

Project Partners

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Problem of Practice

This project started in 2025-2026 and is an extension of other MEP projects within the MEP space. Teachers in grades 4 and 5 report that many students struggle with grade-level math in part due to lack of automaticity with math facts and number combinations. Math intervention researchers suggest that teachers implement class-wide intervention targeting foundational math skills, but implementation may be burdensome.

We surveyed instructional coaches to learn about current strategies used to facilitate practice with math fact fluency in grades 4 and 5. Teachers used a variety of strategies, including computer programs and activities in the curriculum, to facilitate math fact fluency practice. Existing district curricular resources included materials for instruction and practice with math facts, but teachers said that these resources were difficult to organize and use.

What did we do?

- Developed a six-week, ten-minute daily intervention aligned to the district curriculum and rooted in conceptual understanding
 - Intervention materials targeted four multiplication fact strategies (but could be expanded) with two weeks of cumulative practice
- Piloted the intervention with three teachers in two MMSD schools in fall 2025
- Analyzed pre-post data from the district math screener of math fact fluency

What did we learn?

- Teachers suggested our multiplication intervention was relatively easy to implement and articulated some challenges they faced in doing so
- Pilot study results indicated a small effect on students' computation fluency with multiplication problems

What's next?

- Project paused due to district adoption of a new math curriculum in K-8
- Findings demonstrate that creating an "off-the-shelf" intervention using curriculum materials could support teachers in facilitating class-wide practice opportunities supporting procedural fluency from conceptual understanding





Problem of Practice

The aim of this project is to help MMSD understand why families are open-enrolling out of the district.

What did we do?

Jessica Calarco and the students in the Applied Qualitative Methods course (Sociology 631) are conducting in-depth interviews with parents and guardians who are zoned to attend MMSD schools, but who have open-enrolled into nearby districts instead.

What did we learn?

Preliminary analyses suggest that open-enrollment is driven by a confluence of push and pull factors.

- Families often become interested in leaving their zoned school when they come to perceive that school as "chaotic" (e.g., when they hear that other students in the school are exhibiting frequent or serious behavior problems, and when they perceive the school to be unable or unwilling to adequately manage those behavior problems, and when they come to perceive that "chaos" as having (or being likely to have) a negative impact on their children's learning, behavior, safety, and/or emotional wellbeing).
- Families then typically become interested in open-enrolling (rather than other options like private school) when there is another district school to which they could conveniently send their children (e.g., because they live in close proximity and have the resources and schedule flexibility to provide transportation) and when they have reason to believe that that other district school is less "chaotic" than their zoned school (e.g., because they have friends or neighbors who can give them "insider" reports on the other district school).



Project Partners

Culleen Witthuhn (MMSD, Early Learning), **Beth Vaade** (MMSD, Research, Assessment & Improvement), **Becca Bier and Olga Murasova** (UW-Madison, Department of Sociology & ITP), and **Eric Grodsky** (UW-Madison, Department of Sociology & Educational Policy Studies, ITP, MEP)



Problem of Practice

MEP has worked with the Department of Early Learning since 2016, conducting over 25 studies in the last decade. Beginning in 2021-22, MMSD offered full-day four-year-old kindergarten (FD4K) in selected schools as an expansion of the half-day programming (HD4K) MMSD had offered since 2011-12. MMSD rolled out FD4K to schools that disproportionately serve students who identify as Black or are economically disadvantaged. Under contract with MMSD, MEP has now provided three quantitative evaluations of the impact of FD4K relative to HD4K.

What did we do?

- Years 1 & 2 – we sampled children attending FD4K and HD4K programs and measured their numeracy skills and executive function in the fall and in the spring for the 2021-22 and 2022-23 school years. We also drew on administrative data from PALS (literacy) and from TS GOLD (a range of skills) collected by teachers in MMSD for all 4K students.
- Year 3 – we relied exclusively on TS GOLD to measure student growth in 2023-24.

What did we learn?

- Year 1 - No evidence of differential growth in FD4K vs HD4K programs
- Year 2 - Suggestive evidence of a FD4K advantage in growth in literacy skills
- Year 3 - Clear evidence of a FD4K advantage in growth in literacy skills, numeracy skills, and socioemotional learning, with FD4K advantage greatest for students entering 4K with lower levels of achievement

How did we benefit?

- MMSD gained insights into the pace and direction of change from FD4K
 - Hints at where to look for pedagogical improvement/PD for 4K
 - Confidence in educational benefits of continued expansion
- Researchers gained insight into potential of FD4K
 - Led to research and research design challenges
 - Created spinoff project on peer effects in 4K which was published in the American Education Research Journal (Bier, Vaade, & Witthuhn, 2025).



Project Partners

Bri Monahan (MMSD, Research, Assessment & Improvement), **MMSD Central Office staff**, **Eric Grodsky** (UW-Madison, Department of Sociology & Educational Policy Studies, ITP, MEP), **Ellyssa Eiring**, **Amanda Kruger**, and **Katie Mae Imhoff** (MEP Project Managers), **11 Doctoral students at UW-Madison** (since 2023-2024)



Problem of Practice

Researchers have commonly identified research-to-practice partnerships (RPPs) as a means to reduce the research-to-practice gap, increase the use of research evidence in schools, and drive transformative change in education. However, future researchers in education get more training in research than in the practice side of an RPP.

What did we do?

- Broker initial connections between doctoral student researchers and MMSD staff in their areas of interest
- Support interns and MMSD staff in the co-development of projects, completion of said projects, and dissemination of the results in an accessible and actionable manner
- Created an MEP intern Community of Practice to introduce students to the benefits and challenges of RPPs and conducting research in applied settings

What did we learn?

- The importance of facilitating a cohesive internship identity and fostering shared learning through community
- The importance of actively brokering support throughout the intern cycle

What's next?

- Continue training of graduate students through this formalized community of practice
- Continue to gather feedback and tailor the program further
- Expansion to graduate students from other programs and schools at UW-Madison



Project Partners

Mollie McQuillan, Ben Lebovitz, Xue Gong (UW-Madison, ELPA), **and Erin Gill** (UW-Madison/UPenn), **Sherie Hohns and Jennifer Herdina** (MMSD, Student & Staff Support)

Problem of Practice

Twenty-three percent of MMSD high school students identify as LGBTQ+ and 8% of students identify as trans, nonbinary, or another gender-expansive label. Students identifying as LGBTQ+ often report more bullying and less favorable views of school climate than their straight, cisgender peers. MMSD has invested in several districtwide organizational supports for lesbian, gay, bisexual, transgender, queer, or other non-straight, non-cisgender (LGBTQ+) students. This project examined the effects of these supports in terms of school-level academics and disciplinary actions. This project has been ongoing since 2019.

What did we do?

- Combined MMSD administrative and school climate data along with data from the Wisconsin Department of Public Instruction and the Dane County Youth Assessment
- Examined the effect of the Welcoming Schools inclusivity professional development on school-level disciplinary actions and achievement

What did we learn?

- More MMSD middle school and high school students identified as LGBTQ+ than the general U.S. student population
- Similar to national trends, more MMSD LGBTQ+ students report poorer school climates and perceptions of well-being compared to their straight, cisgender peers
- Schools that participated in the Welcoming Schools program in 2019-2020 reported lower suspension, assault, and endangering behavior rates than comparison schools after controlling for school demographics
- Results support the expansion of the Welcoming Schools professional development training
- In a 2022 survey of staff who received the training, participants reported that they believed the training saved LGBTQ+ students' lives

What was the outcome?

- Continued to explore these questions about academic, behavioral, and health outcomes of LGBTQ+ students with the district, with more projects spanning across the transition of MMSD staffing
- Dr. McQuillan received support from the WT Grant Foundation to build on and expand this work



Project Partners

Tracey Scherr, Melanie Salgado, and Leia Esser (MMSD, Student & School Supports), **Katie Eklund, Andy Garbacz, Steve Kilgus** (UW-Madison, Department of Educational Psychology), and the **School Mental Health Collaborative**

The School Mental Health Collaborative (SMHC) has partnered with the MMSD Mental Health and Well Being team since SMHC was established in 2019. Katie Eklund was a MEP co-director for five years, making MEP a natural point for facilitating a mental health and wellbeing partnership. The MMSD-SMHC partnership has led to numerous studies and several external research and training grants from federal and other sources.

Problem of Practice

The MMSD-SMHC team identified supporting students with internalizing concerns as an important focus of their partnership. Beginning with the 2019-2020 school year, the team launched a multi-phase line of research to refine and test the Resilience Education Program (REP), a Tier 2 intervention for students in grades 4-8 who are showing early signs of anxiety, depression, or withdrawal. REP is a multi-component intervention that includes cognitive-behavioral instruction, modified Check-In/Check-Out, and Resilient Families.

What did we do?

- **Phase 1:** Gathered feedback on REP's feasibility, usability, and potential effectiveness from families, teachers, and SMH professionals
- **Phase 2:** Conducted feasibility studies of REP across two schools
- **Phase 3:** Completed a component analysis of REP across six schools to identify which combination of the three main components is most effective
- **Phase 4:** Conducted a pilot efficacy randomized trial of REP across nine schools

What did we learn?

- **Phase 1:** Educators and SMH professionals identified strengths of REP and recommended revisions to improve cultural relevance, clarity, and engagement
- **Phase 2:** Educators and SMH professionals found REP to be feasible to implement. Four of nine students showed behavioral improvement in one or more areas
- **Phase 3:** Students in CBI+CICO demonstrated greater reductions in internalizing concerns across student and teacher reports relative to the other conditions
- **Phase 4:** Students who participated in REP reported reduced behavioral concerns and social difficulties relative to students who did not participate in REP

How did we benefit?

- MMSD gained access to a Tier 2 intervention for students exhibiting early signs of internalizing concerns, trained staff, and data-informed practices
- Researchers gained evidence to (a) refine REP, (b) conduct a federally funded project, (c) publish peer-reviewed research, and (d) inform a future efficacy trial
- MMSD and Researchers gained a sustained research-practice partnership

