montessori teachers as policy advocates. Finally, I expand on the definition of political efficacy to set the foundation for understanding phase one of my data collection.

Montessori Education

While Montessori education improves measures of academic achievement, especially in early childhood and in urban students, its success relies on the fidelity of implementation (Brown, 2015; Culclasure et al., 2018; Diamond & Lee, 2011; Dohrmann et al., 2007; Lillard, 2012; Lillard et al., 2017). At the same time, there are inconsistencies in how high-fidelity Montessori education is defined (Rambusch, 1963; Whitescarver & Cossentino, 2008). For example, Lillard and Else-Quest (2006) define authentic Montessori programs as those recognized by the Association Montessori Internationale/USA (AMI/USA), while Begin (2014) establishes Montessori programs as those that meet at least 75% of the criteria listed in Essential Elements of Successful Montessori Schools in the Public Sector (guidelines set forth by the American Montessori Society, Montessori Educational Programs International, North American Montessori Teacher's Association, Southwest Montessori Training Center and AMI USA). Other scholars describe critical elements of the pedagogy, such as individualized instruction, three-year age spans and multiple age groupings in classrooms, a prepared environment where children can move freely, reality and nature, and teachers who are trained in Montessori education (Ansari & Winsler, 2014; Block, 2015; Dohrmann et al., 2007; Lillard & Else-Quest, 2006; Meyer, 1975;

Whitescarver & Cossentino, 2008). Some of these elements are identified in the AMI guidelines (Lillard & Else-Quest, 2006) and the Essential Elements of Successful Montessori Schools in the Public Sector (Begin, 2014), yet definitions need to be more congruent. Further, no governing body enforces the quality of all Montessori education in America or ensures the Montessori curriculum is followed in schools. Without copyright on the definition of Montessori, any school can claim to use the Montessori Method (Debs et al., 2022; Lillard & McHugh, 2019; Whitescarver & Cossentino, 2008).

The lack of a unified definition for Montessori education introduces additional layers of complexity when considering how policies impact the pedagogy. In a recent study (Gerker, 2023), I found that when a Montessori teacher defines the pedagogy as a teaching philosophy or more than using specific Montessori materials, they are more likely to fully implement Montessori education. However, this finding is also contingent upon whether or not the school and district fully commit to Montessori education. For example, Culclasure et al. (2018) evaluated 42 public school programs in South Carolina. In their study, nearly all teachers had a Montessori teaching credential, and the administration often supported Montessori education. Using the five core components of Montessori, as recognized by the American Montessori Society (AMS), their study mainly had positive findings when examining Montessori students' academic and behavioral outcomes compared to students in traditional schools. The AMS required components of high-fidelity Montessori education go beyond the use of specific materials and include: 1) trained Montessori teachers, 2) multiage classrooms, 3) use of Montessori materials, 4) child-directed work, and 5) uninterrupted work periods (Culclasure et al., 2018). Of the 42 Montessori schools studied, all 120 randomly selected classrooms were

multi-aged based on the Montessori three-year age span, had a complete set of Montessori materials, and had at least a 2.5-hour uninterrupted work period each day.

An analysis of fidelity conducted by Debs et al. (2022) identified six practices that emerge consistently as central principles in Montessori implementation: 1) supporting Montessori philosophy, 2) mixed-age groupings, 3) Montessori-trained teachers, 4) Montessori materials, 5) freedom of choice, and 6) uninterrupted work block. Coincidentally, these six principles are often areas of challenge for Montessori teachers. As such, I chose to use the six principles to explain and further define Montessori education. I further explain the principles below to set the stage for describing policies that create obstacles in implementing high-fidelity Montessori education in the next section.

Supporting Montessori Philosophy and Freedom of Choice

The Montessori Method is a curriculum, and an entire educational philosophy where love of learning is nurtured (Brown, 2015). Maria Montessori believed that teaching should vary according to the nature of the child and that education should not be pushed on children (Montessori, 1995; Wentworth, 2013). She considered the key component necessary to a child's growth and development to be liberty or freedom (Montessori, 1995; Rambusch, 1963). Thus, a Montessori classroom is a carefully prepared environment, free from unnecessary restrictions, where children choose materials and lessons to explore independently. In Montessori classrooms, children are respected, and significant attention is given to their physical, mental, and academic well-being (Chattin-McNichols, 2016; O'Donnell, 2012). Additionally, teachers utilize their scientific observations of children to determine individualized instruction and independent learning are aspects of the Montessori philosophy (Ansari & Winsler, 2014; Montessori, 1964; Rambusch, 1963; Wentworth, 2013).

Mixed-age Groupings and Uninterrupted Work Block

Maria Montessori recognized the development of children in a series of stages, each depending on the previous and leading to the next stage, which she called planes of development (Montessori, 1964). These developmental stages are the basis of the Montessori mixed-age groupings. Montessori classrooms are preschool to kindergarten, first to third, fourth to sixth, and so on. Multi-grade level grouping allows for peer teaching and modeling while teachers work one-on-one or with small groups of students during an uninterrupted block of work time. The uninterrupted block of work time, which is often much longer than the standard learning blocks used in other schools, further supports freedom and liberty in the classroom by allowing students to choose the work they will focus on, while being guided by the teacher in the room. NCMPS (2016) describes the multi-grade level classrooms:

> Students remain in the same community for three years, as the youngest, then middle, and finally as the oldest students in the class. Each year in a Montessori class plays a different role in the student's academic and social experience. Academically, the student experiences a year of introduction, a year of practice, and a year of synthesis. (p. 2)

Montessori-trained Teachers

The role of a Montessori teacher is essential to the definition of a Montessori classroom as it is much different from other teaching pedagogies. For example, Montessori teacher preparation pays substantial attention to the inner preparation of the teacher, transforming the adult's thoughts and ideas toward learning, thinking, and human relationships (Christensen, 2019; Cossentino, 2009). This shift in understanding and attitude is crucial to the pedagogy of a Montessori teacher. Montessori (1995) described the "real preparation" of a teacher as "the study of one's self." She further explained, "the training of the teacher who is to help life is something

far more than the learning of ideas. It includes the training of character; it is a preparation of the spirit" (Montessori, 2012, p. 132). Thoroughly trained in scientific observation, a Montessori teacher understands their role in facilitating learning and supporting students in order to reach their highest level of intellectual and emotional development (Montessori, 1964, 1989, 1995).

Montessori Materials

The Montessori materials are designed to provide rich, independent learning opportunities while focusing on a whole-child developmental approach (Montessori, 1964). The materials, primarily designed for early childhood and elementary children, are hands-on, move from concrete to abstract, and allow for independent student learning. Montessori describes the didactic materials to include a "control of error" that "lies in the material itself" (Montessori, 1965), thus allowing for independent learning. Further, the materials are part of a larger curriculum that "is interconnected, cross-disciplinary, hands-on, and experiential" (Block, 2015, p. 44).

Educational Policies that Create Challenges for Montessori Education

Montessori teacher education programs focus closely on the Montessori philosophy but often omit how to navigate policy (Christensen, 2016). Whether they realize it or not, policies often shape teachers' daily work and create challenges rather than supporting them in their pedagogy (Gerker, 2023; Perryman et al., 2017). The challenges can cause Montessori teachers to stray from high-fidelity Montessori implementation (Block, 2015). In a 2015 study examining a public Montessori school's response to accountability mandates, one teacher commented: "We compromise what we believe in. We compromise what we teach" (Block, 2015, p. 51). Policy challenges that may force Montessori teachers to compromise include federal, state, and district

policies. Below, I describe example policies and the obstacles they create in implementing Montessori education with fidelity.

Federal Policies

The passage of the No Child Left Behind Act (NCLB) in 2001 introduced accountability measures and created a heightened sense of urgency for students to take and pass standardized tests to be sure adequate progress was made each year (Greer, 2018; Lee & Wu, 2017). In addition, NCLB required states to develop academic standards and held districts and schools accountable to test results (Lee & Wu, 2017; Um, 2019). While NCLB allowed states to set their achievement targets, many set unrealistic goals, causing consecutive years of failure (Lee & Wu, 2017). The Obama administration pressured teachers to ensure students progressed and approved Every Student Succeeds Act (ESSA) in 2015. The goal of ESSA was to close the achievement gap among students. While ESSA is detached from national standards, states receive federal funding for adopting supported standards and assessments (Greer, 2018; Valli & Buese, 2007).

Performance accountability measures mandated by the federal government create conflicting systems that all public school teachers must learn how to navigate (Robinson, 2012; Taylor, 2007; Valli & Buese, 2007). For Montessori teachers, the tension between mandates and the principles of Montessori education leads to high stress levels for teachers (Brown, 2015; Murray & Peyton, 2008; Scott, 2017). Suchman (2008) explains, “the Montessori method fundamentally opposes NCLB’s premise that students should master certain academic knowledge at certain ages and that their success in attaining this knowledge is best assessed through standardized tests” (p. 4). While ESSA replaced NCLB, the two laws have many commonalities. Table 2.1 shows how ESSA and the Montessori Method do not align.

Table 2.1

ESSA and the Montessori Method

ESSA	Montessori Method
Emphasizes benchmarking, extrinsic motivation, and standardized testing	Rooted in a developmental, child-centered approach that emphasizes self-paced learning assessed through self-correction and teacher observation
Expects students to hit specific benchmarks by certain ages	Students work through a sequence of activities at their own pace
Standardized measures of their achievement	Students demonstrate mastery through hands-on, experiential projects, while teachers assess their learning through scientific observation
Whole-group, direct instruction, teacher-centered	Small groups or individual lessons, student-centered

Within the contexts of externally imposed standards and testing, Montessori teachers struggle to individualize teaching and allow for freedom of choice during an uninterrupted work period (Begin, 2014; Gerker, 2023). Scott (2017) explains:

> A recurring issue for teachers was determining the best ways to meet the child's needs, according to Montessori philosophy, with what they were expected to know for end-of-grade performance tests. The teachers expressed concern that in attempts to ensure high performance on exams, students would be rushed to learn material that they were not ready for or that was not until a later date in the 3-year learning cycle. (p. 179)

In contrast to standardized tests, Montessori pedagogy is grounded in using observation for student assessment (Montessori, 1964; Rambusch, 1963). Several scholars have, therefore, identified the integration required for standardized tests into the Montessori method as a well-documented challenge for Montessori teachers (Block, 2015; Borgman, 2021; Murray & Peyton, 2008; Scott, 2017).

State Policies

Although the Montessori Accreditation Council for Teacher Education (MACTE), recognized by the United States Department of Education, accredits over 100 Montessori Teacher Education programs, state policies do not recognize the rigorous preparation required for teachers to earn a Montessori teaching credential in several states (MACTE, n.d.). These policies create challenges for teachers in obtaining a license to teach in public schools and add to the larger systemic problem of the licensed Montessori public school teacher shortage (Murray & Peyton, 2008).

In Ohio, for example, a MACTE Montessori teaching credential does not currently align with the state teacher licensure grade bands. Montessori teachers are credentialed based on the three-year learning cycles developed by Maria Montessori: preschool to kindergarten, first to third grade, fourth to sixth grade, etc. (Montessori, 1964). Yet, current categories for Ohio teaching licenses do not match the Montessori planes of development.

Ohio teachers in the middle grades must be licensed by subject area. Consequently, Montessori teachers at the elementary level, grades fourth to sixth, who are trained to teach all subject areas in a Montessori classroom cannot be licensed in Ohio to do so. A teacher may have a license in one subject area and can then apply for a generalist endorsement for a second subject area, but this still does not allow a Montessori credentialed teacher to be licensed to teach a fourth to sixth grade Montessori classroom in a public school on their own. NCMPS (2016) noted that the three-year age span is a "non-negotiable," making the mismatch between teacher licensure and mixed-age groups a crucial issue in Montessori schools. Further, the licensing requirements for teachers in Ohio is shifting over the next several years to preK-8 and 6-12 grade bands (L. Chamberlain, personal communication, August 24, 2023).

District Policies

Public and charter school districts often make district-wide decisions, regardless of whether a school within the district uses the Montessori method or a more traditional approach to education (Block, 2015). Examples of these decisions include pacing guides, building schedules, and discipline policies (Block, 2015; Gerker, 2023; Valli & Buese, 2007). Valli and Buese (2007) studied the shifting role of elementary teachers due to the high-stakes accountability push in public schools. They affirm the difficult issue of district-wide decisions and explain, "District personnel did not seem to consider the role conflicts and intensified pressures that teachers would experience in juggling pacing and differentiating directives" (p. 542).

The pace of curriculum is often district-mandated, and with little support, teachers must determine how to focus on the pace the student needs rather than what the district demands (Block, 2015; Valli & Buese, 2007). One participant in a recent study I conducted on how Montessori public school teachers respond to policies explained a new scope and sequence her district mandated all schools use (Gerker, 2023). She reported that it took several years for the district to understand that her Montessori curriculum was "hitting all the standards" within the mandated pacing guides, scope, and sequence.

In the same study (Gerker, 2023), two participants explained their struggles with the building schedules and only seeing students for 60-90 minutes at a time. They both independently described how they observe students struggling to get in the flow they need to work on projects for more extended periods—a core tenet of the Montessori philosophy (Montessori, 1964). They further explained a shift to their building's schedule due to attendance procedures. Front office staff need to locate students quickly, "block [Montessori] scheduling is confusing, and attendance means dollars [to the district]." Finally, another participant in the

Gerker (2023) study described a discipline committee attempting to develop a district-required school-wide acknowledgment system—one that is focused on rewards rather than a more intrinsically motivated system that is in better alignment with Montessori philosophy.

Montessori Teachers as Policy Advocates

I conducted a systematic literature review to examine Montessori teachers as policy advocates. I focused on the following questions for this literature review:

1. How do Montessori teachers respond to externally imposed policies?
2. How have Montessori teachers engaged in policy advocacy at the school, district, state, and national levels?
3. What strategies have been identified or implemented to support teachers in their advocacy for Montessori education?

The initial literature search included different combinations of key search terms. Databases searched included Academic Search Complete, Academic Search Premier, Education Research Complete, Education Full Text, Eric, EBSCO, Proquest, and Google Scholar. The initial searches did not reveal any studies of Montessori teachers as advocates. As a result, additional key search terms were used as shown in Figure 2.1, broadening the scope to include all teachers in the preK-12 education system. Beyond searching databases, I explored the websites of nationally known Montessori organizations such as AMS, AMI-USA, NCMPS, and MPPI. I also examined reference lists of relevant articles and books. Full inclusion and exclusion criteria are shown in Table 2.2.

Figure 2.1

Literature Review Key Search Terms

Table 2.2

Literature Review Inclusion/Exclusion Criteria

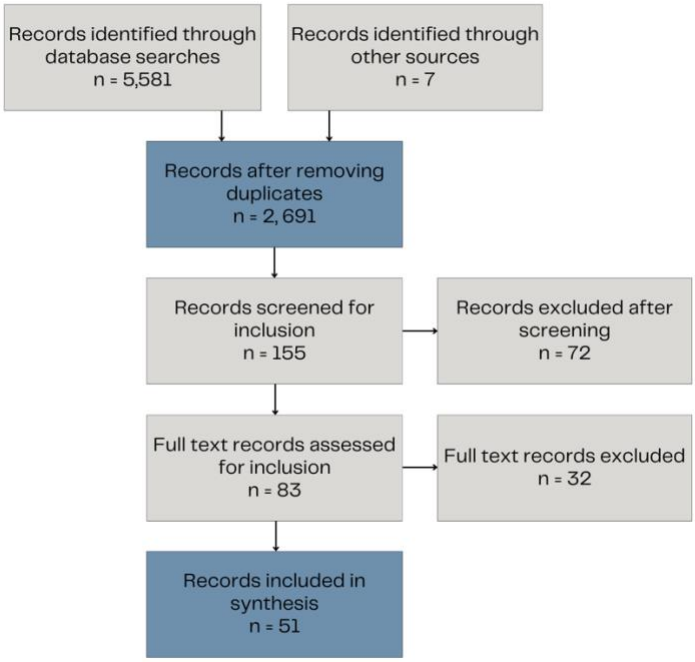
Initial Inclusion Criteria
From 2000 to 2023
United States
Full text Inclusion Criteria
Teacher experiences with policy and advocacy
Policies that shape pedagogy
Exclusion Criteria
Before 2000
Outside of the United States
Teacher Educator Advocacy

Literature Review Results

Through multiple, iterative steps and the inclusion criteria shown in Table **2.2**, 51 records were identified. The identification of records in each step is outlined in Figure 3. Records were first uploaded to Zotero for initial screening and then imported into MaxQDA for full-text screening and coding.

Figure 2.2

Literature Review Record Identification



Of the 51 identified records, 14 were specific to Montessori teachers and their responses to policy, while 37 focused on all teachers in the preK-12 education system (see Table ***2.3)***.

Table 2.3

Types of Records Identified in Literature Review

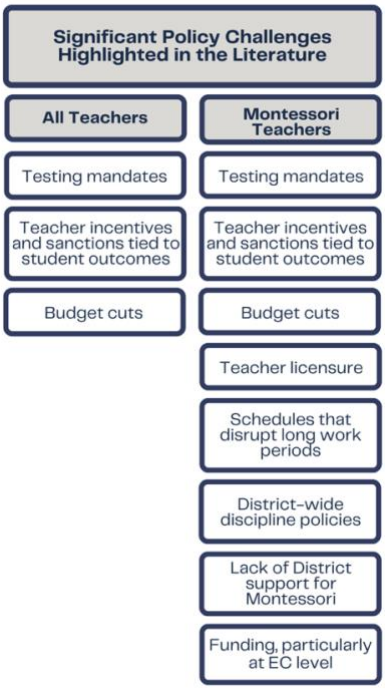
Type of Records – Montessori Specific	
Empirical Journal Articles	6
Dissertations or Theses	4
Non-empirical Journal Articles	4
Total Montessori Specific Records	14
Types of Records – Non-Montessori	
Empirical Journal Articles	34
Dissertations or Theses	2
Non-empirical Journal Articles	1
Total Non-Montessori Records	37

Literature Review Discussion

Policy barriers discussed in this dissertation include federally required standardized tests, state teacher licensure options, and "one size fits all" district-wide decisions that do not consider different teaching pedagogies (Ellison et al., 2018). A review of the literature showed that while Montessori teachers have similar challenges as all teachers, they also have many additional issues due to the differences of the Montessori pedagogy. For example, all teachers struggle with the extensive testing mandates, teacher incentives, and budget cuts from federal, state, and district requirements. Yet, Montessori teachers and schools are also challenged by policies regarding teacher licensure, school day schedules, discipline, and funding at the early childhood level, as outlined in Figure 2.3. Further, more than half of the records in the literature review addressed accountability mandates, such as standardized testing, as a key challenge for all teachers.

Figure 2.3

Salient Policy Challenges in the Literature



Teachers and educators in Montessori schools have been working for many years to respond to policies while upholding high-fidelity Montessori education (Block, 2015; Gerker, 2023; Jackson, 2022; Murray & Peyton, 2008; Scott, 2017). Jackson (2022) found that teachers work together to be creative with scheduling and consistently demand Montessori specific professional development from their district. Murray and Peyton (2008) surveyed 85 Montessori public school leaders and found that the significant issues challenging them included budget cuts, federal and state requirements, hiring and retaining teachers, and district support. Despite these challenges, "most schools reported being reasonably successful at living up to the ideals of establishing truly Montessori environments within public schools" (Murray & Peyton, 2008, p. 30).

The way teachers respond to policies is discussed in many ways. Ball et al. (2011) refers to teachers as "policy actors" in their role as policy implementors. A teacher may be an "entrepreneur" whose policy response includes advocacy and creativity. In contrast, another teacher may be a "receiver," whose policy response includes coping and defending. Ellison et al. (2018) took this work a step further and sought to understand how a teacher's daily practice informs their perspective on education policy. A policy problem that emerged from their study was "bad policy," which they claimed focused on improving student outcomes but took away the educators' ability to individualize teaching (Ellison et al., 2018). Instead of individualizing teaching, teachers are "teaching to the test" and narrowing the curriculum (Abrams et al., 2003; Au, 2011; Berliner, 2011; Levatino et al., 2023).

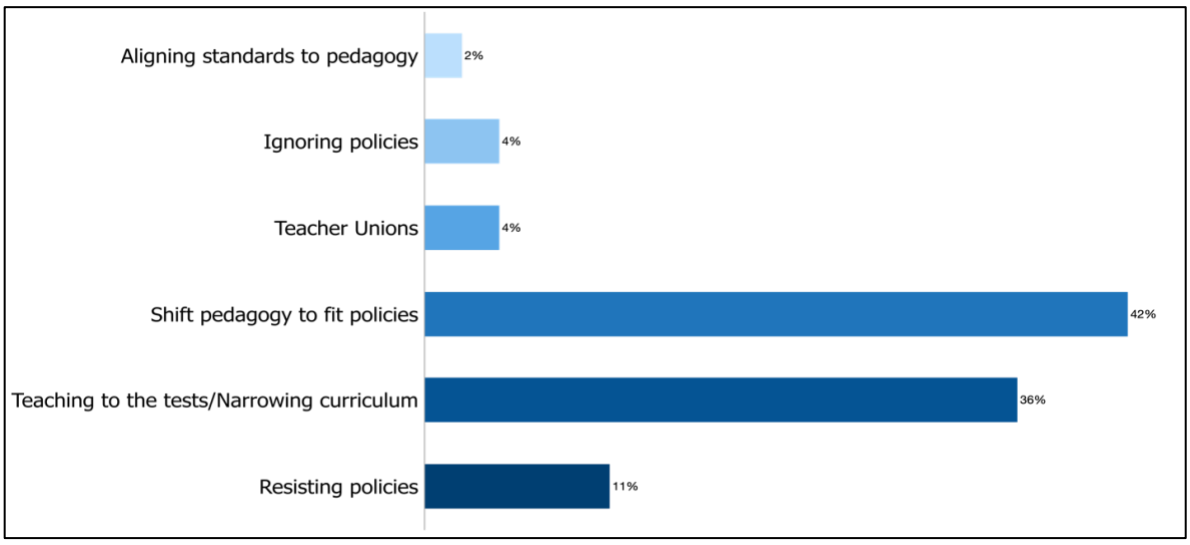
Due to the pressure to raise and keep student test scores up, teachers "devote large amounts of classroom time to test preparation activities" (Abrams et al., 2003, p. 18) and are shaping their curriculum to match standardized tests (Au, 2011). As such, the policies that

mandate standardized tests are pushing the focus away from what is known as best practice in child-centered education and creating a more teacher-centered pedagogy (Au, 2011). Even more undesirable responses to education policies such as standardized testing are cheating during test administration, changes in test scoring, and excessive test preparation (Berliner, 2011; Levatino et al., 2023).

Curriculum narrowing is another response to high stakes testing (Au, 2011; Berliner, 2011; Levatino et al., 2023). Au (2011) describes several studies that show how high-stakes testing narrows the instructional curriculum. For example, in a nationwide study by the Center for Educational Policy in 2006 (as cited in Au, 2011), 71% of districts reported eliminating at least one subject to increase time spent on reading and math as a direct response to the high-stakes testing mandated under the No Child Left Behind (NCLB) legislation. Figure 5 outlines the ways teachers respond to policies as identified in this literature review. But what does this mean for Montessori teachers? Empirical research is limited regarding how Montessori teachers respond to policy, while exploring the barriers for Montessori teachers is plentiful.

Figure 2.4

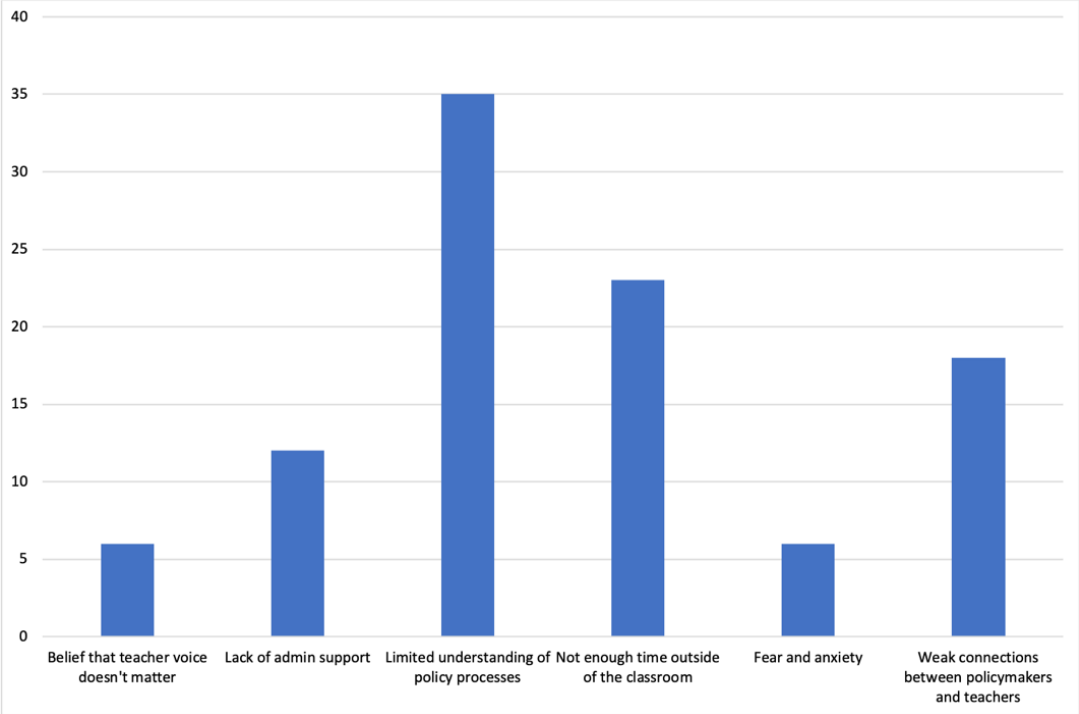
Teacher Response to Policies



Examples of how teachers participate in advocacy include increased collaboration with colleagues, leaning on teacher unions for support, or leaving the classroom to focus on advocacy. Mostly, teachers feel policymakers disregard their experiences and expertise. Hara and Good (2023) describe teacher advocacy as being "constrained to two possibilities: labor actions or micro-level advocacy on behalf of individual students" (p. 1). Barriers to advocacy identified in the literature include a limited understanding of policy processes and needing more time outside the classroom to actively advocate for supportive policies. The barriers to advocacy most salient in the literature are shown in Figure 2.5.

Figure 2.5

Barriers to Advocacy



The top five well documented strategies to support teachers as advocates include:

1. Add policy and advocacy to teacher education programs.
2. Increased and improved support from administration.

3. Provide time outside of the classroom for teachers to advocate.
4. Targeted policy and advocacy professional development and professional learning circles.
5. Teachers can join formal education advocacy organizations.

Teacher education programs can play a role in preparing Montessori teachers to be advocates for the pedagogy, education leaders can find ways to support the Montessori pedagogy in schools and districts, and policymakers can elevate Montessori teacher voice and expertise. Additionally, according to the extant literature, the characteristics of a teacher advocate should be nurtured as a natural part of the teaching profession. These characteristics include a teacher that sees the bigger picture, asks a lot of questions, pushes back against the status quo, takes initiative, sees advocacy as part of what it means to be an educator, and is professionally self-confident.

Literature Review Summary

Scholarly literature examines and explains how educators experience external mandates. Yet, it remains unclear how and why Montessori teachers respond to policies that influence their pedagogy or how they engage in advocacy for the Montessori pedagogy. To understand this question, two kinds of knowledge are needed: 1) trends in the political efficacy of teachers, and 2) exploration of teacher policy sensemaking and their engagement in advocacy. Additionally, while teachers are the implementors of educational policy, their expertise and experiences are often not considered in developing the policies they are expected to implement (Hammon, 2010; Hinnant-Crawford, 2016). Teacher policy advocacy that is collaborative centers the voices of teachers while working together to shift policies rather than having policies imposed on them (Gale & Densmore, 2003; Hara & Good, 2023). As such, a third type of knowledge is needed to

amplify teachers voices and their expertise in advocacy for Montessori education and the policymaking process.

Political Efficacy

Political efficacy refers to political action that can impact the policy process and the feeling an individual has as to whether or not their policy engagement is worthwhile (Campbell et al., 1954; Hammon, 2010). It was initially introduced by Campbell et al. (1954) during their analysis of voter behavior and attitudes in the 1952 United States presidential election and was defined as the "feeling that individual action does have, or can have, an impact upon the political process" (Appendix A). As such, the political efficacy of teachers ultimately determines their interpretation and response to policies.

Other scholars have built on the original work of Campbell, et al. (1954) to expand the definition of political efficacy. Craig and Maggiotto (1982) identified internal political efficacy, defined as individuals' self-perceptions of their capability to comprehend politics and their competence to engage in political activities such as voting and advocacy and external political efficacy, defined as perceptions of political system's responsiveness to individual concerns. The absence of external efficacy signifies the belief that individuals cannot influence political outcomes due to the unresponsiveness of government leaders and institutions to their needs. Yeich and Levine (1994) proposed yet another component of political efficacy—collective political efficacy. Collective political efficacy refers to perceptions of system responsiveness to "collective demands for change" or when "masses of people organize to demand change" (Yeich & Levine, 1994, p. 260). The relationship between the three dimensions of political efficacy is further explained in the methodology section of this dissertation.

Chapter 2 Summary

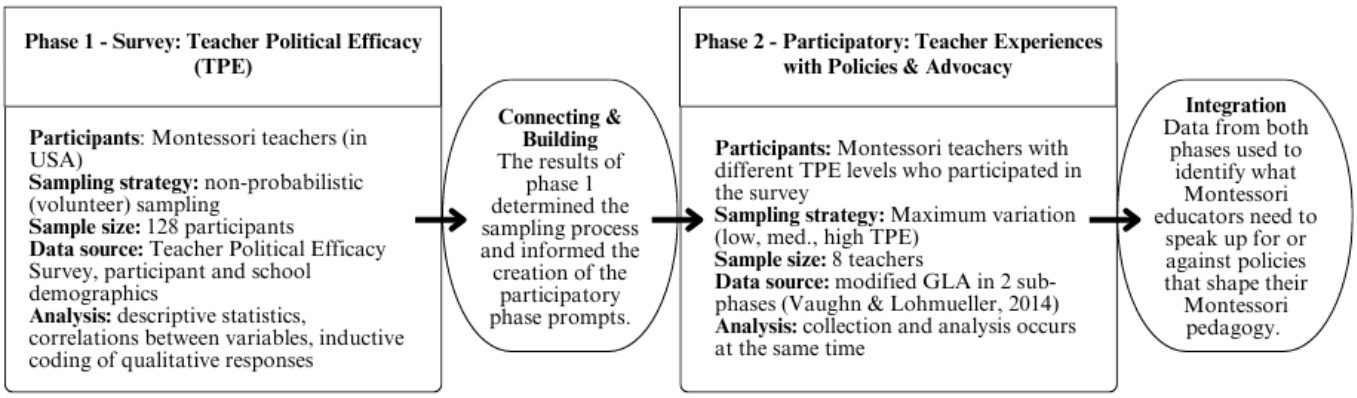
Chapter two further set the stage for this study through outlining a deeper definition of Montessori education. I described central principles of the Montessori Method, as defined by previous scholars and practitioners. Additionally, I explained education policies that create challenges for Montessori teachers at the Federal, State, and District levels. I conducted a systematic literature review on Montessori teachers as advocates and outlined the results in this chapter. Finally, I expanded on the definition of political efficacy to set the foundation for understanding phase one of data collection.

Chapter 3: Methodology

To understand how Montessori teachers experience policies and engage in advocacy requires an innovative research design. Methods that value local knowledge and reflect the unique factors that influence teacher experiences are also necessary (DeJonckheere, 2016). As such, I designed an explanatory sequential mixed methods study, utilizing a participatory method. I first collected and analyzed quantitative data (phase 1), then collected and analyzed participatory data (phase 2). The two methodological strands were connected between phases, and then the qualitative participatory results were used to help explain the quantitative results (Creswell & Plano Clark, 2018; Fetters, 2020). This chapter describes the overall explanatory sequential design and the research methods of the study, including the processes of building and integrating the two phases (Fetters et al., 2013). Figure 3.1 breaks down the study design and provides a visual representation of the timing of each research activity.

Figure 3.1

Procedural Diagram of Dissertation Study



Note. Diagram adapted from Fetters (2020). GLA refers for Group Level Assessment (Vaughn & Lohmueller, 2014). Connecting and building refers to integration techniques (Fetters et al., 2013).

Mixed Methods Rationale

In a previous study, I interviewed eight Montessori public school teachers. Through these conversations and the subsequent data analysis, I found that when Montessori teachers understand how policies are developed, they are more apt to advocate for policy changes (Gerker, 2023). In contrast, when a Montessori teacher does not understand how policies are developed or felt discarded in previous attempts, they tend to close their classroom doors in an effort to ignore policy pressures. Implications for future research included expanding the scope of participants to include many levels of teacher political efficacy. In this way, investigating Montessori teachers' engagement with policy would include a broader range of teacher experiences. I contend that an explanatory sequential mixed methods approach utilizing participatory methods is an excellent fit to listen and learn from a broad range of Montessori teachers' policy know-how and investigate their conception of what they need to speak up for or against policies that may shape their Montessori pedagogy.

Much of my research and work involves exploring the relationship between education policy and Montessori pedagogy. However, I have found limited studies in this space. At the same time, I am intrigued by mixed methods approaches to studying education policy. Chestnut et al. (2018) noted that "mixed methods approaches to policy inquiry are quite useful due to the variety of data that can be collected and multiple options for the application of analytic techniques" (p. 310). Mixed methods research is well suited for interrogating the limits and possibilities of policy issues because the approach looks at policy issues from many perspectives (Brannen & Moss, 2012). Interestingly, the same accountability mandates schools are forced to adhere to also emphasize quantitative data. However, the emphasis on quantitative data does not capture the full implications of educational accountability (Hall & Ryan, 2011).

A mixed methods approach combines qualitative and quantitative methods to support a more profound understanding of a phenomenon and substantiation of findings (Johnson et al., 2007; Plano Clark & Ivankova, 2016). Further, Creswell and Plano Clark posit that "Audiences such as policymakers, practitioners, and others in applied areas need multiple forms of evidence to document and inform research problems" (Creswell & Plano Clark, 2018, p. 23). Since one of my intentions was to amplify teacher voice and experience, I chose a mixed methods approach using quantitative methods to appeal to policymakers and a participatory action research (PAR) method to center those closest to the work—Montessori teachers. Further, PAR provides a framework that fosters collaborative reflection leading to collective action aimed at transforming practices, policies, and creating systemic change (Hara & Good, 2023).

The intentional integration of quantitative and qualitative methods ultimately highlights the benefits of mixed methods (Guetterman et al., 2015). Scholars define integration in mixed methods research differently but with some similarities. For example, Plano Clark (2019) defines integration as the "explicit conversation (or interrelating of) the quantitative and qualitative components of a mixed methods study" (p. 108). Bazeley and Kemp (2012) expand this definition through three rationales: 1) strengths approach where the two methods complement each other, 2) use of the two methods to initiate a new understanding of the research topic, and 3) use of the two methods to provide a more in-depth understanding of the research topic. Indeed, there is ample room for creativity in designing a mixed methods study as long as integration remains at the center of the study (Guetterman et al., 2015). Connecting, building, and integration of the multiple methods used in this study are further explained in this chapter.

The quantitative and qualitative data offset the strengths and weaknesses of each other in this study (Plano Clark & Ivankova, 2016). The quantitative data is a larger sample resulting in

national policy trends that may be of interest to policymakers and the identification of Montessori teacher political efficacy which may be of interest to teacher education programs. The participatory data is a detailed description of context that centers teacher voice and policy or advocacy experiences that may be of interest to Montessori educators, teacher education programs, and school administration. Since the goal of this study includes communicating findings to multiple groups, using different data and analysis methods is beneficial. In addition to offsetting weaknesses and strengths, Greene et al. (1989) describe seeking elaboration of the findings from one phase of the study to the other (complementarity) as a rationale for mixed methods research. In this way, I used quantitative methods to identify trends in variables and a participatory method to illustrate the details of the trends and move to action that might create change for teachers (Plano Clark & Ivankova, 2016).

Applying participatory action research in mixed methods generates an action plan using a systematic approach (Ivankova, 2014). It is a democratic process that "seeks to bring together action and reflection, theory and practice, in participation with others" (Reason & Bradbury, 2001, p.1). While action research overall has a complex history and lacks a standard definition, one thing scholars agree on is that it is research that respects participants' knowledge and leads to understanding, taking action, and affecting change (Brydon-Miller et al., 2003; Cargo & Mercer, 2008; Kemmis & McTaggart, 1988; Reason & Bradbury, 2001). Driving home the importance of connecting theory and practice, Kurt Lewin (1946), one of the first people to conceptualize action research, explained, "Research that produces nothing but books will not suffice" (p. 35).

Vaughn and Jacquez (2020) explain participatory action research as research that engages participants who are not necessarily trained but are members of a group with shared concerns on

issues confronting them or their communities. Further, Altrichter et al. (2002) describes it as "inquiry with people, rather than research on people" (p. 130). Because of the focus on participant knowledge and experiences, participatory research has great potential for bridging the gap between research and practice (Cargo & Mercer, 2008). Further, participatory action research in mixed methods "may help provide a comprehensive initial assessment of the problem, develop a more solid plan of action, and conduct a more rigorous evaluation of the action" (Ivankova, 2014, p. 58). Accordingly, a mixed methods explanatory sequential study utilizing a participatory action research method effectively addresses my research questions while centering the voice of teachers in the co-creation of collective action to transform practices and policies (Freire, 1970; Hara & Good, 2023).

Inclusion and Place of the GLA

Essential features of action research include its practical focus, participatory and collaborative nature, the importance of reflection, and focus on empowerment (Ivankova, 2014). Using these features, I rationalize the inclusion and place of the participatory approach in the study. First, Kemmis and McTaggart (2007) argue that action research is practical due to the focus on studying participants' situations and is participatory by nature. The emphasis of action research is on clarifying what the community is trying to accomplish and then working to remove obstacles. In this study, teachers first participated in a quantitative survey (studying their situation). In the subsequent Group Level Assessment, participants reflected on themes that emerged from the quantitative survey (clarifying their goals) and then explored what might be needed to support them in their policy advocacy (removing obstacles). In this way, participants reflected on their political self-efficacy in relation to their classroom practice and were empowered to "explore the ways in which their practices are shaped and constrained" by policies

(Kemmis & McTaggart, 2007). Further, the GLA method allows participants the space and community to share their experiences and improve "awareness and connection" (Guy & Arthur, 2021).

Phase 1: National Survey – Teacher Political Efficacy

In the first phase of the study, 125 participants completed a predominately quantitative survey through an anonymous Qualtrics survey link. The target population to complete the survey was Montessori PreK-12 classroom teachers currently teaching in Montessori schools in the United States. To participate in the survey, respondents needed to meet the following criteria: 1) currently work in a Montessori classroom (in a public, private, or charter school), 2) hold a Montessori teaching credential, 3) have instructional responsibility for students regularly throughout a school year, and 4) are at least 18 years old. These criteria were intentionally broad, to encompass a wide range of perspectives and to provide the opportunity to explore differences based on characteristics such as type of school (public, private, and charter schools). Three questions, aligned to the criteria named, were included at the beginning of the survey to filter out ineligible participants.

Sampling and Recruitment

It is unclear how many Montessori programs exist in the United States, since the method lacks a copyright, any school can claim to use the Montessori Method (Debs et al., 2022; Lillard & McHugh, 2019; Whitescarver & Cossentino, 2008). However, in an ongoing Montessori School Census, NCMPS (n.d.-b) states there are 3,491 private and public Montessori schools in the USA. The American Montessori Society states that there are approximately 5000 Montessori schools in the USA (AMS, n.d.-b). I was unable to find data specific to the number of

Montessori teachers in the USA, yet given the number of Montessori schools, my goal was to recruit a sample size of 100 – 150.

Non-probabilistic, volunteer sampling was utilized to identify participants (Creswell & Plano Clark, 2018). This strategy allowed me to recruit teachers who were available and volunteered to complete the survey. I searched for Montessori teacher email addresses online and identified emails addresses through school websites and my personal connections to Montessori educators across the country (n=148). Next, I requested access to the University of Wisconsin River Falls Montessori teacher research database. This database is a list of Montessori teachers who have volunteered to share their contact information for IRB approved studies (n=507).

Recruitment took place over eight weeks, February 4 to March 31 of 2024. On February 4, I sent each potential participant (n=655) an anonymous link to the survey and asked them to also share with other Montessori teachers and colleagues. In addition to direct recruitment, I shared an anonymous link in Montessori Teacher Facebook groups and on other personal social media outlets such as Instagram and LinkedIn. Follow-up emails were sent to all potential participants who I had email addresses for, and I posted reminders on social media, approximately four weeks after the initial email invitation. Finally, I created a flyer to share at spring conferences, including the Cincinnati Montessori Society conference, the Montessori Educational Programs International conference, and the American Montessori Society conference. See Appendix A for the recruitment communication, scripts and the flyer.

Survey Design

The survey included five sections. The first section of the survey included three multiple choice pre-survey questions which acted as a survey eligibility check. The next section was the Teacher Political Efficacy scale (adapted from Craig & Maggiotto, 1982; Yeich & Levine, 1994)

and included 20 seven point agree to disagree Likert scale questions about participant thoughts on politics, government, and advocacy (internal, external, and collective political efficacy as explained in the following section). The third section of the survey focused on participant experiences with external policies and included three open-ended questions. The final two sections were demographic and background information (18 multiple choice questions) and a request to participate in phase two of the study (one yes/no question, if yes, then contact information was requested). There were 46 questions total on the survey. The survey did not ask participants to identify the name of their school or district and demographic details requested did not identify teachers or schools, unless the participant agreed to participate in the study's second phase. The survey was tested with two Montessori educators and two peers in my doctoral group who anticipated the survey to take approximately 20 minutes to complete (Qualtrics approximated 17 minutes for survey completion). Survey testers also reflected on the following questions:

- Are there any questions that are confusing?
- Did you experience any errors in taking the survey?
- Approximately how long did it take you to complete the survey?

A full version of the survey can be reviewed in Appendix B and each section of the survey is further explained below.

Teacher Political Efficacy Scale

Intended to quantify K-12 teachers' level of teacher political efficacy (TPE), this section of the survey was based on the work of many political science scholars (Balch, 1974; Campbell et al., 1954; Craig & Maggiotto, 1982; Yeich & Levine, 1994). The first section of the survey included three sub-sections: 1) internal political efficacy, 2) external political efficacy, and 3)

collective political efficacy. The sequence of the measure's iterations is detailed in the next several paragraphs.

Campbell et al. (1954) created a questionnaire using four agree-disagree items and proposed the idea of political efficacy as a single dimension. Balch (1974) examined Campbell et al.'s (1954) scale and ultimately identified two dimensions of political efficacy through their study: 1) internal efficacy – individuals' self-perceptions of their capability to comprehend politics and their competence to engage in political activities such as voting and advocacy and 2) external efficacy – perceptions of political system's responsiveness to individual concerns. The absence of external efficacy signifies the belief that individuals cannot influence political outcomes due to the unresponsiveness of government leaders and institutions to their needs. In this way, Balch (1974) moved Campbell et al.'s (1954) work toward a focus on the individual and less on the policy system. Craig and Maggiotto (1982) further operationalized the scale based on Balch (1974) and developed a new measure to assess the two dimensions of political efficacy to understand the "mobilization of people" (Yeich & Levine, 1994). Their measure hypothesized:

> People are most likely to become involved in protest if (a) they feel personally competent to engage in political activity and (b) they perceive the system as unresponsive to their personal interests in the realm of conventional political relations. (Yeich & Levine, 1994, p. 260)

Building on the measure developed by Craig and Maggiotto (1982), Yeich and Levine (1994) proposed yet another component of political efficacy—collective political efficacy. Collective political efficacy refers to perceptions of system responsiveness to "collective

demands for change" or when "masses of people organize to demand change" (p. 260). The measure demonstrated strong reliability, with a coefficient alpha of .87.

To use the political efficacy measure in this study, I made slight language modifications so that it would be more focused on teacher experiences, rather than the generalized "people" or "political system." See Table 3.1 for examples of modifications.

Table 3.1

Example Modifications to Political Efficacy Measure

Original Item	Edited Item
People like me are generally well qualified to participate in the political activity and decision making in our country.	**Teachers** are generally well qualified to participate in political activity and decision making for educational policies.
I feel I have a pretty good understanding of the important political issues which confront our society.	I feel like I have a pretty good understanding of the important political issues which confront our **educational system.**
Generally speaking, those we elect to public office lose touch with the people pretty quickly.	Generally speaking, those we elect to public office **or educational leadership** lose touch with **teachers** pretty quickly.
Dramatic change could occur in this country if people banded together and demanded change.	Dramatic **educational policy** change could occur in this country if **teachers** banded together and demanded change.

Note. Words bolded in the right column indicate language modification to the items.

Experiences with Policies

The third section of the survey included three open-ended questions related to teacher experiences with external policies that affect their school and/or classroom. External policies were defined for participants as any policy, rule, or regulation imposed on a teacher from outside their classroom (e.g., policies from district leadership/administration, states, federal governments, accrediting bodies, etc.). Based on my conceptual framework, I coded the qualitative data using MaxQDA from the open-ended responses. Emerging themes and trends

were then be used to support the quantitative results through triangulation and to build the GLA plan for phase two.

Demographic and Background Information

The fourth section of the survey included demographic questions related to the individual participant, school (and district) characteristics, and past teaching experiences.

Each section of the survey contained variables that were then used for analysis. Table 3.2 outlines variables of each section.

Table 3.2
Survey Variables

Section	Variables
Teacher Political Efficacy	internal political efficacy, external political efficacy, and collective political efficacy (subscales)
Experiences with external policies	policies that support or hinder pedagogy
Teacher Demographics	gender, race, level of credential, level currently teaching, and number of years teaching in a public school
School Characteristics	school Montessori accreditation, requirement of Montessori teaching credential, type of public school, and administrator with Montessori credential
District Characteristics (public schools only)	location of district, size of district, other pedagogies offered in district, and district leaders with Montessori credentials
Past Experiences	past teaching experiences (public and private), past admin experiences, work with Montessori teacher education programs

Data Diagnostics

During data collection, I reviewed survey responses periodically to be sure Qualtrics was working as it should. Once data collection was complete, I downloaded the data from Qualtrics (2022) and saved a file from the raw data to work with in Microsoft Excel. I removed participants who were missing responses for more than one item in the political efficacy scale

(n=38), which left 125 participant responses total. Responses were deidentified and participants were assigned numbers so they could be referenced later. Identifying information of participants who responded yes to interest in phase two was extracted and entered into a separate Microsoft Excel file.

Of the 125 responses, there were three participants with one missing data response. To impute the value of these three question responses, I replaced the missing value with that participant's subdomain score mean. There were 25 participants who did not report any demographic details. In these situations, I chose to retain the data for the policy efficacy tool, in these situations. All analysis was conducted using Jamovi, version 2.3.28. Dr. Angela Murray, Associate Research Professor at the University of Kansas, served as technical support for the quantitative data analysis.

Participants

The final sample (N=125) included a variety of participants. The educators who responded were predominantly White (*n*=78) females (*n*=88) teaching at the early childhood level (*n*=43) with 6-10 years of experience (*n*=33). The type of school where participants currently teach was divided between public (*n*=41) and private (*n*=60). Table 3.3 provides a detailed summary of participant characteristics.

Table 3.3

Survey Participant Information

Characteristic	*n*
Gender	
Female	88
Male	8
Non-binary/third gender	3
Preferred not to say	2
Race/Ethnicity	
American Indian or Alaska Native	2
Asian	2
Black or African American	4
Hispanic/Latinx	11
White	78
Preferred not to say	6
Current Teaching Level	
Infant & Toddler	7
Early Childhood	43
Elementary I (1st – 3rd grade)	27
Elementary II (4th – 6th grade)	8
Secondary (9th – 12th grade)	10
Administration	4
Other	2
Years of Teaching Experience	
1-5 years	12
6-10 years	33
11-15 years	23
16-20 years	11
21+ years	22
Type of School	
Public	41
Private	60

Note. Respondents selected all that apply for race/ethnicity, thus cumulative percent over 100. There were 25 participants that did not report all demographic details. I chose to retain the data for the policy efficacy tool, in these situations.

The 125 survey respondents represented 24 states plus Washington DC (Table 3.4). The largest count from Ohio (*n*=13) is understandable since most of my personal connections are located in Ohio. Other states with four or more respondents were California (*n*=4), Colorado (*n*=6), New York (*n*=4), Texas (*n*=6), and Washington (*n*=4).

Table 3.4

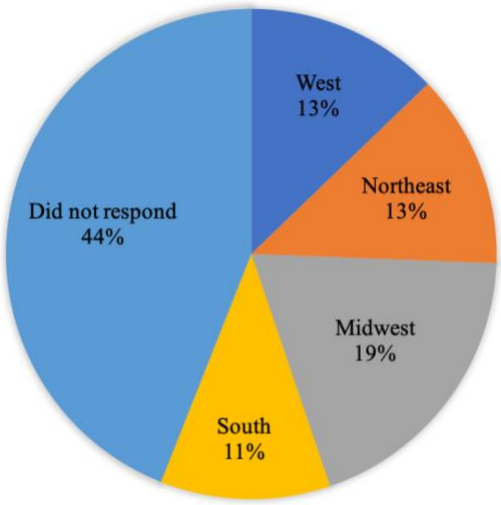
Survey Participant Location by State

State	*n*
California	4
Colorado	6
Connecticut	2
Georgia	2
Illinois	3
Indiana	2
Louisiana	1
Massachusetts	2
Maine	1
Maryland	2
Michigan	2
Minnesota	1
Montana	1
North Carolina	2
New Jersey	2
New York	4
Ohio	13
Pennsylvania	2
South Carolina	2
Texas	6
Virginia	1
Washington	4
Washington DC	1
Wisconsin	3
Wyoming	1
Did not respond	55

Regions represented in the survey respondents are shown in Figure 3.2. While most participants did not respond to the state where their school is located question, the largest percentage of respondents did not respond (*n*=44%), followed by the Midwest (*n*=19%), followed by both the West and Northeast (*n*=13%).

Figure 3.2

Survey Participant Regions



Political Efficacy Scale Data Analysis

Analysis of the political efficacy measure was exploratory and included descriptive statistics, comparisons, and correlations. Table 3.5 outlines research questions connected to scale variables and how results in this phase were analyzed.

Table 3.5

Phase 1 Research Questions, Survey Data Variables, and Analysis

Research Question	Variable	Measure	Analysis
How politically efficacious are Montessori teachers?	Indicators of TPE subscales	Subscale scores calculated from the 7-point Likert scale survey questions	Descriptive Statistics
How do teacher, school, and district characteristics relate to (or predict) the level of teacher TPE?	TPE, Teacher demographics, school & district characteristics	7-point Likert scale survey questions	Comparisons and correlations
How have teachers' experiences with policies shaped their Montessori pedagogy in relation to their TPE?	Teacher experiences with district policies	Open-ended questions	Inductive coding based on the conceptual framework to connect to phase two of this study

Note. Adapted from Jackson-Gordon (2022).

As discussed above, the measure for the political efficacy of Montessori teachers was the Teacher Political Efficacy Scale, section one of the survey. Before the analysis, I reverse-coded positively worded items so that the value indicates the same type of response for every item (10 items total). Scores were calculated for each subscale of teacher political efficacy. A higher score represented a higher teacher political efficacy (TPE) as shown in Table ***3.6*** (Craig, 1980; Craig & Maggiotto, 1982; Yeich & Levine, 1994).

Table 3.6

Political Efficacy Score Range Representations

Low Political Efficacy	< 2.99
Medium Political Efficacy	3.0 to 5.4
High Political Efficacy	> 5.5

Note. Based on the work of Craig, 1980; Craig & Maggiotto, 1982; Yeich & Levine, 1994

Internal political efficacy

Teacher self-perceptions of their capability to comprehend politics and their competence to engage in political activities such as voting and advocacy, otherwise known as internal political efficacy, was measured by five items on the survey (Balch, 1974). Internal consistency using Cronbach's alpha was .62 for the 5-item internal efficacy measure (Sullivan & Artino, 2013). A Cronbach's alpha between .6 and .70 is consistent with previous uses of the internal political efficacy survey and is considered acceptable (Balch, 1974; Tavakol & Dennick, 2011; Yeich & Levine, 1994). The mean score on the five items was 4.82 (*SD* = 1.0, N=125), with a minimum score of 2.0 and a maximum score of 7.0.

External political efficacy

Teacher perceptions of the political system and policymaker responsiveness to their concerns, otherwise known as external political efficacy, was measured by nine items on the survey (Balch, 1974). Internal consistency using Cronbach's alpha was .85 for the 9-item external efficacy measure, which suggests a high level of internal consistency among the items in

the measure (Sullivan & Artino, 2013). The mean score on the nine items was 2.81 (*SD* = .98, N=125), with a minimum score of 1.11 and a maximum score of 5.78.

Collective political efficacy

The belief that a political system responds effectively to demands for change made by large groups of people, otherwise known as collective political efficacy, was measured by six items on the survey (Yeich & Levine, 1994). Internal consistency using Cronbach's alpha was .93 for the 6-item collective efficacy measure, which suggests a high level of internal consistency among the items in the measure (Sullivan & Artino, 2013). The mean score on the nine items was 5.46 (*SD* = 1.10, N=125), with a minimum score of 1.0 and a maximum score of 7.0.

School and teacher characteristics as they relate to TPE

To determine if there is a significant difference between the TPE of educators working in public schools versus private schools and to investigate whether there is a significant difference in the TPE of educators with more or less years of experience, I conducted independent samples t-tests using Jamovi, version 2.3.28.

Survey Validity Considerations

To consider validity of the TPE measure, I ensured a logical association between variables and TPE through expert and peer reviews of the content. For example, members of my dissertation committee and Montessori educators were asked to review the survey tool. I also pilot tested the Qualtrics survey to be sure it was working properly before it was sent to participants. The sample was recruited from all five regions of the United States, increasing generalizability. I assessed replicability by comparing the data across regions and school types.

Limitations

One important limitation to note is the demographic make-up of the survey sample. The participants were predominantly White (*n*=78, 77.2%). Critical voices missing from this sample are Montessori educators of color. The sample in this study included participants that identified as American Indian or Alaska Native (*n*=2, 2.0%), Asian (*n*=2, 2.0%), Black or African American (*n*=4, 4.0%), and Hispanic/LatinX (*n*=11, 10.9%). At the same time, aggregate data from the Integrated Postsecondary Degree System, self-reported by teacher education programs or reported by programs that receive federal student financial aid in the United States, shows approximately 65% of teachers who earned their Montessori degree or credential in 2022 were White, 15% Hispanic or Latino, 5% Asian, 4% Black or African American, and Multi-racial, American Indian, Alaska Natives, and Pacific Islanders made up the remaining 11%. Further, a survey of public resumes showed that 73% of Montessori teachers are white, 11.8% are Hispanic or Latino, 9.8% are Black, 3.3% are Asian, 0.6% are American Indian or Alaska Native, and 1.5% are unknown in race (Zippia, 2021).

While the survey sample is representative of the overall population of Montessori teachers in regard to race, I recognize as an action researcher my role is to ensure all voices are being heard through the data. While the survey link was open for recruitment, I sent the link to the co-executive director of the Black Wildflowers Fund, a non-profit organization that aims to "aim to remove barriers for Black educators who want to pursue leadership pathways and design innovative schools—without compromising their freedom, power, identity, or financial security" (Black Wildflowers Fund, n.d.). Going forward, and in the next cycle of this action research project, I will place more intention on recruitment of Montessori teachers of color.

Integrating the Quantitative and Qualitative Phases

In a mixed methods study, combining quantitative and qualitative approaches must be done with intention (Guetterman et al., 2015). Fetters et al. (2013) identify two deliberate strategies for integrating quantitative and qualitative phases: connecting (through sampling) and building (where one method informs the data collection of the other). In the *Sampling and Recruitment* section of phase two, I outline my approach to connecting the two phases. Additionally, I describe how I built the GLA based on the survey results in the section below.

Phase 2: Participatory: Teacher Experiences with Policy & Advocacy

Deeply convinced that teachers should be essential in shaping policy, I designed the second phase of this study to focus on listening to the experiences of teachers. A Group Level Assessment (GLA) method was selected to emphasize the role teachers should play in the process of policymaking and to better understand their experiences with policies and advocacy. GLA is a collaborative research method where participants come together to generate, analyze, and prioritize ideas. This approach helps identify key issues and create actionable plans, ensuring all participants can share their perspectives and contribute to possible solutions (Vaughn & Lohmueller, 2014). It is typically a seven-step, in-person process, but I adapted it for remote feasibility to include participation from across the country, similar to Jackson-Gordon's (2022) GLA adaptation. Modification included structuring the GLA to include two subphases: 1) asynchronous and 2) synchronous. The GLA method was also originally designed for larger groups but can be modified for different group sizes. For example, Guy (2017) modified the process to be conducted with 12 participants in an online setting. Phase one survey respondents provided deeper insights on survey findings through the GLA process (Vaughn & Lohmueller, 2014).

Sampling and Recruitment

I planned to use purposeful, maximal variation sampling (Creswell & Plano Clark, 2018) to invite teachers from the phase one sample to participate in the GLA. As such, my plan was to invite participants based on demographic criteria such as gender, race, district size, the number of years teaching, and level of TPE (low, medium, and high) to ensure a group with diverse perspectives and experiences. The timing of the sampling strategies was sequential since the survey and GLA occurred at different times but in a sequential order. The strategies were nested, where the teachers completing the survey volunteered to participate in the GLA. Thus, nested sampling *connects* the study's first phase to the second phase.

With the school year coming to a close, I was concerned teacher participants would not be interested in participating in the GLA during the summer months. Purposeful sampling at this time of year may have also resulted in fewer phase two participants. Rather than inviting phase two participants using purposeful, maximal variation sampling all survey participants who responded yes to interest in participating in phase two were invited (*n*=63). Appendix C provides a script for GLA recruitment. The total number of participants who completed the consent form for phase two was 33.

Participants

The sample (N=33) that completed the consent form for phase two included a variety of participants. The educators who responded were predominantly White (*n*=28) females (*n*=33) teaching at the early childhood level (*n*=18) with 11-15 years of experience (*n*=10). The type of school participants currently teach was divided between public (*n*=14) and private (*n*=19). Table 3.7 provides a detailed summary of asynchronous GLA participant characteristics as a subset of the Survey Sample.

Table 3.7

Survey and GLA Asynchronous Subphase Participant Characteristics

Characteristic	Survey Sample	GLA Asynchronous Sample
	n	*n*
Gender		
Female	88	33
Male	8	0
Non-binary/third gender	3	0
Preferred not to say	2	0
Race/Ethnicity		
American Indian or Alaska Native	2	0
Asian	2	1
Black or African American	4	0
Hispanic/Latinx	11	4
White	78	28
Preferred not to say	6	0
Current Teaching Level		
Infant & Toddler	7	2
Early Childhood	43	18
Elementary I (1st – 3rd grade)	27	7
Elementary II (4th – 6th grade)	8	1
Secondary (9th – 12th grade)	10	2
Administration	4	2
Other	2	1
Years of Teaching Experience		
1-5 years	12	4
6-10 years	33	8
11-15 years	23	10
16-20 years	11	4
20+ years	22	7
Type of School		
Public	41	14
Private	60	19

Note. There were 25 participants who did not report all demographic details in the survey. I chose to retain the data, in these situations.

The 33 asynchronous GLA participants represented 16 states plus Washington DC (Table 3.8). The largest count from Ohio (*n*=4) is again, understandable, since most of my personal connections are located in Ohio. Other states with two or more respondents were California (*n*=2), Georgia (*n*=2), Illinois (*n*=2), Maryland (*n*=2), New York (*n*=2), and Washington (*n*=3).

Table 3.8

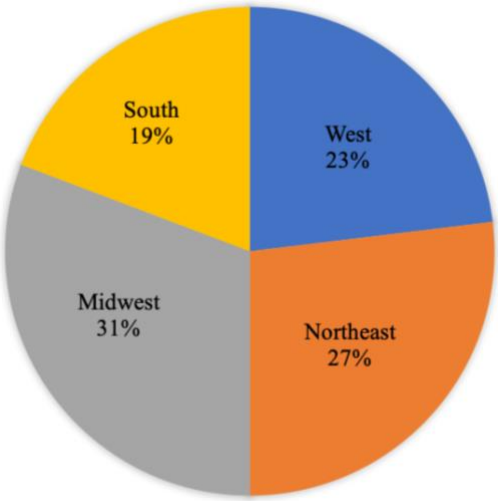
Survey Participant Location by State

State	*n*
California	2
Colorado	1
Connecticut	1
Georgia	2
Illinois	2
Indiana	1
Louisiana	1
Massachusetts	1
Maryland	2
Minnesota	1
New York	2
Ohio	4
South Carolina	1
Texas	1
Washington	3
Washington DC	1

Regions represented in the phase two respondent sample for the asynchronous GLA phase are shown in Figure 3.3. While the largest percentage of respondents were from the Midwest (*n*=31%), the other three regions closely followed, Northeast (*n*=27%), West (*n*=23%), and the South (*n*=19%).

Figure 3.3

Phase Two Participant Regions



The GLA method included two subphases, 1) asynchronous and 2) synchronous. Of the 33 asynchronous participants for the first subphase, eight participated in the synchronous subphase of the GLA. The educators who participated synchronously were all White (*N*=8) females (*N*=8), primarily teaching at the early childhood level (*n*=6) with 11-15 years of experience (*n*=4). Most participants of the synchronous subphase currently teach at a private school (*n*=7). Table 3.9 provides a detailed summary of synchronous GLA participant characteristics.

Table 3.9

GLA Asynchronous and Synchronous Subphase Participant Characteristics

Characteristic	GLA Asynchronous Sample	GLA Synchronous Participants
	n	*n*
Gender		
Female	33	8
Male	0	0
Non-binary/third gender	0	0
Preferred not to say	0	0
Race/Ethnicity		
American Indian or Alaska Native	0	0
Asian	1	0
Black or African American	0	0
Hispanic/Latinx	4	0
White	28	8
Preferred not to say	0	0
Current Teaching Level		
Infant & Toddler	2	0
Early Childhood	18	6
Elementary I (1st – 3rd grade)	7	1
Elementary II (4th – 6th grade)	1	0
Secondary (9th – 12th grade)	2	0
Administration	2	1
Other	1	0
Years of Teaching Experience		
1-5 years	4	1
6-10 years	8	1
11-15 years	10	4
16-20 years	4	1
20+ years	7	1
Type of School		
Public	14	1
Private	19	7

Similar to the survey sample, GLA participants were from a variety of states. Regions represented in the synchronous subphase include Ohio (*n*=2), and one participant from each of the following states: Colorado, Connecticut, Georgia, Illinois, Massachusetts, and New York.

The TPE subscale scores for the asynchronous and synchronous participants of the GLA were similar across all subscales. However, the standard deviation of collective political efficacy with the asynchronous sample and the standard deviation of external political efficacy indicates

the scores are more dispersed over a wider range than the others. Table 3.10 presents all TPE subscale score results for the asynchronous and synchronous GLA participants.

Table 3.10

Asynchronous and Synchronous GLA Participant TPE Subscale Score Results

Political Efficacy Subscale	Asynchronous GLA Participants (*N*=33)				Synchronous GLA Participants (*N*=8)			
	Mean	SD	Min.	Max.	Mean	SD	Min.	Max.
Internal Political Efficacy	4.73	0.979	3.00	7.00	4.45	0.707	3.40	5.60
External Political Efficacy	2.80	0.956	1.11	5.78	2.99	1.34	1.11	5.78
Collective Political Efficacy	5.47	1.16	2.00	7.00	5.88	0.722	4.50	7.00

Table 3.11 shows the TPE subscale score result frequencies for the asynchronous and synchronous GLA participants. Again, the two samples are similar in the low, medium, high scores for each subscale and in each subphase of the GLA.

Table 3.11

Asynchronous and Synchronous GLA Participant TPE Subscale Score Frequency Results

Political Efficacy Subscale	Asynchronous Subphase (*N*=33)	Synchronous Subphase (*N*=8)
	n	*n*
Internal Political Efficacy		
Low	0	0
Medium	24	7
High	9	1
External Political Efficacy		
Low	21	4
Medium	11	3
High	1	1
Collective Political Efficacy		
Low	1	0
Medium	14	2
High	18	6

GLA Design

Raider-Roth et al. (2019) describes a GLA as a "process in which a group generates data by responding to poster prompts, collectively analyzes the data, selects the themes that speak loudest to them, and then chooses action steps to address the challenges and opportunities they have identified" (p. 189). The steps of a GLA typically occur in person. However, the GLA for this study was modified as outlined in Table 3.12. The first column describes the steps of a typical GLA and the second column describes how the steps took place in this study. For the GLA two subphases, I utilized the technology tools Padlet and Zoom.: 1) asynchronous using a collaborative online platform called Padlet (Padlet.com) and 2) a synchronous meeting using Zoom (Zoom.us).

Table 3.12

GLA Modifications for Current Study

GLA Steps in Vaughn and Lohmueller (2014)		GLA Steps for Current Study	
Synchronous	**Climate setting:** review GLA process and participant roles, icebreaker	**Climate setting:** the first two columns of the padlet dedicated to explaining the process of responding to prompts and directions for how to post prompts or comments. Video instructions with transcript and written instructions were offered.	Asynchronous Phase
	Generating: participants respond to GLA prompts concurrently throughout the room on large chart paper	**Generating:** participants responded to prompts on the virtual platform in their own time.	
		Climate setting: participant introductions, consent reminders, explaining the process, and warmth-builder question.	Synchronous Phase
	Appreciating: participants review each other's responses, add additional comments, and discuss	**Appreciating & Reflecting:** Combined during synchronous session - participants review all prompt responses, add comments, or express agreement by clicking heart on prompts in padlet while also reflecting on initial thoughts and reflections individually for their own processes.	
	Reflecting: participants independently think about the data, write down initial thoughts or reflections		
	Understanding: large group is divided into small groups and assigned multiple prompts; they identify 3-5 themes and come back to the whole group to report out themes while the facilitator records themes from the whole group.	**Understanding:** the large group was placed in smaller groups in breakout rooms via Zoom; each room is assigned multiple prompts and will analyze the data to find 3-5 themes. The facilitator will float between groups for support and encouragement. Notes will be recorded on google drive files shared with each group.	
	Selecting: the whole group chooses the most important ideas together.	**Selecting:** the whole group will vote on the most important ideas using Zoom tools such as polls or the chat function.	
	Action: participants discuss and identify the next steps.	**Action:** the whole group will discuss potential recommendations from themes, which will then be used later to create a list of recommendations and strategies to support teachers in speaking up for or against policies that shape their Montessori pedagogy.	

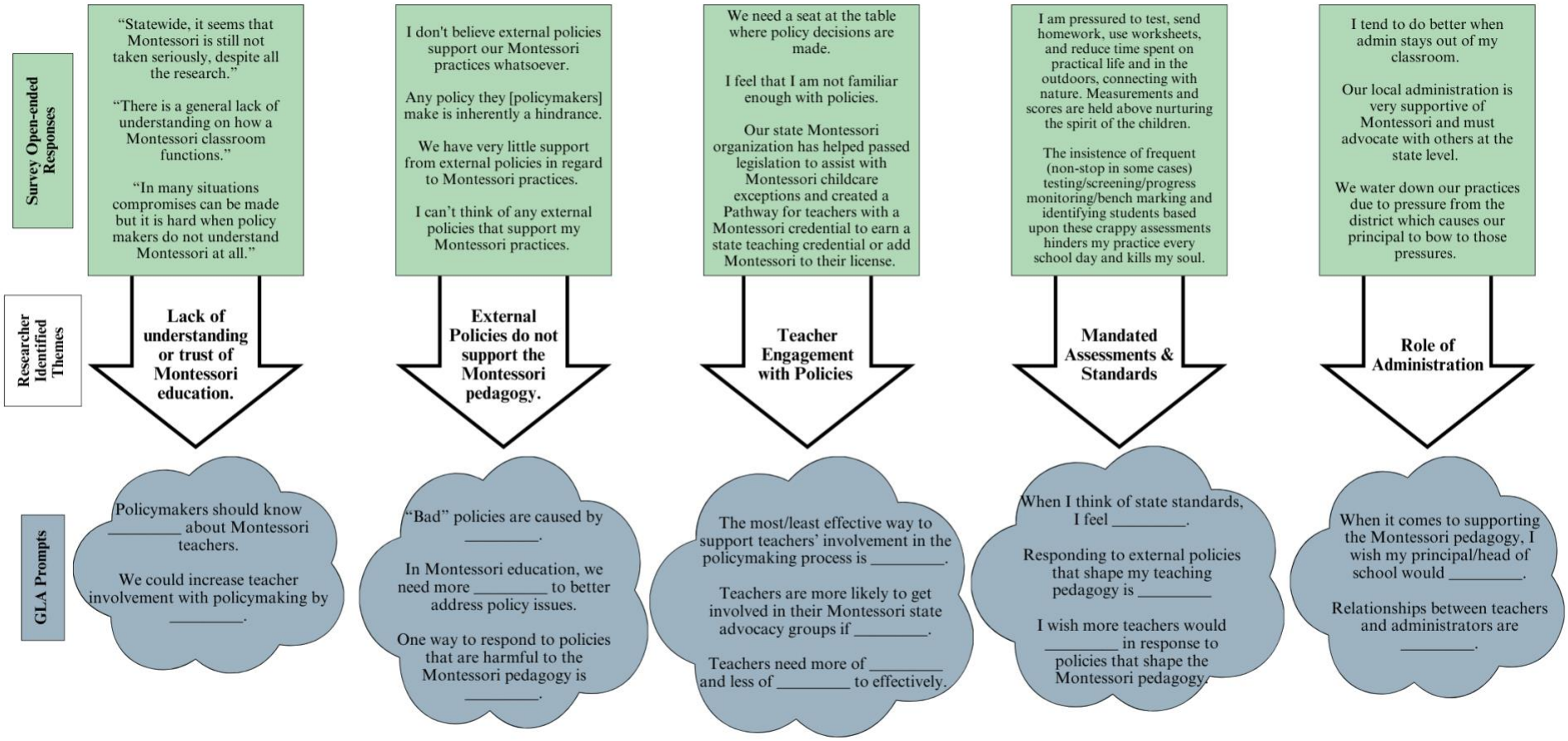
Building the GLA from the Survey Results

One strategy for integrating in a mixed methods study is known as *building*, where one method informs the data collection of the other (Fetters et al., 2013). Phase one survey results were used to build the GLA prompts in the phase two. The GLA prompts were developed based

on the survey results and analysis of the open-ended responses. I first analyzed the open-ended response data using an inductive approach to allow codes to emerge progressively (Miles et al., 2014). Then, I used a thematic analysis approach to collate codes into themes (Braun & Clarke, 2006). I identified five themes in the open-ended response data: 1) lack of understanding or trust of Montessori education, 2) external policies do not support the Montessori pedagogy, 3) teacher engagement with policies, 4) mandated assessments and standards, and 5) role of administration. Finally, I developed the GLA prompts based on the identified themes. Figure 3.4 shows example open-ended responses, connected to themes identified during analysis, then developed into GLA prompts. A complete list of 26 prompts can be found in Appendix D. Once fully developed, the prompts were then added to an online collaborative platform called Padlet (Padlet.com). Appendix E provides a screenshot of the Padlet for this study.

Figure 3.4

Building: Survey Open-ended Responses, to Researcher Identified Themes, to GLA Prompts

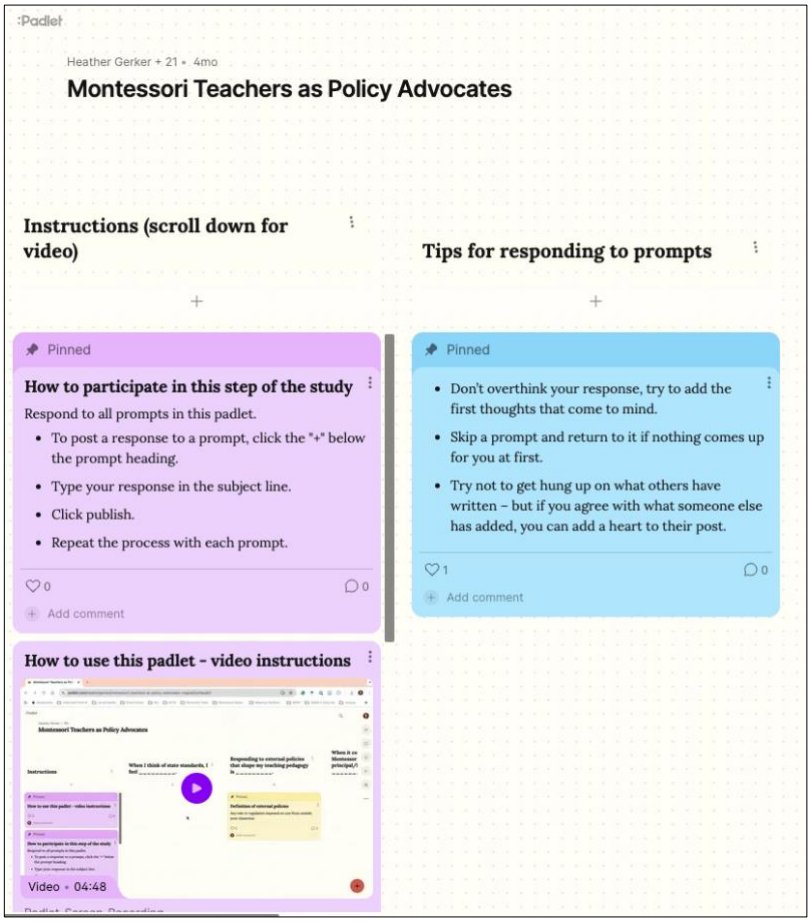


GLA Asynchronous Subphase

The Padlet was used to facilitate the asynchronous steps of the GLA, which were the first two steps in the second column of Table 17: 1) climate setting and 2) generating. The first two columns on the Padlet were dedicated to instructions for how to use the Padlet and tips for how to respond to the prompts, as shown in Figure 3.5. Instructions were offered in written and video format with a video transcript included.

Figure 3.5

Screenshot of GLA Padlet's first two columns



Note. The video transcript was provided just below the video.

Participants were encouraged to review the instructions and then begin responding to the prompts. The 33 participants generated 288 responses and 437 reactions to responses (hearts).

Participants were asked to respond to the Padlet prompts before the synchronous meeting two weeks later.

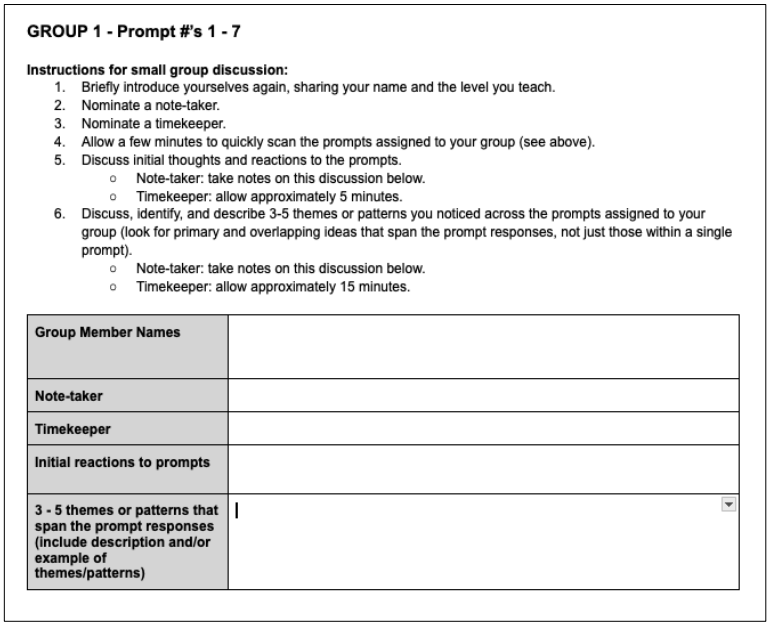
GLA Synchronous Subphase

Five steps, shown in Table 3.12, of the GLA were then completed during one synchronous Zoom meeting. Technical assistance and observation note-taking was provided for this meeting from two doctoral students, Mindy Gold at University of Louisville and Claire Underwood at University of Cincinnati. Appendix F provides scripts for directions of the synchronous subphase emailed to phase two participants.

Eight participants joined the 1-hour synchronous meeting. The full agenda for the Zoom meeting is provided in Appendix G. The meeting began with sharing consent information one final time, offering an opportunity for questions or for participants to leave the meeting. The *climate setting* question was, what is bringing you joy right now as you wrap up the school year? Participants shared comments about spending time with family and the beautiful weather in their area. The second step was *appreciating and reflecting,* where participants were provided with the link to the Padlet and spent ten minutes reviewing all prompt responses, adding comments, or expressing agreement by clicking the heart on the prompts while also reflecting on initial thoughts and reflections individually. Moving to the third step of the GLA, *understanding*, participants were placed in groups of two for 20 minutes and given the instructions as outlined in Figure 3.6. Each partner set was assigned multiple prompts from the Padlet and asked to share initial reactions to the prompts and to identify 3-5 themes or patterns that spanned the prompt responses. Each group recorded notes directly on a Google document, shared with the researcher.

Figure 3.6

GLA Step: Understanding



GROUP 1 - Prompt #'s 1 - 7

Instructions for small group discussion:

1. Briefly introduce yourselves again, sharing your name and the level you teach.
2. Nominate a note-taker.
3. Nominate a timekeeper.
4. Allow a few minutes to quickly scan the prompts assigned to your group (see above).
5. Discuss initial thoughts and reactions to the prompts.
    - Note-taker: take notes on this discussion below.
    - Timekeeper: allow approximately 5 minutes.
6. Discuss, identify, and describe 3-5 themes or patterns you noticed across the prompts assigned to your group (look for primary and overlapping ideas that span the prompt responses, not just those within a single prompt).
    - Note-taker: take notes on this discussion below.
    - Timekeeper: allow approximately 15 minutes.

Group Member Names	
Note-taker	
Timekeeper	
Initial reactions to prompts	
3 - 5 themes or patterns that span the prompt responses (include description and/or example of themes/patterns)	

After 20 minutes, the groups were invited back to the main Zoom room for the *selecting* and *action* steps of the GLA. Each group then shared the themes they identified with the whole group. The full list of themes that the group identified in the step of *understanding* included:

- Teachers feel stuck (confused, frustrated, disconnected) from policies.
- Need time and space to dedicate to thinking about policies.
- We do not even understand how things are working.
- How can we understand and utilize policy to the fullest extent?
- We do not know where to begin.
- We are so caught up in the many day-to-day tasks of being a Montessori teacher.
- We need funding, for accreditation since it supports the pedagogy, for our time we put into advocacy, and for professional development to understand the policy systems.

As a researcher, I noticed several areas of overlap in these themes. However, I facilitated the conversation to keep each item separate to prioritize participant voice and experience. I then asked them to select the top three themes that resonated with them the most. Together, the group merged some themes and identified the following:

1. Teachers are overstretched. We need time and space dedicated to understanding policies.
2. Teachers do not know enough about policymaking processes or systems to know what to do when policies do not work with our pedagogy.
3. Teachers need access to funding, to the policymakers and to the policymaking process.

Finally, participants were asked: what are possible action items we might consider based on these themes? This question guided the final step of the GLA, *action*. At this point in the meeting, we were very limited on time (approximately three minutes remaining). As such, the comments from participants were minimal and quick. They included:

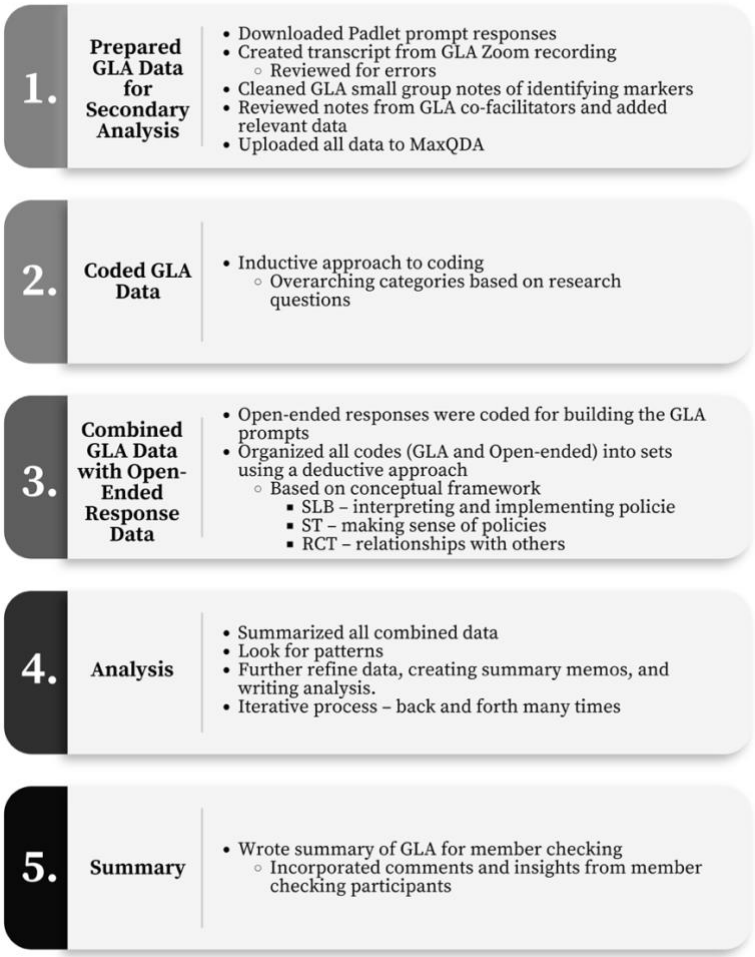
- It would be really interesting and/or helpful to document what a typical day/week looks like for Montessori teachers.
- Wish there was like a crash course on policy - in plain language and simple training
- Policymakers already disregard conventional public teachers when making policy, so how do we get them to care about Montessori teachers and schools?
- Policymakers and School leaders need to understand teachers are already stretched, we need time to advocate for ourselves and support to do it.

GLA Data Analysis

While the GLA participants co-analyzed their generated data in the synchronous session, I completed a secondary analysis to ensure that all relevant ideas were thoroughly incorporated into the prompts and discussion as show in Figure 13. The findings from the secondary analysis integrated with the participant generated themes and open-ended response data from the survey in phase one were then used to develop a draft of themes and recommendations to be shared in a later member-checking stage of the second phase.

Figure 3.7

GLA Secondary Analysis Steps



I conducted a secondary analysis due to the time limited time for analysis and action steps with the participants during the Zoom meeting. For the secondary GLA analysis, I prepared the data by first downloading a spreadsheet of all Padlet prompt responses, creating transcripts of the synchronous Zoom meeting, cleaning the Zoom meeting small group notes of identifying markers, and uploaded all data into MaxQDA Plus 24 (VERBI Software, 2024). Then, I coded the data using an inductive approach and created broad overarching categories of codes aligned to the research questions for this phase of the study. For example, the first research question in this study is: *How politically efficacious are Montessori teachers?* Codes aligned with this research question are Teachers, Advocacy, and Response to Policies. Finally, I organized codes into sets using a deductive approach based on my conceptual framework for this study—combining the theories of Street Level Bureaucracy, Sensemaking Theory, and Relational Cultural Theory. After reviewing notes from co-facilitators and my memo entries, I produced a summary of the GLA for the member checking process.

GLA Validity

The final step in phase two was member checking (Lincoln & Guba, 1985). After the synchronous session, and the secondary analysis process, a summary of the data was produced. Appendix H shows the member checking email script sent to all GLA participants (from both synchronous and asynchronous subphases, n=33). Participants were asked to review a summary of findings. The following are guiding questions provided to participants to support their reflection of the summary (McKim, 2023):

- After reading through the summary of findings, what are your general thoughts?
- How accurately do you feel the summary captures your thoughts/experiences?
- What could be added to the summary to capture your experiences more fully?

- If there is anything you would like removed, what would that be and why?

Anderson et al. (2007) explains the criteria for a valid action research study may be different than the criteria for a social science research project. For example, outcome validity acknowledges that rather than solving a problem simply, the problem is reframed in a more complex way and may lead to a new set of questions or problems. Process validity emphasizes the extent that problems are framed and solved in a way that supports ongoing learning. Importantly, outcome validity is dependent on process validity. The final report for this study that was shared with participants for member checking reframes Montessori teacher experiences with policies in a way that supports the continuation of cycles of inquiry (outcome validity). The study's recommendations also include new ways of thinking about Montessori teacher advocacy (process validity). Finally, dialogic validity refers to dialogue with peers. In this study, I asked two people to act as critical friends—people who are familiar with Montessori education policies and advocacy (one is a fellow Montessori Public Policy Initiative board member and the other is a Montessori educator and action researcher).

Limitations

Similar to the survey sample, a critical limitation with the GLA sample is the lack of experiences Montessori teachers of color as participants. Going forward, and in the next cycle of this action research project, I will place more intention on recruitment of Montessori teachers of color. Another limitation was the short time period participants had to develop action items during the GLA. To mitigate this, I included all 33 GLA participants in the member checking process. I spoke with one member checking participant on the phone and engaged in email correspondence with five other member checking participants.

Mixed Methods Merging

The intent of utilizing an explanatory sequential mixed methods design is to use the qualitative (phase two) findings to provide a strong explanation of the quantitative (phase one) findings (Creswell & Plano Clark, 2018). The results from both phases of the study are also *merged* to "more fully answer those [research] questions and develop a more robust and meaningful picture of the research problem" (Ivankova et al., 2006, p.14). Fetters et al. (2013) describes different approaches to interpreting and reporting data. For this study, I combined open ended response data from the survey in phase one with the GLA data in phase two during the coding and analysis steps as shown in Figure 13. Additionally, I analyzed the data at the interpreting level by integrating through narrative and joint displays (Fetters et al., 2013). Joint displays are visual representations of quantitative and qualitative data that are used to support mixed methods integration (Creswell & Plano Clark, 2018; Guetterman et al., 2015). I used joint displays to visualize and make sense of new insights beyond the findings of each separate phase of the study.

MMR Validity

Threats to validity are specific to each type of mixed method research design. Creswell and Plano Clark (2018) describe potential threats for an explanatory sequential design as 1) not identifying important quantitative results, 2) failing to explain contradictory quantitative results with qualitative data, and 3) failing to connect quantitative results with the qualitative data. To minimize threats to this study, the survey results informed the qualitative GLA plan, the GLA sample was a nested sub-sample of the quantitative sample, and all findings were integrated to develop a summary that was then member-checked. To interpret the mixed methods findings from the survey and GLA, I used joint display and narrative integration techniques (Creswell &

Plano Clark, 2018) to visualize how the qualitative data enhanced the quantitative data. This integration provided a more comprehensive understanding of the political efficacy of Montessori teachers and their experiences with policies.

Furthermore, previously mentioned strategies to minimize threats include dissertation committee and peer review, member checking through GLA and participant review of the findings summary, and carefully considering philosophical assumptions and researcher foundations that undergird the study.

MMR Ethical Issues

The first step in ensuring compliance with the ethical standards for research was to gain approval by the Institutional Review Board (IRB) at the University of Cincinnati. Approval was granted for this study (IRB # 2023-1082). Preissle et al. (2015) contend that "ethics should be a central and routine" part of mixed methods research (p. 149). In an explanatory sequential design, ethical issues are emergent and may occur over time – urging researchers to be intentional in their considerations of ethical issues (Preissle et al., 2015).

I used several specific strategies in anticipation of ethical issues. First, all participants received consent information prior to participating in the study. The survey included identifiable information and participant names if they volunteered for follow-up phases of the study. To mitigate issues with confidentiality, all information was stored on a password protected Qualtrics account and a password protected computer.

The two phases of this study took place over a year. This prolonged timeline may have caused some participants to be sampled multiple times (Creswell & Plano Clark, 2018; Preissle et al., 2015). To address this, I explained the phases to participants in each consent information document and during recruitment. Also, participants had the option to volunteer for additional

phases of the study or to stop at any time. Ethical dissemination of findings included working with participants for co-authoring opportunities, member checking of recommendations created based on findings, and creating publications for different audiences (e.g., policymakers, Montessori educators, district administration) (Stadnick et al., 2021).

Beyond ethical considerations specific to mixed methods research, participatory research methods should be assessed for ethical challenges. The GLA may have produced emotional responses from participants – in the sharing of experiences (Cahill, 2007). To address this, I intentionally continued to build trust and collaborated with participants throughout the study. Transparent communication is a personal value for me in my daily life. As such, communicating all areas of this study transparently with participants from the beginning of the study and through the dissemination of the findings was of utmost importance. My commitment to accessible Montessori education also guided ethical judgments throughout the study.

MMR Strengths and Limitations

The major strengths of this study include addressing a topic and focus area – Montessori teacher political efficacy and their engagement in advocacy – that has received little attention in the extant literature and utilizing participatory method that emphasizes teacher voices and experiences. The quantitative and qualitative phases each have their own limitations as described previously. However, there are also limitations across both phases that should be considered when reviewing the study results. The participant samples were predominantly White, which may lead to more general findings that lack the specificity needed to enhance Montessori teacher advocacy efforts. Additionally, the generalizability of the results is uncertain due to the small final sample sizes (N=125 survey participants, n=33 GLA participants). Despite these

limitations, it is important to note the valuable insights gained from participants representing 24 states and Washington, D.C.

Chapter 3 Summary

This study applied an explanatory sequential mixed methods approach to understanding how Montessori teachers respond to education policies and how if at all, they have engaged in policy advocacy at the local, state, or national levels. It also included a participatory method to identify what Montessori educators need to speak up for or against policies that shape their Montessori pedagogy. Participants were Montessori teachers currently working in a Montessori school. The mostly quantitative survey in phase one was completed by 125 participants and analysis included descriptive statistics, comparisons, and correlations. The subsequent qualitative phase included a Group Level Assessment, divided into two subphases: 1) asynchronous (n=33) and 2) synchronous (n=8). GLA data was co-analyzed by the participants and I conducted a secondary analysis using both inductive and deductive approaches. Finally, I explained the mixed methods merging analysis approach using joint displays and narrative integration.

Chapter 4: Findings

This chapter describes the findings of each phase including mixed methods integration. I begin with presenting the results of the quantitative phase to explain the political efficacy of Montessori teachers. Next, I present the results of the qualitative phase to better understand teacher experiences with policy and advocacy. Finally, I use mixed methods strategies for analysis to address how national trends of TPE and teacher experiences with policies combine to improve Montessori teacher policy advocacy. Table 4.1 provides a reminder of the research questions for each phase.

Table 4.1

Research Questions for Each Phase

Study Phase	Research Questions
Phase 1 - Survey: Teacher Political Efficacy (TPE)	• How politically efficacious are Montessori teachers? • How do teacher, school, and district characteristics relate to (or predict) the level of TPE? • How do different types of schools (public, charter, private) correlate to TPE?
Phase 2 - Participatory: Teacher Experiences with Policy & Advocacy	• What conditions and strategies have supported teachers in effectively navigating policies that shape their Montessori pedagogy? • What do Montessori teachers need in order to advocate for Montessori education? • What conditions and strategies are needed to support Montessori teachers in their policy advocacy?
Integration	• How do the national trends on TPE findings and teacher experiences with policies combine to improve teacher policy advocacy in Montessori schools?

Phase 1 - Survey: Teacher Political Efficacy

The measure for the political efficacy of Montessori teachers was the Teacher Political Efficacy Scale, section one of the survey. It included three sub-scales: 1) internal political -

teacher self-perceptions of their capability to comprehend politics and their competence to engage in political activities such as voting and advocacy efficacy, 2) external political efficacy - teacher perceptions of the political system and policymaker responsiveness to their concerns, and 3) collective political efficacy - belief that a political system responds effectively to demands for change made by large groups of people, for a total of 20 items with 7-point Likert scale response options. Analysis of the political efficacy subscale measures were exploratory and included descriptive statistics, comparisons, and correlations.

How politically efficacious are Montessori teachers?

To determine the political efficacy of Montessori teachers, scores were calculated for the subscales: internal political efficacy (M = 4.82, SD = 1.00), external political efficacy (M = 2.81, SD = 0.98), and collective political efficacy (M = 5.46, SD = 1.10), as shown in Table 4.2.

Table 4.2

Political Efficacy Properties for TPE Subscales

	Mean	SD	Min.	Max.	Cronbach's α
Internal Political Efficacy	4.82	1.00	2.00	7.00	.62
External Political Efficacy	2.81	0.980	1.11	5.78	.85
Collective Political Efficacy	5.46	1.10	1.00	7.00	.93

Teachers with a TPE score below 2.99 would be considered to have a low political efficacy, a TPE score is between 3.0 and 5.4 would be considered to have a medium political efficacy, and TPE is a score greater than 5.5 would be considered to have a high political efficacy (Craig, 1980; Craig & Maggiotto, 1982; Yeich & Levine, 1994). Frequencies of the TPE subscale scores are shown in Table 4.3. Across all TPE subscale scores, the scores were distributed across levels. The internal scores were mostly in the medium range, n = 86. External political efficacy scores were predominately in the low range, n = 76. Finally, collective political

efficacy scores were distributed between the medium and high ranges (medium, $n = 58$; high, $n = 64$).

Table 4.3

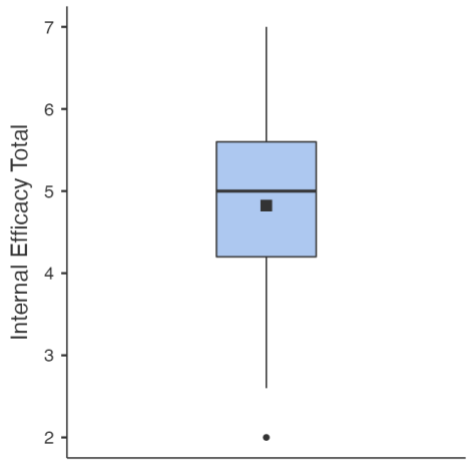
Political Efficacy Frequencies for TPE Subscales (N=125)

Political Efficacy Subscale	*n*
Internal Political Efficacy	
Low	4
Medium	86
High	35
External Political Efficacy	
Low	75
Medium	49
High	1
Collective Political Efficacy	
Low	3
Medium	58
High	64

While the internal political efficacy falls in the medium range (between 3.0 and 5.4), Figure 4.1 suggest that 50% of the internal political efficacy scores fall between 4.2 and 5.6, with a median around 5, which falls on the high end of the medium political efficacy range (Craig & Maggiotto, 1982).

Figure 4.1

Boxplot of Internal Political Efficacy Subscale Scores



Note. The thick horizontal line in the middle of the box is approximately 5, indicating the median score. The box represents the middle 50% of the data. There is one visible outlier, represented by the dot at about 2 on the scale. The rest of the data is represented by the whiskers and is from about 2.6 to 7.

The correlation matrix presented in Table 4.4 shows the relationships among internal efficacy, external efficacy, and collective efficacy. The results indicate there is not a statistically significant relationship between internal efficacy and external efficacy ($r = 0.115$, $p = 0.201$, $df = 124$). Similarly, internal efficacy and collective efficacy lacks statistical significance ($r = 0.134$, $p = 0.136$, $df = 124$). However, external efficacy and collective efficacy demonstrate a statistically significant relationship ($r = 0.236$, $p = 0.008$, $df = 124$). These findings show that only the association between external efficacy and collective efficacy reaches statistical significance. The overall pattern indicates that these efficacy measures, while related, are largely distinct constructs with limited shared variance.

Table 4.4

Subscale Correlations for Political Efficacy Subscales (Pearson)

TPE Type		1	2	3
1. Internal Political Efficacy	Pearson	-		
	df	-		
	p-value	-		
2. External Political Efficacy	Pearson	0.115	-	
	df	124	-	
	p-value	0.201	-	
3. Collective Political Efficacy	Pearson	0.134	0.236	-
	df	124	124	-
	p-value	0.136	0.008*	-

Note. * p < .01

How do teacher, school, and district characteristics relate to (or predict) the level of TPE?

To investigate whether there is a significant difference in the TPE of educators with more or less years of experience, I first ran descriptive statistics on the years of experience responses as shown in Table ***4.5***.

Table 4.5

Survey Participant Years of Experience

Years of Experience	*n*
1-5 years	12
6-10 years	33
11-15 years	23
16-20 years	11
20+ years	22

Teaching experience was distributed across the five categories, with the 6-10 years range having the highest number (*n*=33). This was followed closely by the 11-15 years category (*n*=23) and the more than 20 years range (*n*=22). I then divided the experience levels into two groups: those with less than 10 years and those with 10 years or more, allowing me to conduct an

independent samples t-test. The descriptive statistics of the two groups are presented in Table 4.6.

Table 4.6

Survey Participant Years of Experience TPE

TPE Type	Group	*n*	Mean	SD	SE
Internal Political Efficacy	Less than 10 years	45	4.84	1.133	0.169
	10 years or more	56	4.81	0.931	0.1244
External Political Efficacy	Less than 10 years	45	2.58	0.830	0.124
	10 years or more	56	3.00	1.027	0.1372
Collective Political Efficacy	10 years or less	45	5.36	1.327	0.198
	10 years or more	56	5.42	0.987	0.1319

For internal political efficacy, teachers with less than 10 years of experience had a mean score of 4.84 (SD = .133, *n*=45), while those with 10 or more years had a mean score of 4.81 (SD = 0.931, *n*=56). For external political efficacy, the mean score for teachers with less than 10 years of experience was 2.58 (SD = 0.830, *n*=45), compared to a mean of 3.00 (SD = 1.027, *n*=56). For collective political efficacy, teachers with less than 10 years of experience had a mean score of 5.36 (SD = 1.327, *n*=45) while those with more than 10 years had a mean of 5.42 (SD = 0.987, *n*=56).

To determine if there is a statistical difference on the TPE subscales between participants with less than 10 years of experience and 10 years or more of experience, I conducted an independent samples t-test as shown in Table 4.7.

Table 4.7

Years of Experience Independent Samples T-Test

TPE Type	*t*	df	*p*	Mean difference	SE difference		Effect Size
Internal Political Efficacy	0.121	99.0	0.904	0.0248	0.205	Cohen's d	0.0242
External Political Efficacy	-2.186	99.0	0.031	-0.4133	0.189	Cohen's d	-0.4376
Collective Political Efficacy	-0.233	99.0	0.816	-0.0537	0.230	Cohen's d	-0.0467

Internal Political Efficacy. There was not a significant effect of years of experience on internal political efficacy, $t(99.0) = 0.121$, $p = 0.904$, $d = 0.024$. Specifically, results show that participants with 10 years of experience or more ($M = 4.81$, $SD = 0.931$) do not have statistically significant higher internal political efficacy score than participants with less than 10 years of experience ($M = 4.84$, $SD = 1.133$).

External Political Efficacy. There was a significant effect of years of experience on external political efficacy, $t(99.0) = 2.186$, $p = 0.031$, $d = 0.438$. Specifically, results show that participants with 10 years or more of experience ($M = 3.00$, $SD = 1.027$) have statistically significantly higher external political efficacy scores than participants with less than 10 years of experience ($M = 2.58$, $SD = 0.830$). This indicates that participants with 10 years or more of experience perceive policymakers are responsive to their concerns more than those with less than 10 years of teaching experience perceive policymakers to be responsive of their concerns. There may be many reasons for this and would require further investigation. For example, perhaps policymakers are more responsive to educators now than they have been in the past.

Collective Political Efficacy. There was not a significant effect of years of experience on collective political efficacy, $t(99.0) = -0.233$, $p = 0.816$, $d = -0.047$. Specifically, results show that participants with 10 years or more of experience ($M = 5.42$, $SD = 0.987$) do not have

statistically significant higher collective political efficacy scores than participants with less than 10 years of experience (M = 5.36, SD = 1.327).

How do different types of schools (public, charter, private) correlate to TPE?

To determine if there is a significant difference between the TPE of educators working in public schools versus private schools, I first ran descriptive statistics as shown in Table 4.8.

Table 4.8

Public and Private School Participant TPE scores

TPE Type	Group	N	Mean	SD	SE
Internal Political Efficacy	Public	41	5.02	0.964	0.151
	Private	60	4.69	1.044	0.1347
External Political Efficacy	Public	41	2.77	0.779	0.122
	Private	60	2.84	1.075	0.1388
Collective Political Efficacy	Public	41	5.34	1.448	0.226
	Private	60	5.43	0.893	0.1153

Type of school was distributed closely between the two groups, with slightly more participants from private schools (n=60) than public schools (n=41). Internal political efficacy mean score for public school participants was 5.02 (SD = 0.964), compared to a mean of 4.69 (SD = 1.044) for private school participants. For external political efficacy, the mean for public school participants was 2.77 (SD = 0.779), while the mean for private school participants was 2.84 (SD = 1.075). Finally, for collective political efficacy, the mean for public school participants was 5.34 (SD = 1.448) and for private school participants, it was 5.43 (SD = 0.893).

I conducted independent samples t-tests to determine if there is a significant difference between the TPE of educators working in public schools versus private schools as shown in Table 4.9.

Table 4.9

Public and Private School Participants Independent Samples T-Test

TPE Type	*t*	df	*p*	Mean difference	SE difference		Effect Size
Internal Political Efficacy	1.623	99.0	0.108	0.3328	0.205	Cohen's d	0.3288
External Political Efficacy	-0.340	99.0	0.735	-0.0665	0.196	Cohen's d	-0.0688
Collective Political Efficacy	-0.400	99.0	0.690	-0.0932	0.233	Cohen's d	-0.0810

Internal Political Efficacy. There was not a significant effect of public or private school participants scores of internal political efficacy, $t(99.0) = 1.623$, $p = 0.108$, $d = 0.3288$. Specifically, results show that public school participants ($M = 5.02$, $SD = 0.964$) do not have statistically significant higher internal political efficacy score than private school participants ($M = 4.69$, $SD = 1.044$).

External Political Efficacy. There was not a significant effect of public or private school participants scores of external political efficacy, $t(99.0) = -0.340$, $p = 0.735$, $d = -0.0688$. Specifically, results show that public school participants ($M = 2.77$, $SD = 0.779$) do not have statistically significant higher external political efficacy score than private school participants ($M = 2.84$, $SD = 1.075$).

Collective Political Efficacy. There was not a significant effect of public or private school participants scores of collective political efficacy, $t(99.0) = 0.400$, $p = 0.690$, $d = -0.081$. Specifically, results show that public school participants ($M = 5.34$, $SD = 1.448$) do not have statistically significant higher external political efficacy score than private school participants ($M = 5.43$, $SD = 0.893$).

Phase 1 Summary of Findings

Montessori teachers were found to have internal political efficacy in the high end of the medium political efficacy range ($M = 4.82$, $SD = 1.00$), external political efficacy in the low range ($M = 2.81$, $SD = 0.98$), and collective political efficacy in the high range ($M = 5.46$, $SD = 1.10$). Years of teaching experience do not have a significant effect on the internal political efficacy or collective political efficacy. However, there was a significant effect of years of experience on external political efficacy. Results show that participants with 10 years of experience or more have statistically significant higher external political efficacy scores than participants with less than 10 years of experience, meaning the longer an educator is teaching, the more likely they are to believe policymakers are responsive to their needs. In addition, there was not a significant effect of public or private school participants scores across all subscales. This indicates that public school teachers and private school teachers have similar political efficacy, internally, externally, and collectively.

Phase 2 - Participatory: Teacher Experiences with Policy & Advocacy

Three major themes emerged from the GLA prompts, the synchronous Zoom discussion, and the secondary analysis of the phase two data. These themes were also supported by the open-ended responses of the survey and through a member check process with phase two participants. Each theme is written from the point of view of teachers, since the participants were key to the co-identification of the themes. The final step of the GLA synchronous meeting was devoted to co-creating recommendations based on the participant prompt responses and prompt analysis. In this section, I describe each theme and subsequent recommendations identified by the participants during the synchronous GLA meeting, the secondary analysis I did on the GLA data,

and through the member check process. Themes, subthemes, and recommendations are also presented in Table 4.10.

Table 4.10

Phase 2 Themes, Subthemes, and Co-created Recommendations

Theme 1. We are overstretched and need more support.	
Subthemes	**Recommendations**
• Montessori teachers need time and space dedicated to understanding policies. • Montessori teachers need administrators that trust and advocate for the pedagogy and method. • School leaders and policymakers do not respect Montessori teachers for their expertise. • Montessori teachers are often siloed. • Public school systems often shift policy mandates with little thought of the Montessori Method.	• Allow teachers time away from the school during the day for advocacy. • Provide Montessori specific professional development for support staff and administration. • Get involved or stay connected with Montessori Advocacy Groups for support. • Provide structured and intentional time for Montessori educators to connect with educators from different methods of teaching.
Theme 2. We are not explicitly taught about policymaking processes or systems.	
Subthemes	**Recommendations**
• Montessori teachers do not have knowledge of policy systems. • Montessori teachers do not know what to do regarding advocacy. • Montessori teachers know how to "get creative" and use the materials to teach standards or align with policies without losing the core of the Montessori pedagogy.	• Hold meetings when teachers are not in the classroom. • Move to a more iterative, inclusive practice of policymaking at all levels. • Teach Montessori teachers and administrators about the policymaking process, not how to advocate. • Include foundational policy systems information in Montessori teacher education programs. • Teach Montessori teachers how to use the Montessori Method within existing policy systems.
Theme 3. We need access to funding and access to policymakers and the policymaking process.	
Subthemes	**Recommendations**
• School accreditation with a Montessori organization supports the pedagogy but is often financially inaccessible. • Montessori credentials are not appropriately recognized for state teacher licensure or in childcare regulations. • Policy makers are often disconnected from the classroom, lack understanding of child development and the Montessori Method, and do not engage with Montessori educators.	• Include credentialed Montessori teachers and administrators in the policymaking process. • Create pathways for alignment of Montessori teaching credentials and state teaching licensure or within childcare regulations. • Prioritize funding for Montessori school accreditation and Montessori credential training. • Involve Montessori secondary students in advocating for the Montessori pedagogy.

Theme 1. We are overstretched and need more support.

Throughout the prompt responses and during the Zoom discussion, participants used words and phrases such as "just feeling really overstretched," "frustrating," and "struggle" when talking about policies and their Montessori pedagogy. Thus, the first theme emerged as *We are overstretched and need more support.* Five subthemes were identified as: 1) teachers need time and space dedicated to understanding policies, 2) Montessori teachers need administrators that trust and advocate for the pedagogy and method, and spend time observing Montessori classrooms, 3) school leaders and policymakers do not respect Montessori teachers for their expertise, 4) Montessori teachers are often siloed and should work more alongside all educators for support in advocating for what is right for students and families, and 5) public school systems often shift policy mandates with little thought of the Montessori Method. At the same time, there were a few participants, whose internal political efficacy scores were high, who commented, "I don't let the standards define all the concepts I teach/expose my students. They don't limit my thoughts" and "I know who I am as a teacher and I don't let others shape what I do."

Teachers need time and space dedicated to understanding policies. One participant reported, "there is a lot expected of teachers, so much that they feel they cannot possibly engage with it all." The notion of "feeling really overstretched" came up often and was connected to teachers feeling like they do not have time to add policy and advocacy work to their already full schedules. For example, a participant explained, "there's just always so much happening. It's hard to know what to focus on, when to focus on it" and another said, "It's hard for teachers to think of the big picture when we get so caught up in the many day-to-day tasks of being a Montessori teacher- even when we care a lot about the Montessori mission and accessibility as a whole." An administrator, who is also in the classroom part-time shared, "If I wasn't the owner

of the school, I don't know how I would ever have been able to do the advocacy that I have done."

Montessori teachers need administrators that trust and advocate for the pedagogy and method, and spend time observing Montessori classrooms. There were many comments about the important role a school administrator plays in supporting teachers and the Montessori Method. Some teachers yearned for their administrators to "stay out of my classroom," while most spoke about the importance of having administrators who are "willing to stand up for the philosophy of Montessori against the district." Montessori teachers do not need their administrators to have a Montessori credential, but they want administrators and school leaders to show support of the Montessori Method. Teachers want public school principals who support the pedagogy and do not cause them to "water down practices due to pressure from district leaders."

School leaders and policymakers do not respect Montessori teachers for their expertise. One private school teacher shared her experience with early childhood licensing visitors, "they look at my classroom full of didactic materials serving the children's developmental needs and dock us points for not having interlocking blocks or dress-up play." In both public and private schools, participants spoke of a lack of trust and autonomy which decreased their "freedom to teach." As one participant explained, "we need more autonomy based on Montessori philosophy and less mandates that don't recognize Montessori practices."

Montessori teachers are often siloed and need time to collaborate with all educators for support in advocating for what is right for students and families. Teachers often expressed interest in talking with educators who may not work in Montessori schools to collaborate on the systemic issues that ALL educators face, such as "issues around

compensation, work load, support, etc." At the same time, there is not time or space offered for this type of collaboration. Further, teachers feel that many policies are not "developmentally appropriate," regardless of the teaching pedagogy an educator utilizes.

Public school systems often shift policy mandates with little thought of the Montessori Method. Similar to the subtheme regarding respecting the expertise of Montessori teachers, this subtheme includes ideas of trust and support. For example, one participant explained, "I think something that frustrates many educators about public policy and working in public settings is that there is often a mandate, a struggle to integrate the mandate, and then when you finally get the hang of it, a complete swing in a different direction." Another participant referenced data meetings that public school teachers often attend and shared, "we KNOW what and where our students are because we have them for 3 years. So, spending hours looking at data that we already know is a waste of time. To be fully supportive, we need better ways to assess students rather than the state, one size fits all testing procedures we have now."

Theme 1 Recommendations

The recommendations that emerged from this theme are connected to the work of school leaders (administrators, board members, and others at the public school district level). First, school leaders should provide teachers time outside the classroom to advocate for the Montessori pedagogy. One participant explained this by saying, "I think there has to be buy-in from the districts in order for active teachers to be involved in policy making so release time can be offered." Another participant shared, "Teachers need to be told that it is ok to use one's energy for projects beyond their classroom, and given the time by school administration." Second, Montessori specific professional development should be provided to support staff in Montessori schools and if an administrator does not hold a Montessori credential, then Montessori

professional development should be required for them. Participants talked about feeling like their "time isn't respected" and mismatched professional development was one way they felt disrespected. A participant explained that as, "Our district does do not provide proper planning time for a Montessori classroom. We still often have PD [professional development] about district mandated curriculum which is not useful for our time." One participant captured these feelings well, through her explanation:

> Teaching, by the nature of how the job is designed and valued in this country currently, constantly asks more and more of teachers without commensurate respect or compensation. The hours are long and demands of the job are high, so if we want practitioners who have the space to be reflective and the passion to sustain the thankless work of policymaking, there needs to be either dedicated space in the working day to work on these aims, or additional opportunity for compensation.

Third, teachers want to feel connected. One way to do this is for teachers and administrators to get involved with the Montessori advocacy group in their state for support and to mobilize for change. In addition, school leaders should provide structured and intentional time for Montessori educators to connect outside the Montessori "bubble" with educators utilizing different pedagogies.

Theme 2. We are not are not explicitly taught about policymaking processes or systems.

The second theme to emerge from the GLA data was about the policymaking processes, rather than school level understanding or implementation of policies. This theme was first identified in the survey open-ended responses (e.g., "I feel that I am not familiar enough with policies to make an educated response") and then emerged again in the GLA data. Subthemes include 1) Montessori teachers do not have knowledge of policy systems, 2) Montessori teachers

do not know what to do regarding advocacy, and 3) some Montessori teachers know how to "get creative" and use the materials to teach standards or align with policies without losing the core of the Montessori pedagogy.

Montessori teachers do not have knowledge of policy systems. Almost all participants shared that they did not know enough about how policies are made. For example, one participant explained that their teacher education program was focused on the Montessori method and "there was no focus on state or national discourse and how it impacted current Montessori practice." Others expressed desire to learn more, requesting that including "at least the basics" of how policies are made or "maybe just an awareness of what struggles Montessorians face in the public realm" as part of Montessori teacher education programs might be helpful. Additionally, another participant also noted, "Most of us [teachers] didn't go into politics for a reason and have no experience. How can we do work in state and education policy when we don't know how that works logistically?" Montessori teachers have a desire to understand policy making processes, yet need support in doing so.

Teachers do not know what to do regarding advocacy. The second subtheme built on the first, with more emphasis on teachers unsure about the steps involved for advocacy. One participant explained this by sharing, "I have so many questions about who do we talk to, how do we get involved, what do we do if we're in the classroom." Another participant explained how she inquired about her state Montessori advocacy group, "but what do they do every day? What's the 'boots on the ground' work they do? I have asked and I still don't exactly understand." Many participants shared comments about not knowing where to start or "feeling so overwhelmed" that they just do not engage in advocacy efforts.

Some teachers know how to "get creative" and use the materials to teach standards or align with policies without losing the core of the Montessori pedagogy. Rather than spending time ignoring policies or advocating for different policies, several teachers have found ways to use the Montessori materials and pedagogy to teach to standards or align with policies. For example, a lower elementary teacher explained how she shifts her language when teaching math lessons to include language from the standards that may not necessarily be part of the Montessori lessons. This requires creativity, but also support in figuring out how to do it without losing pieces of the Montessori pedagogy. Another participant explained it is, "Hard to keep up with at first, but gets easier and easier to creatively keep up with." Another shared that what is most important is that Montessori teachers realize this is a short and long term strategy that requires both creativity and advocacy, "Short term- get creative, long term- advocate for change."

Theme 2 Recommendations

Several participants commented on the inability to devote time to advocacy, pointing back to the first theme, and offered many recommendations to combat this such as "allow time away from school during the work day, or closing school for specific advocacy days." Yet another participant said simply, "hold meeting when teachers are NOT in the classroom." A larger more systemic recommendation included, "Move to a more iterative practice of policymaking where a variety of stakeholders would continually reconvene to implement, assess and refine policies in a way that feels more aligned with place based practices." This sentiment was heard from many participants.

A second recommendation was related to professional development. Specifically, the GLA group recommended focusing on teaching Montessori teachers about the policymaking

process and systems, not just how to advocate. This professional development should be provided and teachers should be compensated for attending it. In addition, many participants suggested that Montessori teacher education programs should include foundational policy information in an already required course, such as Program Leadership. However, it is important to note that one participant disagreed with this recommendation during the member check process. She shared, "There is already so much in the teacher education curriculum that adding more will detract from the important work of Maria Montessori." Another member check participant noted, "I'm curious about the teaching of policy advocacy. I feel like that would be helpful, but doesn't it really come down to who you know? Sure wish Montessori had a lobbyist for us." This particular participant sees the benefit in learning about the policymaking process and recognizes teachers cannot do it all.

Finally, a third recommendation from the group is to teach Montessori teachers how to fit within the existing policy systems without letting go of the Montessori pedagogy. Several participants shared that there are existing organizations with this focus (e.g., National Center for Montessori in the Public Sector), but it is also a need for early childhood private school Montessori teachers.

Theme 3. We need access to funding and access to policymakers and the policymaking process.

The third and final theme to emerge from the GLA was related to access. Participants identified issues with access to funding, professional development, policymakers, and the policymaking process. While the processes at the state and federal level are more difficult to access, participants also referenced being "left out" of school level policies. Subthemes for this theme include: 1) school accreditation with a Montessori organization supports the pedagogy but

is often financially inaccessible, 2) Montessori credentials are not appropriately recognized for state teacher licensure or in childcare regulations, and 3) policy makers are often disconnected from the classroom, lack understanding of child development and the Montessori Method, and do not engage with Montessori educators.

School accreditation with a Montessori organization supports the pedagogy but is often financially inaccessible. Participants talked about how accreditation from a well-known, reputable Montessori organization can "help to shape and protect what happens in the classroom." Several participants directly commented on how their school accreditation has supported the Montessori pedagogy in their classrooms. For example, one participant explained their accreditation, "supports our school by helping us come up with ways to marry Montessori with public school standards. For example, we have a protected Montessori work time in the morning, yet our afternoons can be used for state standard time." Another participant shared that the "most support" she receives is through their Montessori accreditation, such as Montessori specific professional development and the ability to prioritize accreditation requirements over district mandates. At the same time, many participants talked about the barrier of costs when it comes to school accreditation, stating their schools "cannot afford the trainings and other items needed to ensure accreditation." In contrast, one participant spoke at length about the "money grab" she felt the accreditation process is for Montessori organizations. She explained her feelings that Montessori accrediting organizations do not offer "true accountability" and mostly want to collect fees.

Montessori credentials are not appropriately recognized for state teacher licensure or in childcare regulations. Many states do not recognize a Montessori teaching credential as equivalent to a state teaching license. And Montessori public schools need teachers with both a

Montessori credential and a state teaching license. Districts must prioritize the state teaching license (state policy) and many Montessori classrooms end up with teachers who do not have a Montessori credential. One participant discussed this challenge by sharing, "Why would teachers get Montessori credentials if they aren't recognized at the state level for a teaching license?" Another participant explained, "Even with Montessori certification at 3 levels AND an engineering PhD, I am not qualified to teach at any level in a Montessori (or any) public school in my state." Further, Montessori teaching credentials are also often not recognized within a state's child-care licensing regulations—making this an issue for teachers in both public schools and childcare programs. Participants in public schools highlight a key reason why teachers may have state licensure but lack Montessori teaching credentials as school districts often do not prioritize funding for Montessori training.

Policy makers are often disconnected from the classroom, lack understanding of child development and the Montessori Method, and do not engage with Montessori educators. While this subtheme may seem to be pointed at policymakers at the state or federal level, many participants also included both private and public Montessori school leadership as "being too far removed from the classroom." Participants noted that policymakers often "don't possess enough awareness of the Montessori Method, "don't understand Montessori at all," or they simply prioritize "increasing test scores" over "following the child." One participant shared her frustration by saying, "Unfortunately, it will always be a game of numbers and money for those in charge." This subtheme is also connected to the first theme, teachers feel more respected when policymakers and school leaders recognize their expertise and include them in the policymaking process.

Theme 3 Recommendations

First and foremost, participants stated clearly the importance of "inviting credentialed Montessori educators to "the policymaking tables, naturally and without needing to push the way in." Second, a systemic recommendation for this theme is to create pathways for alignment of Montessori teaching credentials and state teaching licensure or within childcare regulations. Third, prioritize funding for Montessori school accreditation and Montessori credential training. And finally, Montessori secondary students could become more involved in advocating for the pedagogy and Montessori Method.

MMR Merging

Central to mixed methods research is the "explicit conversation between (or interrelating of) the quantitative and qualitative components" of the study (Plano Clark, 2019). I utilized joint displays to bring the data from both phases together and to answer my mixed methods research question about how national trend of TPE scores and teacher experiences with policies combine to improve teacher policy advocacy in Montessori schools. Joint displays are a visual approach to place the data in conversation with each other, for analysis and comparison (Fetters et al., 2013; Plano Clark, 2019).

Participant scores on each subscale were identified to be in the low, medium, or high range. For internal political efficacy, Table 4.11 shows GLA quotes (from both subphases) related to medium and high scores in the context of GLA themes. Low score quotes are not shown as there were zero GLA participants with a low internal political efficacy score.

Table 4.11

GLA Quotes Related to Internal Political Efficacy Medium and High Scores and Themes

Theme 1. Montessori Teachers are overstretched and need more support.	
Medium Internal TPE Score	"It's hard for teachers to think of the big picture when we get so caught up in the many day-to-day tasks of being a Montessori teacher, even when we care a lot about the Montessori mission and accessibility as a whole." "There are always changes, and people always have to learn something new, and that takes away from following the child."
High Internal TPE Score	"Policymakers need to know teachers are already stretched, we need time to advocate for ourselves and support to do it."
Theme 2. We are not are not explicitly taught about policymaking processes or systems.	
Medium Internal TPE Score	"Montessori teachers are experts on Montessori and early childhood development. It's what we know best. Most of us didn't go into politics for a reason and have no experience. How can we do work in state and education policy when we don't know how that works logistically?"
High Internal TPE Score	"We should include learning about policy and advocacy as a part of ongoing professional development."
Theme 3. We need access to funding and access to policymakers and the policymaking process.	
Medium Internal TPE Score	"As Montessori teachers in nonprofit and private schools, how can we advocate and work with policymakers when we feel so removed? Even if we feel like we know what ideally would need to happen." "Money is a huge barrier to access to accreditation, time and space to dedicate to thinking about policies, or even being able to understand how things are working."
High Internal TPE Score	"I believe too many policies are set by people who are too far removed from the classroom."

Note. There were zero GLA participants with a low internal TPE score.

Table 4.12 shows external political efficacy low, medium, and high scores as they relate to GLA quotes (from both subphases) in the context of GLA themes.

Table 4.12

GLA Quotes Related to External Political Efficacy Low, Medium and High Scores and Themes

Theme 1. We are overstretched and need more support.	
Low External TPE Score	"Statewide, it seems that Montessori is still not taken seriously, despite all the research." "They [policymakers] don't understand our values."
Medium External TPE Score	"Their [policymakers] main goal is safety. My goal is the whole child. I believe they have a role in the bigger picture." "There are too many chefs in the kitchen who are not familiar with Montessori philosophy."
High External TPE Score	"To be fully supportive, we need better ways to assess students rather than the state, one size fits all testing procedures we have now."
Theme 2. We are not are not explicitly taught about policymaking processes or systems.	
Low External TPE Score	"It is difficult to find the information on how to become involved."
Medium External TPE Score	"There was little to nothing I retained about policies [from my Montessori teacher education training]. Because both programs were intentional about Montessori theory and practice, there was no focus on state or national discourse and how it impacted current Montessori practice."
High External TPE Score	"Local/district impact has been positive with funding and recognition of training following the state policies. State policies have been positive and supportive."
Theme 3. We need access to funding and access to policymakers and the policymaking process.	
Low External TPE Score	"What motivation do policymakers have to adapt policies to serve Montessori schools? If their constituents don't care, why should they care? They already don't listen to conventional teachers in public schools." "Collectively the entire education system is broken and when you have powers that are also so far removed from classroom life, but allowed to dictate practices is a never ending problem not only in education but corporately as well. Children don't always feel the priority."
Medium External TPE Score	"In many situations compromises can be made but it is hard when policy makers do not understand Montessori at all." "Funding streams are not provided for some schools because of license exemption."
High External TPE Score	"Call the regulators directly. It can confuse those making the decisions and they are more responsive to an organized representation asking the questions and speaking with one voice."

Table 4.13 shows collective political efficacy medium and high scores as they relate to GLA quotes (from both subphases) in the context of GLA themes. Low score quotes are not shown as there were zero GLA participants with a low collective political efficacy score.

Table 4.13

GLA Quotes Related to Collective Political Efficacy Medium and High Scores and Themes

Theme 1. We are overstretched and need more support.	
Medium Collective TPE Score	"We need time to advocate for ourselves and support to do it."
	"Lack of representation due to lack of numbers. When do we do this? When do we find the time?"
High Collective TPE Score	Teachers can find support by "revisit[ing] the Montessori manuals and writings of Dr. Montessori to consistently remind ourselves what we are about. Trust the child - trust the method."
Theme 2. We are not are not explicitly taught about policymaking processes or systems.	
Medium Collective TPE Score	"How do we get organized and help teachers understand how they can do this?"
High Collective TPE Score	"If a policy or curriculum choice does not align with standards, why aren't we speaking up?"
	"I truly believe if teachers stood up, together, that all education systems, Montessori, Stem, etc., would flourish and work best for our students. Unfortunately, it will always be a game of numbers and money for those in charge."
Theme 3. We need access to funding and access to policymakers and the policymaking process.	
Medium Collective TPE Score	"No one else is standing up for the developmental needs of the children in our care. I don't like being a squeaky wheel but I will for these kids."
	We need "more paid training and on-the-clock time to participate [in advocacy] and less being seen as outliers in education and not 'real' teachers."
High Collective TPE Score	"We have to raise awareness and mobilize for change."
	"Ask for what you need - your administrator, your policy-makers, get involved with your state policy group."
	"Teachers should get informed about and make educated decisions as an organized group."

Note. There were zero GLA participants with a low collective TPE score.

The quotes provided in Tables 4.11 – 4.13, are from GLA participants who scored in the ranges as identified in the tables. To bring together all results from both phases, I created Table 4.14. Table 4.14 is a joint display of quantitative and qualitative results on each of the political efficacy subscales. In situating the data in this way, the overall importance of Montessori teachers feeling disrespected and left out of policymaking processes became even more apparent.

Table 4.14

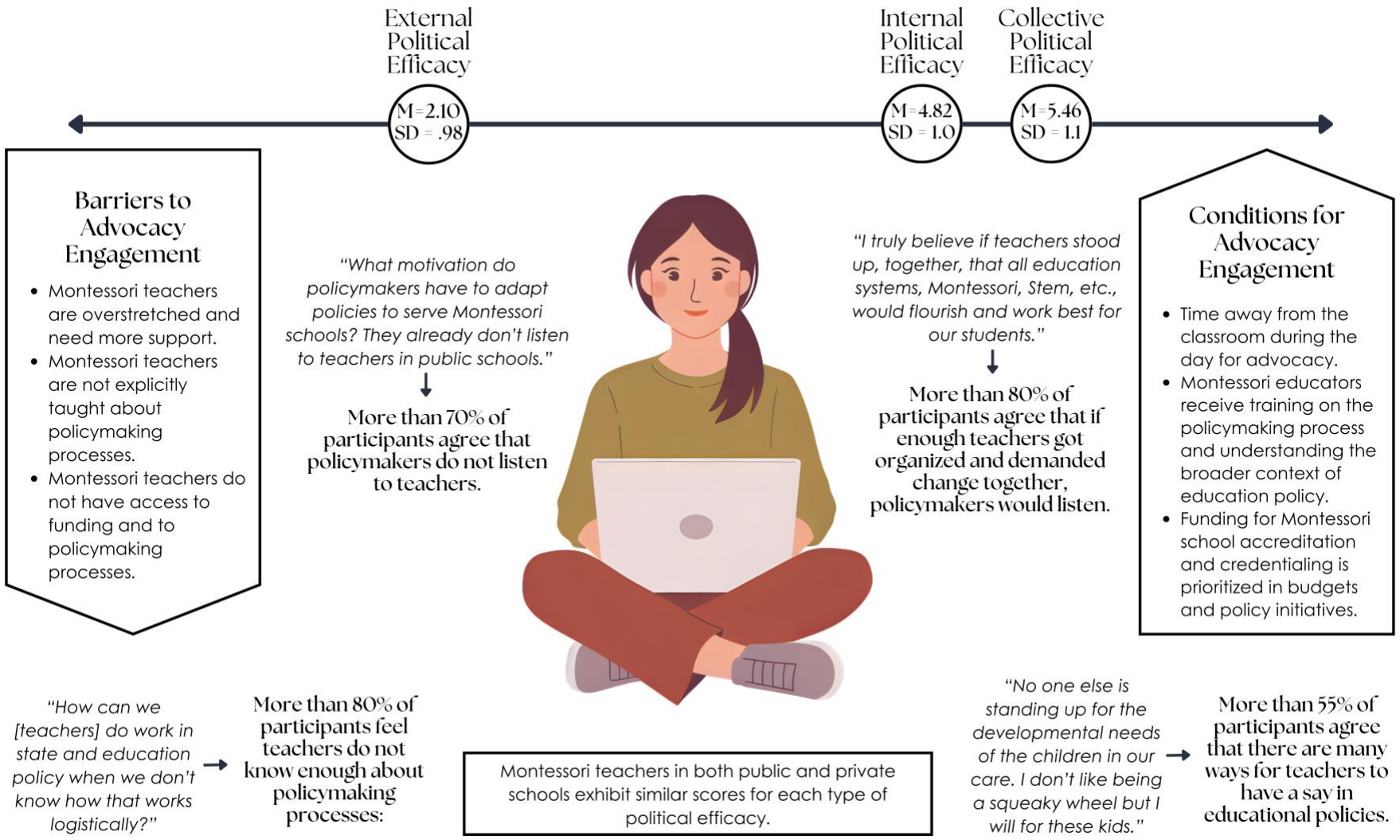
Joint Display of Quantitative and Qualitative Results on Political Efficacy, N=125

TPE Type	Subscale Mean (SD)	GLA Subtheme	Summary	Interpretation
Internal Political Efficacy	4.82 (1.00)	School leaders and policymakers do not respect Montessori teachers for their expertise. Montessori teachers do not have knowledge of policy systems.	The internal political efficacy mean is in the medium range (between 2.99 and 5.4). Qualitative comments mentioned desires to focus on teaching students, not worrying about policies. Montessori teachers do not feel respected for their expertise and do not have enough information about the way educational polices are created.	While the mean score for internal political efficacy is in the medium range, comments reflect that Montessori teachers do not believe in their capability to comprehend politics or their competence to engage in political activities. At the same time, they may or may not "want to" engage in policies or advocacy.
External Political Efficacy	2.81 (0.980)	Public school systems often shift policy mandates with little thought of the Montessori Method. Policy makers are often disconnected from the classroom, lack understanding of child development and the Montessori Method, and do not engage with Montessori educators.	The external political efficacy mean is in the low range. Participants expressed frustration through their comments. These comments were most often aimed toward administrators, school leaders, and policymakers.	Montessori teachers have little belief that policymakers or educational leaders are responsive to their concerns. These beliefs were often connected to policymakers and educational leaders not having enough knowledge about the Montessori pedagogy.
Collective Political Efficacy	5.46 (1.10)	Montessori teachers know how to "get creative" and use the materials to teach standards or align with policies without losing the core of the Montessori pedagogy. Montessori teachers are often siloed.	The collective political efficacy mean is in the high range (more than 5.4). Qualitative comments were connected to examples of how advocacy efforts have worked when teachers came together to advocate for the Montessori pedagogy. While Montessori teachers feel siloed, they also know how to find a community of support.	Montessori teachers are more willing to advocate for the Montessori pedagogy when in large groups organizing for change in policies.

Similar to a process outlined in Myers-Coffman et al. (2021), I designed a graphic to visually present findings through creative interpretation. Figure 4.2 shows a teacher at the center of the findings (emphasizing the importance of teacher voice and experiences). The double arrow line at the top is a visual depiction of the mean scores for Montessori teachers external, internal, and collective political efficacy. The barriers and conditions for advocacy engagement are from the GLA and open-ended response data. Finally, the quotes are all GLA participant quotes with quantitative findings from items on the survey.

Figure 4.2

Joint Display of Integrated Qualitative and Quantitative Results



Chapter 5: Discussion

This study examines the political efficacy of Montessori teachers and how, if at all, Montessori teachers engage in policy advocacy. Further, the study utilizes a participatory method to amplify the experiences of teachers in the context of policy implications and the push to advocate for the Montessori Method that Montessori teacher often experience. While teacher response to policies has been studied, to my knowledge, Montessori teachers' political efficacy has not yet been discussed. As such, this study fills the gap of Montessori teacher's political efficacy and their advocacy engagement in the extant literature. The findings help us to better understand how to involve Montessori teachers in the crucial work of policymaking and advocating for the Montessori pedagogy and how policy and advocacy engagement is influenced by school characteristics, educational and professional background, and personal or organizational identity.

Honoring child rights are a core aspect of Montessori teacher training, central to the Montessori Method. As such, Montessori teachers advocate for the rights of the child every day. While Montessori teachers are taught to be comfortable with advocating around the rights of the child, it is in advocating within policy systems that their self-perceived capabilities diminish. Often, their lack of knowledge of policymaking processes and their competence to engage in political activities interferes with their capacity to be advocates at a broader level. Although Montessori teachers may feel that policymakers and the broader policy system are not fully attuned to their needs, they tend to believe that by uniting and advocating together, they can drive meaningful policy change.

Themes that exist for Montessori teachers in their efforts to advocate include needing more support from administration, feeling overstretched with the day-to-day responsibilities of

teaching, a lack of knowledge of policy processes, and a lack of access to policymakers and funding. While some of these themes may be systemic (access to policymakers and funding), others are more individual (more support from administration or knowledge of policy processes). When I set out on this dissertation journey, I was of the mindset that "we just need more Montessori teachers to be active in advocacy at state level." I often wondered, "why aren't more Montessori teachers speaking up?" I thought if we could just get Montessori teachers to see how important advocacy is, then we could get more involvement. Yet, that mindset was not working. Montessori teachers are not rushing to add more work to their already full workloads. This study has encouraged a new way of thinking for me.

Montessori teachers are taught to shift the environment or their behavior when something is not working in the classroom. Considering this study's findings and my previous mindset of "we just need more Montessori teachers to advocate at the state level", we could encourage increased participation in advocating for Montessori education by shifting our approach to supporting Montessori teachers as advocates. In the following sections, I begin by placing findings discussed in Chapter 4 within the framework of the literature reviewed in Chapter 2 and the conceptual framework outlined in Chapter 1. Finally, I identify future paths for continuing the inquiry and conclude with some final thoughts on this dissertation study.

Montessori Teachers as Policy Advocates

Participation in policy advocacy is complex. Gen and Wright (2013) describe the complexity of participating in policy advocacy as mirroring "the policymaking process itself, with interacting considerations such as lengthy time span, difficulties of attributing success to a particular advocacy effort, and the central role of values" (pp. 163-164). Further, teacher participation and voice in the policymaking process is largely marginalized (Hammon, 2010;

Hargreaves, 1996; Hinnant-Crawford, 2016; Ingersoll, 2003) and the educational policy framework in the United States was intentionally structured to limit teachers' impact and authority (Hinnant-Crawford, 2016). This dissertation study aimed to better understand Montessori teacher participation in policy advocacy and center their voice and experiences with policies.

To my knowledge, this is the first study specific to Montessori teachers as policy advocates. Yet, previous literature regarding how teachers respond to policies is plentiful. For example, teaching to the test is a common response and includes shaping curriculum to match test expectations and narrowing the curriculum, often leading to the removal of topics or subjects to make more time for test preparation (Abrams et al., 2003; Au, 2011; Berliner, 2011; Levatino et al., 2023). Throughout the study, participants commented on how mandated testing shapes their Montessori pedagogy. For example, one participant posted on the GLA Padlet, "standards make me feel pressure to teach to the test instead of following the child's natural progression and interests." An open-ended survey response highlights the issue with testing and narrowing the curriculum by explaining, "I am pressured to test, send homework, use worksheets, and reduce time spent on practical life and in the outdoors, connecting with nature." During the synchronous subphase of the GLA, another participant shared in the Zoom chat, "STANDARDS," when asked what external force most shapes your Montessori pedagogy. An open-ended survey response explained, "The hindering of our Montessori practices through standardized state testing has such a huge impact on our daily lives. Though on the other hand, if we didn't have public Montessori schools then so many students wouldn't be able to go to a Montessori school." In my own experience of working to increase access to Montessori education, this sentiment

strongly resonates with me and points to a significant difference for the policy challenges in Montessori education in contrast to more conventional pedagogies.

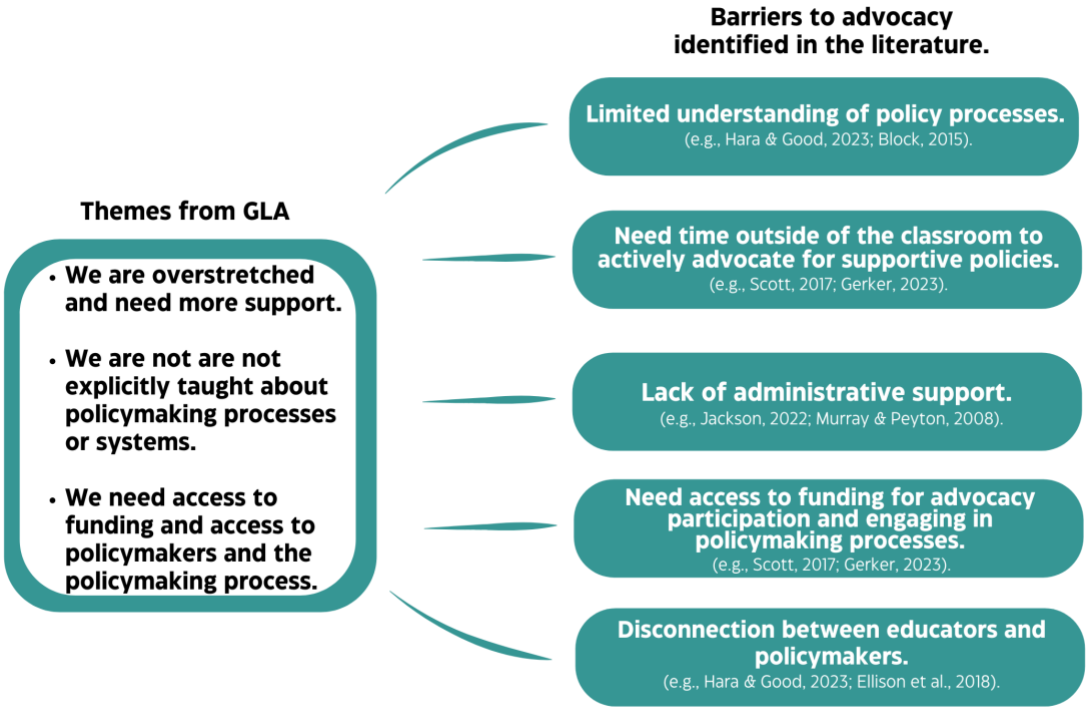
Further, Ellison et al. (2018) described "bad policies" as policy that focuses on outcomes and takes away from individualization. One GLA prompt on the Padlet asked, "Bad policies are caused by _____." Participant responses included misinformation, lack of understanding child development or Montessori education, and "politicians who do not take the time to consider and learn what is important." Further evidence of this was found in question 16 of the survey, "It doesn't matter what a person does – if the politicians want to listen, they will, and if they don't want to listen, they won't." More than 70% of participants responded with some level of agreement to this item: 19% of participants selected "completely agree," 23.8% selected "agree," and 25.4% selected "somewhat agree." Thus, confirming that Montessori teachers do not believe policymakers listen to them.

To better understand policy advocacy, Gen and Wright (2013) developed a logic model, built on six different previously developed advocacy logic models, in which they identified four inputs needed for individual involvement in political advocacy: 1) sense of agency, including feeling empowered, 2) people and relationships, described as leadership support and the ability to organize, 3) specialized knowledge and skills, referring to strategy and research, and 4) resources, such as funding. Results from this study affirm these four inputs as Montessori teachers identified a lack of feeling empowered, needing more support (particularly from administrators), lack of explicit policymaking processes instruction, and lack of funding to participate in advocacy through the identification of the themes from phase two. In addition, Hinnant-Crawford (2016) examined how teachers engage in policy and found barriers similar to those found in this study. Their themes included disconnect and distrust, ill-informed

policymakers, and teachers do not feel valued. Finally, Figure 5.1 presents barriers to advocacy participation identified in the literature as they align to the themes from the GLA in this study.

Figure 5.1

Barriers to Advocacy Participation Identified in the Literature Aligned to GLA themes.



Recommendations from participants in this dissertation study to increase Montessori teacher participation in advocacy and support them in their understanding of policymaking processes are similar to those found in the literature. For example, Jackson (2022) found that Montessori teachers know how to creatively work together to align policies with their Montessori pedagogy. Additionally, Johnson (2022) highlighted the importance of Montessori teachers "practicing flexibility while staying true to fidelity." Qualitative data that affirms this finding include the GLA prompt comments about responding to external policies: "hard to keep up with at first, but gets easier and easier to creatively keep up with" and "short term- get

creative, long term- advocate for change." Another example in the literature of how teachers can find support to participate in advocacy include leaning on teacher unions in public school districts. One participant shared success with this strategy in an open-ended response from the survey, "Our [teachers'] Union and [teacher contract] help protect our creative implementation of activities and curriculum that is aligned with the scope and sequence of our Montessori curriculum." Finally, all previously listed recommendations in the extant literature to encourage Montessori teacher participation in advocacy were also identified in this study as part of the GLA phase and include: 1) add knowledge of policy and advocacy to Montessori teacher education training, 2) increase administrative support, 3) provide teachers time outside the classroom for policy and advocacy engagement, 4) provide targeted professional development on policy systems and ways of advocating, and 5) administrators and teachers should join Montessori advocacy organizations for additional support.

Estes et al. (2010) and Cobb (2012) found that knowledge of policy systems increases teacher political efficacy. Further, Baird and Heinen (2015) explain, "While being trained for the classroom, future educators should be introduced to their role in the political process" as well (p. 149). Question five on the survey stated "Teachers are generally well qualified to participate in the political activity and decision making for educational policies." More than 80% of participants responded with some level of disagree to this item: 36.5% of participants selected "completely disagree," 27.8% selected "disagree," and 15.9% selected "somewhat disagree." This confirms the need for teachers to have more professional development specific to the policymaking process. Comments from the GLA further confirm this finding, such as "How can we do work in state and education policy when we don't know how that works logistically?" or a GLA participant who shared that they "wish there was like a crash course on policy" for

Montessori educators. In addition to these congruent findings, Cobb (2012) also suggest that educational leaders should be more supportive of teacher involvement in professional organizations and provide a variety of policy engagement opportunities.

Recommendations for how teachers might participate more in advocacy are not as abundant in the extant literature. However, this study aimed to hear directly from teachers what might support them in being advocates for Montessori education. Salient recommendations from participants included: 1) dedicated time away from the classroom for advocacy, 2) more training and professional development specific to policy, and 3) funding for accreditation and teacher training.

Political Efficacy of Montessori Teachers

Montessori teachers were found to have internal political efficacy in the high end of the medium political efficacy range ($M = 4.82$, $SD = 1.00$), external political efficacy in the low range ($M = 2.81$, $SD = 0.98$), and collective political efficacy in the high range ($M = 5.46$, $SD = 1.10$). The efficacy subscale scores in this study are congruent with Craig's (1980) use of the political efficacy scale, in which he found that people with medium to high internal political efficacy, low external political efficacy will also have a high collective political efficacy. In other words,

> When citizens believe that they should be permitted to play an active role in democratic decision making, but when they also believe that the political system has denied them this opportunity, the potential for popular mobilization would appear to be significantly enhanced. p. 198

External political efficacy is based on dissatisfaction with political systems and policymaking processes (Craig, 1980), as expressed through qualitative comments in this study.

For example, a participant from the GLA shared, “Policymakers already disregard conventional public teachers when making policy, so how do we get them to care about Montessori teachers and schools?” Another GLA participant explained policymakers as people, “who do not have first-hand experience in the field” yet, are “allowed to influence and shape policies without truly understanding the impact that they will have.” According to findings from Cobb (2012), teachers with low external efficacy still feel they can make a difference as indicated by their high level of internal political efficacy. This finding is similar to the quantitative finding in this study that Montessori teachers have low external political efficacy but their internal political efficacy is in the medium to high range of the scale.

As the researcher, and as a Montessori advocate, my assumption was that public school teachers would be more political efficacious, since the policy challenges are more salient. However, this study found Montessori teachers in private and public schools scored similarly across all three political efficacy subscales.

Conceptual Framework

Spillane (2005) explains policy implementation as similar to the telephone game where “the player at the start of the line tells a story to the next person in line” and the “story is morphed as it moves from player to player” (p. 8). With teachers often at the end of this line, they are left to make sense of the policies handed down to them and do so by filtering the policies through preexisting beliefs and practices and their individual identity (Chimbi & Jita, 2021; Coburn, 2004, 2005; Nardon & Hari, 2022; Weick, 1995). Salient comments from the teachers with high internal political efficacy scores in this study included “I know who I am as a teacher and I don’t let others shape what I do” and “I don’t let the standards define all the concepts I teach/expose my students. They don’t limit my thoughts.” These comments are

directly linked to the self-identity of the teacher. At the same time, according to street-level bureaucracy theory, teachers have discretion to stretch or bend policies. Hinnant-Crawford (2016) described an example of this as teachers pretending to comply with policies but ignoring the policy or even contradicting it. A street-level bureaucrat also develops coping mechanisms to adapt or adopt policy requirements to fit within their pedagogies (Lipsky, 2010; Robinson, 2012). In this study, an example of a Montessori teacher operating as a street-level bureaucrat is a comment from the GLA phase, "What I often see, especially in private schools, is that teachers nod their heads and pretend to agree and then behind closed doors do whatever they want in their classroom."

While teachers make sense of policies on the individual level, it is also a collective process (Louis et al., 2005). Relational cultural theory explicitly addresses relationships at a larger societal level. In this study, the relationships at hand are those between Montessori teachers, the teacher and their administrators, and teachers and policymakers at the district, state, and federal level. A participant commented during the GLA that relationships between teachers and policymakers are "nearly nonexistent but critical to informing best practice and increasing access to high quality education for all children." Further evidence of this was found in question 10 of the survey, "Generally speaking, those we elect to public office or educational leadership lose touch with teachers pretty quickly." More than 90% of participants responded with some level of agreement with this item: 50% of participants selected "completely agree," 28.6% selected "agree," and 18.3% selected "somewhat agree." Another participant, when talking about their administrator, shared, "I tend to do better when admin stays out of my classroom." While one GLA participant noted, "The support of the Montessori philosophy and curriculum varies from administrator to administrator and is hard to generalize their support," another shared that

their administrator is “very supportive” and “advocates with others at the state level.” The disconnections teachers experience from their administrators make it clear that they place value in the role of the administrator’s support for teacher engagement in policy advocacy and for the ways they respond to policies that shape their Montessori pedagogy (Jordan, 2008). When a disconnection occurs between teachers and their administrators, teachers may withdrawal from policy processes, feel less capable of making sense of policies or may even feel a decreased sense of self-worth (Comstock et al., 2008; Jordan, 2008). However, if teachers and administrators have growth fostering relationships, marked by mutual empathy, authenticity, and mutual empowerment (Miller, 1976), then repair of the disconnection is possible. On a broader level, this study showed that growth-fostering relationships do not exist between policymakers and educators, making mitigation of disconnection non-existent. A future inquiry, then, may be to explore what disconnection repair might look like for policymakers and educators to collaborate and work together.

Continuing the Inquiry

As the first study to examine the political efficacy and advocacy engagement of Montessori teachers, this research opens up numerous avenues for future exploration. One key direction is to expand the sample size and diversity of participants to enhance the generalizability of the findings. During discussions with participants, various levels of advocacy such as advocating for students and families or advocating for policy change, were frequently mentioned. However, since the primary focus was on Montessori teachers’ engagement with policy advocacy, not all levels of advocacy were specifically examined in this study. Future research should address both micro and macro advocacy efforts, investigating the daily strategies teachers employ to advocate for the rights of children and families, as well as their efforts to influence

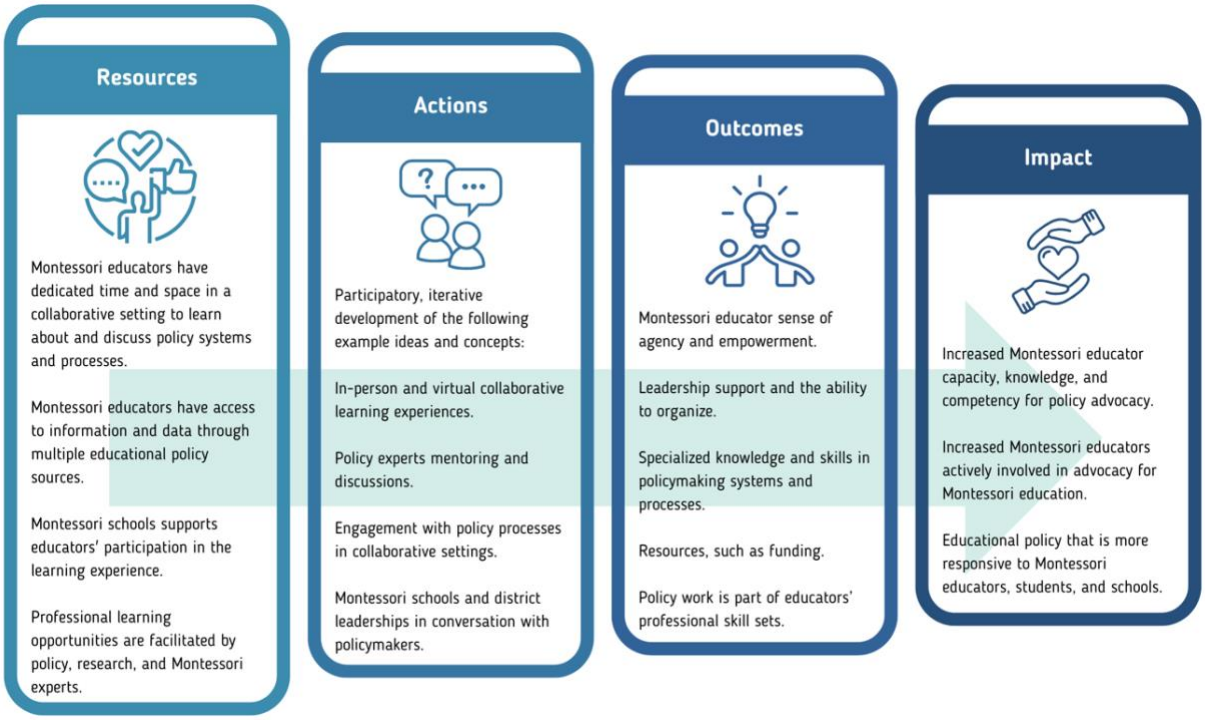
policy changes (Hara & Good, 2023). Additionally, incorporating empowerment theory could highlight how teachers can exert influence in policymaking processes (Gen & Wright, 2013). Participatory advocacy methods, such as demonstrations, boycotts, and grassroots initiatives, should also be included in future inquiries (Chapman & Wameyo, 2001).

Montessori teachers scored well in internal and collective political efficacy, but low in external political efficacy. When teachers know more about policy systems, their political efficacy increases. Additionally, two conditions that Montessori teachers named as recommendations to support their advocacy participation include 1) time away from the classroom during the day for advocacy participation and 2) available training on the policymaking process and the broader context of education policy. In response to this, Montessori education organizations and leaders should consider specific professional development for Montessori teachers. In Figure 5.2, I outline an iteratively developed professional development program that includes collaborative learning experiences to increase Montessori educators' understanding of policymaking processes and their capacity and agency in policy advocacy. The theory of change is based on the belief that educators are integral to shaping policy and the critical importance of amplifying Montessori educators' voices in policy work. The resources listed in Figure 5.2 are directly linked to the work of Gen and Wright (2013) and confirmed in this study's findings—dedicated time and space to learn about policy, access to policy information, school support, and professional learning opportunities. Using participatory research methods to engage Montessori educators in the development of a pilot program and in the evaluation of the initial program, this approach could empower Montessori educators by valuing their experiences and perspectives. Further, by developing a policy professional

development program with and for Montessori teachers the cycle of action research can continue with deeper participant engagement.

Figure 5.2

Theory of Change for Bridging Policy & Practice: Using Participatory Research Methods to Develop a Collaborative Learning Program for Montessori Educators



The third salient condition that Montessori teachers named as a recommendation to support their participation in advocacy is prioritizing funding for Montessori school accreditation and Montessori teacher credentialing in school budgets and policy initiatives. Montessori teachers noted that accreditation is often supportive of implementing the Montessori pedagogy in their classrooms and that teachers with both a Montessori credential and state license are challenging to recruit. Dedicating funding to both would then increase Montessori teachers ability to advocate through their increased knowledge of the Montessori Method and the collective support of their school.

Conclusion

Dr. Lisa Starr (2024) emphasizes the importance of reflexivity in research, particularly action research, and says we must constantly be asking ourselves: *Why am I doing this? Why am I doing it this way? Why is this work important?* My motivation for this work has always been clear—Montessori education must be accessible for all children and families. Through my experiences advocating for accessible Montessori education, I observed that Montessori teachers responded to policies in many different ways. This research highlights the need for innovative strategies to empower Montessori teachers in their advocacy efforts and to ensure their voices and expertise are acknowledged. It is evident that merely telling Montessori teachers they need to advocate is insufficient; we must actively support them in advocating for the rights of the child just as Dr. Maria Montessori intended.

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Appendix A

Phase 1 (Survey) Recruitment

Social Media Script

Are you a credentialed Montessori teacher? Are you over 18 years old and currently work in a Montessori school in the United States? If so, you are invited to share your experiences with policies that shape your Montessori pedagogy and your engagement in policy advocacy. The survey is part of a dissertation research study (UC Study, IRB #2023-1082) and will take approx. 20 minutes to complete. It can be accessed at the link below or by scanning the QR code.

http://tinyurl.com/MontessoriTeacherAdvocates

The purpose of this study is to understand how Montessori teachers respond to externally imposed policies and how, if at all, they have engaged in policy advocacy. The study also aims to identify what types of support Montessori educators need to be advocates and areas where they could voice their support or opposition regarding policies that shape their pedagogy.

Please share this information with your Montessori colleagues!

Questions?

Contact Heather Gerker gerkerhr@mail.uc.edu

Social Media Graphic and Flyer Information for Montessori Conferences

Email Script

Hello,
I am emailing to invite you to participate in a dissertation research study (UC Study, IRB #2023-1082) seeking to understand how Montessori teachers respond to externally imposed policies and how, if at all, you have engaged in policy advocacy at the local, state, or national levels. I also aim to identify what types of support Montessori educators need to be advocates and areas where Montessori educators could voice their support or opposition regarding policies that influence their Montessori teaching methods.

If you are currently a credentialed Montessori PreK-12 classroom teacher in the United States who is over 18 years old, we need your input! Your experiences are crucial as we learn more about implementing the Montessori pedagogy.

Additional information about the study is attached to this email.

The survey for this phase of the study is specific to your political efficacy. That is, your thoughts on politics and government. You may complete the brief survey at this link. The survey will take approximately 20 minutes to complete. The final question in the survey invites you to also be contacted for the second part of the study to participate in a group discussion.

Please forward this email to colleagues who also work in Montessori schools.

In gratitude,
Heather Gerker

Appendix B

TPE Tool: Survey

UNIVERSITY OF CINCINNATI INFORMATION SHEET FOR RESEARCH STUDY

STUDY TITLE:	
Montessori Teachers as Policy Advocates: The Political Efficacy and Advocacy Engagement of Montessori Teachers, a Mixed Methods Study	
PRINCIPAL INVESTIGATOR NAME: Heather Gerker	**PHONE NUMBER (24-hour Emergency Contact)** 207-450-3689
FACULTY ADVISOR (if PI is student): Dr. Miriam Raider-Roth	**DEPARTMENT:** CECH - EDST

INTRODUCTION

You are being asked to take part in a research study. Please read this paper carefully and ask questions about anything that you do not understand.

WHO IS DOING THIS RESEARCH STUDY?

The person in charge of this research study is Heather Gerker of the University of Cincinnati (UC) College of Education, Criminal Justice, and Human Services in the Educational Studies program.

She is being guided in this research by Dr. Miriam Raider-Roth.

There may be other people on the research team helping at different times during the study.

WHAT IS THE PURPOSE OF THIS RESEARCH STUDY?

I want to find out how Montessori teachers react to rules that affect their teaching. I want to find out how they speak up for the Montessori teaching method. I also want to know what kind of help Montessori teachers need to speak up for or against rules that affect their teaching.

WHO WILL BE IN THIS RESEARCH STUDY?

Around 100-150 Montessori teachers will take part in this phase of the study. You are eligible for this study if:
- are 18 years or older and
- are a teacher who is fully credentialed in Montessori and
- currently have instructional responsibility for students on a regular basis throughout a school year and
- work at a school in the United States

WHAT WILL YOU BE ASKED TO DO IN THIS RESEARCH STUDY AND HOW LONG WILL IT TAKE?

You are asked to complete an online survey. It will take approximately 20 minutes to complete. You will be asked about the district and/or school where you work and about your experiences responding to or engaging with educational policies. The survey may be completed on your own time online.

There is also a follow-up research phase, and the survey will ask about your willingness to be contacted about the subsequent phase. If you opt in to the second phase of this study, you will be asked to participate first by responding to open-ended prompts online (15-30 minutes) and then participate in a collaborative group meeting via Zoom to discuss survey findings, prompt responses, and recommendations (60 minutes). Phase two of this study will take approximately 75-90 minutes total.

ARE THERE ANY RISKS TO BEING IN THIS RESEARCH STUDY?

The risk is not expected to be more than you would have in daily life. There is the possible risk of loss of confidentiality but precautions are being taken to minimize this risk. Please review the "How will your research information be kept confidential?" section below.

You may also experience discomfort in responding to study questions. If so, you may choose to not respond at any time.

ARE THERE ANY BENEFITS FROM BEING IN THIS RESEARCH STUDY?

You will probably not get any benefit from taking part in this study. But, being in this study may help Montessori educators, administration, teacher educators, and policymakers understand how to develop policies that support the implementation of the Montessori pedagogy.

WHAT WILL YOU GET BECAUSE OF BEING IN THIS RESEARCH STUDY?

You will not be paid (or given anything) to take part in this study.

DO YOU HAVE CHOICES ABOUT TAKING PART IN THIS RESEARCH STUDY?

If you do not want to take part in this research study you may simply not participate.

You have a choice whether or not to take part in the phase 2 of this study. There is a question at the end of the survey, asking you to choose yes/no to participate in phase 2.

HOW WILL YOUR RESEARCH INFORMATION BE KEPT CONFIDENTIAL?

Information about you will be kept private by:

- using a study ID number instead of the participant's name on the research forms

- keeping the master list of names and study ID numbers in a separate location from the research forms
- limiting access to research data to the research team
- not including the participant's name on the typed transcript
- keeping research data on a password-protected secure server computer

Your responses will be kept on a password protected secure server until the study is complete. It will be de-identified (if needed) by using a participant ID number instead of the participant's name. De-identified data will be stored indefinitely for future review and use. The recordings of the virtual session will be deleted after transcription.

The data from this research study may be published; but you will not be identified by name (unless you confirm interest in participating as a contributor of the recommendations developed in this study).

Agents of the University of Cincinnati may inspect study records for audit or quality assurance purposes.

The researcher will ask people in the second phase, the participatory group session, to keep the discussion confidential, but they might talk about it anyway.

The researcher cannot promise that information sent by the internet or email will be private.

Information that could identify you will be removed from the study data. After removal, the study data could be used for future research studies. The study data could also be given to another researcher for future research studies. This may be done without getting additional permission from you.

WHAT ARE YOUR LEGAL RIGHTS IN THIS RESEARCH STUDY?

Nothing in this consent form waives any legal rights you may have. This consent form also does not release the investigator, the institution, or its agents from liability for negligence.

WHAT IF YOU HAVE QUESTIONS ABOUT THIS RESEARCH STUDY?

If you have any questions or concerns about this research study, you should contact Heather Gerker at gerkerhr@mail.uc.edu or 207-450-3689. Or, you may contact Dr. Miriam Raider-Roth at raidermm@ucmail.uc.edu

The UC Institutional Review Board reviews all research projects that involve human participants to be sure the rights and welfare of participants are protected.

If you have questions about your rights as a participant, complaints and/or suggestions about the study, you may contact the UC IRB at (513) 558-5259. Or, you may call the UC Research Compliance Hotline at (800) 889-1547, or write to the IRB, 300 University Hall, ML 0567, 51 Goodman Drive, Cincinnati, OH 45221-0567, or email the IRB office at irb@ucmail.uc.edu.

DO YOU HAVE TO TAKE PART IN THIS RESEARCH STUDY?

No one has to be in this research study. Refusing to take part will NOT cause any penalty or loss of benefits that you would otherwise have. If you are uncomfortable responding to any questions, you may choose to skip a question.

You may start and then change your mind and stop at any time. To stop being in the study, you should contact Heather Gerker at gerkerhr@mail.uc.edu or 207-450-3689.

BY CHECKING YES BELOW, YOU INDICATE YOU HAVE READ THE CONSENT INFORMATION AND CONSENT FOR YOUR RESPONSES TO BE USED IN THIS RESEARCH STUDY.

☐ Yes

PLEASE KEEP THIS INFORMATION SHEET FOR YOUR REFERENCE.

Captcha Verification (new page)
Before you proceed to the survey, please complete the captcha below.

☐ I'm not a robot.

Section 0: Pre-survey questions
Before continuing with the survey let's make sure your current position is a match for the survey target audience.

1. Are you currently employed in a Montessori school? Yes ____ No ____
2. Are you fully certified/credentialed in Montessori? Yes ____ No ____
3. Do you have instructional responsibility for students on a regular basis throughout the school year? Yes ____ No ____

*if no to any of these questions, skip to end of survey.

Section 1: Teacher Political Efficacy (adapted from Craig & Maggiotto, 1982; Yeich & Levine, 1994)
This section asks you to respond to statements about your thoughts on politics and government. Using the response format below, rate your level of agreement by choosing one of the seven responses for each item.

- Completely agree
- Agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Disagree
- Completely disagree

Internal Efficacy

4. Sometimes policies, politics and government seem so complicated that I can't really understand what's going on.
5. Teachers are generally well qualified to participate in the political activity and decision making for educational policies. (inverse)
6. I feel like I have a pretty good understanding of the important political issues which confront our educational system. (inverse)
7. Today's educational issues are so difficult I feel I could not know enough to come up with any ideas that might solve them.
8. I feel I could do as good a job in public office as most of the politicians we elect. (inverse)

External Efficacy

9. I don't think public officials care much what teachers think.
10. Generally speaking, those we elect to public office or educational leadership lose touch with teachers pretty quickly.
11. Candidates for office are interested in people's votes, but not in their opinions.
12. There are plenty of ways for teachers to have a say in educational policies. (inverse)
13. Politicians are supposed to be servants of the people, but too many of them ignore the people.
14. It hardly makes any difference who I vote for because whoever gets elected does whatever he or she wants to do anyway.
15. In this country, a few people have all the political power and the rest of us have nothing to say.
16. It doesn't matter what a person does – if the politicians want to listen, they will, and if they don't want to listen, they won't.
17. Most public officials wouldn't listen to me no matter what I did.

Collective Efficacy

18. Dramatic educational policy change could occur in this country if teachers banded together and demanded change. (inverse)
19. If enough teachers got organized and demanded change, policymakers would listen. (inverse)
20. Organized groups of educators can have much impact on the education policies in this country. (inverse)
21. Policymakers would respond to our needs if we began a movement. (inverse)
22. Policymakers would respond to the needs of teachers if enough people demanded change. (inverse)
23. Policymakers would listen to teachers if we pressured them to. (inverse)

Section 2: Experiences with External Policies

This section asks you to respond to open-ended questions related to your experiences with ***external*** policies that affect your school and/or classroom (e.g., policies from district leadership, states, federal governments, accrediting bodies, etc.).

24. In what ways do external policies ***support*** your Montessori practices?

25. In what ways do external policies ***hinder*** your Montessori practices?
26. How, if at all, do the different levels of external policies differ in supporting or hindering your Montessori practices?

Section 3: Demographic & Background Information

This section asks you to provide demographic information about yourself, your district, and your school. This information will help the researchers understand who you are and the perspective from which you respond to questions in this survey.

Teacher/Participant

27. Gender: Male ____ Female ____ Non-binary ____ Prefer not to say ____ Other ____
28. Race/Ethnicity (check all that apply): American Indian or Alaska Native ____ Asian ____ Black or African American ____ Native Hawaiian or Other Pacific Islander ____ White ____ Hispanic/Latinx ____Prefer not to answer ____
29. Level of Montessori credential (check all that apply): Infant/Toddler ____Early Childhood ____ Elementary I ____ Elementary II ____ Secondary ____ Administrator ____ None ____
30. Montessori credential awarded by: AMS____ AMI-USA ____ AMI____ IMC ____ MEPI ____ PAMS ____ Other ____
31. Level you are currently teaching: Infant/Toddler ____ Early Childhood ____ Elementary I ____ Elementary II ____ Secondary ____ Administration ____ Other ____
32. Indicate the number of years, including the current year, you have been teaching in a PreK-12 Montessori school: 1-5 years ____ 6-10 years ____ 11-15 years ____ 16-20 years ____ 20+ years ____
33. Are you licensed by the state to teach in a public school district? Yes ____ No ____
34. Did your teacher education program curriculum include advocacy or policy information? Yes ____ no ____
    34a. If yes, please explain how it was included.

School

35. State school is located in:
36. Does your school hold Montessori accreditation? Yes ____ I'm not sure ____ No ____
    36a. If yes, which accrediting body is it: AMS ____ AMI ____ Other (please identify) ____
37. Does your school require all lead teachers to hold a Montessori teaching credential? Yes ____ I'm not sure ____ No ____
38. Does your school administrator hold a Montessori credential? Yes ____ I'm not sure ____ No ____
39. Type of school you currently teach in:
    a. Public: Yes ____ No ____
        i. if yes, answer the following:
            1. Charter Yes ____ No ____
            2. Magnet Yes ____ No ____
            3. Title 1 Yes ____ No ____

4. Neighborhood School Yes ____ No ____
5. Other (fill in) _____

b. Private: Yes ____ No ____

40. [if public] District size (student population #)
    a. Small (up to 800 students)
    b. Medium (between 801 and up to 5000 students)
    c. Large (5001 students or more)
41. Does your school district offer other pedagogies besides the Montessori pedagogy? Yes ____ No ____
42. Is there a Montessori Coordinator, Director, or other Montessori-specific leadership position in your district's office? Yes ____ I'm not sure ____ No ____

Past Experiences

This section asks you to provide information about your past experiences in Montessori education. This information will help the researchers understand how your past experiences may influence your engagement with education policies.

43. Do you have experience teaching in both Montessori private and public schools? Yes ____ No ____
44. Have you been an administrator at a Montessori private school in the past? Yes ____ No ____
45. Have you been an administrator at a Montessori public school in the past? Yes ____ No ____
46. Have you, or do you now, work as a Teacher Educator with a Montessori teacher education program? Yes ____ No ____

Section 4:

Once the survey phase of the study is complete, we will be contacting interested teachers to learn more about their experiences through a 60-minute group meeting with other Montessori teachers. We want to learn from teachers with a variety of backgrounds and experiences with policies and identify conditions and strategies needed for improved teacher policy advocacy.

Would you be willing to be contacted with additional information about the 60-minute group meeting to take place in April or May of 2024?
Yes ____ No ____

If yes, please provide contact information below.
Name:
Email:
Phone:

Appendix C

Phase 2 (GLA) Recruitment

Initial Recruitment Email

Hello _____,

Thank you for completing the survey about Montessori teacher political efficacy. You indicated you are willing to participate in follow-up activities in the survey from a dissertation research study (UC Study, IRB #2023-1082). These activities include two subphases: 1) an asynchronous portion where you will respond to open-ended prompts on Padlet and 2) a synchronous portion where you will participate in a collaborative group hour long meeting to discuss survey findings, prompt responses, and potential action steps. Total time to participate in this phase is about 1.5 hours.

Participating in this research contributes to the development of strategies and recommendations related to what types of support Montessori educators need to be advocates and areas where Montessori educators could voice their support or opposition regarding policies that influence their Montessori teaching methods. You may also opt to be included as a contributor to this list that will be potentially distributed to practitioners, school administration, teacher education programs, and policymakers. It is also an opportunity to network with other practitioners in your field.

If you are interested in continuing to phase 2 of this research, please review the consent information at this link and confirm participation interest.

Once participation is confirmed, I will send additional details in a follow-up email.

Please let me know if you have any questions at this time.

In gratitude,
Heather Gerker

Follow-up Email

Hello,

Thank you for agreeing to participate in this phase of the study, Montessori Teachers as Policy Advocates (UC Study, IRB #2023-1082). The second phase includes two subphases: 1) an asynchronous portion where you will respond to open-ended prompts on Padlet and 2) a synchronous portion where you will participate in a collaborative group meeting to discuss survey findings, prompt responses, and potential action steps.

Step 1: For the synchronous phase, please complete the doodle poll at this link by April 10 to help determine the best time for a 60 minute group discussion.

Step 2: For the asynchronous phase, a Padlet with open ended prompts will be sent to you via email by April 22.

Please let me know if you have any questions.

In gratitude,
Heather Gerker

Follow Up Email to Confirmed Participant

Hello,
Thank you for completing the doodle poll for the virtual collaborative meeting as part of my dissertation research study (UC Study, IRB #2023-1082). The most agreed upon time is: **Monday, May 6 from 8pm - 9pm EST.** By participating in this meeting, you acknowledge that you have read the consent information and are attending voluntarily.

Below is the zoom meeting link. I will also send you an outlook calendar invite with the zoom link.

I will send a Padlet with open ended prompts to you via email by April 22. Please plan to take 15 minutes prior to our meeting to complete the prompts.

Thank you for sharing your time and experiences with me.
Sincerely,
Heather

Appendix D

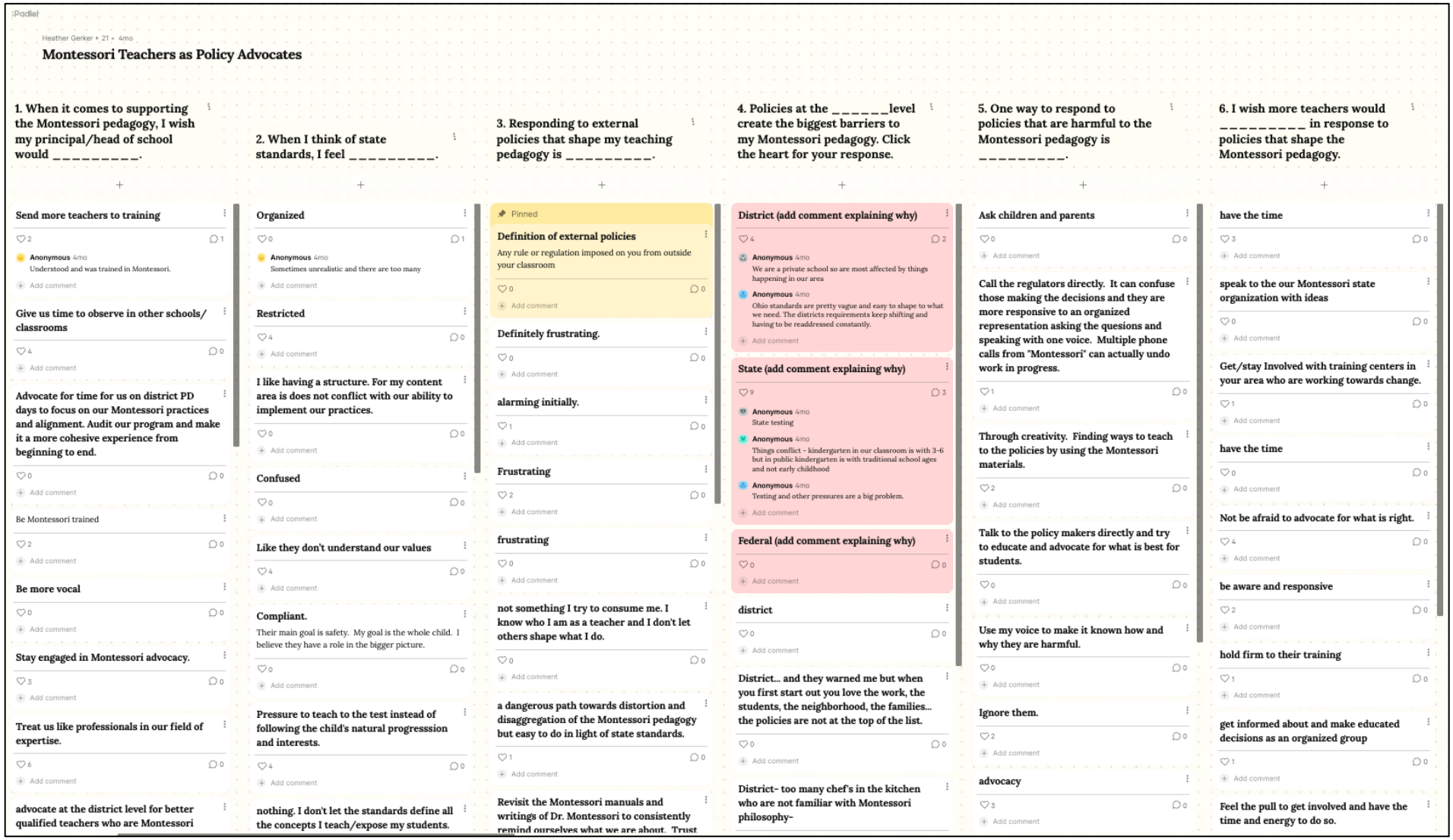
GLA Prompts

1. When it comes to supporting the Montessori pedagogy, I wish my principal/head of school would _____.
2. When I think of state standards, I feel _____.
3. Responding to external policies that shape my teaching pedagogy is _____
4. Policies at the _____ (district/state/federal) level create the biggest barriers for my Montessori pedagogy. Click the heart for your response. Add comment explaining why.
5. One way to respond to policies that are harmful to the Montessori pedagogy is _____.
6. I wish more teachers would _____ in response to policies that shape the Montessori pedagogy.
7. Accreditation for Montessori schools supports/doesn't support teachers. Click the heart for your response and add a comment.
8. We could increase teacher involvement with policymaking by _____.
9. During my teacher education program, I wish my instructors would have taught me _____ about policies.
10. Of the following policy issues, click the heart of the one that is most harmful to your pedagogy.
    - Mixed age groups/ratios
    - Building schedules
    - Standardized tests
    - Common core/Standards
    - Teacher credentialing/Licensure
11. If I could change one thing about the way policies are designed, it would be _____.
12. To me, advocacy means _____.
13. "Bad" policies are caused by _____.
14. If you have a Montessori Advocacy group in your state, how involved are you with them? Click the hear for your response. Very involved, somewhat involved, not at all involved, we do not have a group or I don't know of one in our state.
15. In Montessori education, we need more _____ to better address policy issues.
16. The most effective way to support teachers' involvement in the policymaking process is _____.
17. The least effective way to support teachers' involvement in the policymaking process is _____.
18. One education policy that needs to change is _____.
19. Teacher Unions support/don't teachers. Click the heart for your response.
20. Relationships between teachers and administrators are _____.
21. Relationships between teacher and policymakers are _____.
22. Policymakers should know _____ about Montessori teachers.
23. Teachers are more likely to get involved in their Montessori state advocacy groups if _____.
24. Teachers need more of _____ and less of _____ to effectively advocate for the Montessori pedagogy.
25. The biggest difference between public, charter, and private schools is _____.

26. Montessori teacher educators should know _____ about the policymaking process.

Appendix E

Padlet Screenshot (Example of prompts and responses on padlet)



Appendix F

Directions for GLA Subphases

Follow Up Email with prompts and reminder of Zoom meeting

Hello,

Thank you for agreeing to participate in the second phase of dissertation research study (UC Study, IRB #2023-1082). There are two steps to this phase.

Step 1: Complete the prompts at this padlet link. Instructions are included on the padlet and also in this 5-minute video. The padlet prompts should take approximately 15-20 minutes to complete.

Step 2: Attend the Zoom session on **Monday, May 6 from 8pm - 9pm EST.** Below is the zoom meeting link and a calendar invite will be sent to you.

By completing the prompts and participating in the Zoom meeting, you acknowledge that you have read the consent information and are attending voluntarily.

Thank you for sharing your time and experiences with me.
Sincerely,
Heather

Appendix G

GLA Synchronous Subphase Protocol & Agenda

GLA Step	Facilitator Script & Co-facilitator Roles	Timing	Notes
Climate setting	Welcome and reminder of consent information Warmth-builder question (as part of self-introduction): Please type in the chat, your name, what level you teach, and a response to this question: *What is bringing you joy right now as you wrap up the school year?* Brief overview of GLA process and what we will do together in this meeting Share screen, show how to view padlet [Facilitation assistants] – observe and take notes as participants engage or ask questions	8:00 – 8:10	**RECORD** Link to consent information Need slide for GLA process Link to padlet
Appreciating & Reflecting	Allow 10 minutes for quick review of padlet prompts. Let participants know they can click the heart for prompts that resonate and/or add additional comments that might come up for them.	8:10 – 8:20	
Understanding	Briefly review directions as outlined in group Google documents (open one document and share screen). Mindy – randomly assign breakout groups: 5 groups of 3- 4 participants each Prompt assignments: 1. Prompts 1 – 5	8:20 – 8:45	Small group notes will be recorded on google drive files shared with each group Group 1 link Group 2 link Group 3 link Group 4 link Group 5 link

	2. Prompts 6 – 10 3. Prompts 11 – 15 4. Prompts 16 – 20 5. Prompts 21 – 26 [Facilitation assistant] – float between groups 1 and 2, checking in, gentle prodding, and support [Facilitation assistant] – Group 3, checking in, gentle prodding, and support Heather – float between groups 4 and 5, checking in, gentle prodding, and support		
Selecting	Bring all participants back together. [Facilitation assistant] – grab themes from each groups document and copy/paste to new Google document at this link. While Mindy grabs all themes, Heather will talk with group about next steps. 1. Share screen to show all themes. 2. Offer time for questions or reflections. 3. Ask participants to select the top three themes that resonate with them and type them (in order of importance) in the chat. [Facilitation assistant] – observe and take notes as participants engage or ask questions	8:45 – 8:55	

Action	Lead discussion on the themes that are most highly rated/selected in the chat. Ask: 1. What are possible action items we might consider based on these themes? 2. Anything specific for policymakers? For administrators? For TEP's? For teachers? Wrap up by telling participants what's next – member checking. [Facilitation assistants] – observe and take notes as participants engage or ask questions	8:55 – 9:00	

Small Group Note catcher:
GROUP X - Prompt #'s X - X
Instructions for small group discussion:

1. Briefly introduce yourselves again, sharing your name and the level you teach.
2. Nominate a note-taker.
3. Nominate a timekeeper.
4. Allow a few minutes to quickly scan the prompts assigned to your group (see above).
5. Discuss initial thoughts and reactions to the prompts.
    - Note-taker: take notes on this discussion below.
    - Timekeeper: allow approximately 5 minutes.
6. Discuss, identify, and describe 3-5 themes or patterns you noticed across the prompts assigned to your group (look for primary and overlapping ideas that span the prompt responses, not just those within a single prompt).
    - Note-taker: take notes on this discussion below.
    - Timekeeper: allow approximately 15 minutes.

Group Member Names	
Note-taker	
Timekeeper	

Initial reactions to prompts	
3 - 5 themes or patterns that span the prompt responses (include description and/or example of themes/patterns)	

Appendix H

Member Check

The following is the email script sent to all GLA participants (from both synchronous and asynchronous subphases, *n*=33).

> Hello,
> Thank you for participating in my dissertation research study (UC Study, IRB #2023-1082), *Montessori Teachers as Policy Advocates.* Your experiences are instrumental as we learn more about implementing the Montessori pedagogy. You are invited to participate in the final step of this study, to review a summary of the padlet and/or discussion you participated in back in May. Your continued support is invaluable to this research!
>
> First, please review the attached summary of our work together. Second, please reply to this email, using the following questions to guide your reflection.
>
> 1. After reading through the summary of findings, what are your general thoughts?
> 2. How accurately do you feel the summary captures your thoughts/experiences?
> 3. What could be added to the summary to capture your experiences more fully?
> 4. If there is anything you would like removed, what would that be and why?
>
> If you'd rather discuss your reflection (instead of writing), please let me know when is a good time to schedule a phone call.
>
> If you are able, please return your thoughts within the next week (by end of day September 8). Please let me know if you have any questions or concerns.
>
> In gratitude,
> Heather Gerker