



Preparing Graduate Students for Careers in Applied Educational Research through MEP Internships

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Over the last several years, the Madison Education Partnership (MEP) has supported graduate students at the University of Wisconsin-Madison (UW) in conducting research projects with staff members based at the Madison Metropolitan School District (MMSD). In 2023-24, we cemented many of these practices into a formalized internship program. The brief describes MEP's motivation in facilitating and supporting graduate student internships, how the internship program works, and what we learned from the 2023-24 school year.

Why offer internships?

MEP offers internship opportunities for UW graduate students to further MEP's mission of joining research and practice by engaging in mutually defined, high-quality, and problem-based research with MMSD staff. For MEP, one goal of these internships is to provide students with tangible opportunities to conduct research projects in applied settings and develop their capacity in collaborating with practitioners and policymakers. Simultaneously, internships provide a service to the district, providing evidence to answer practical questions for which district clients often lack time or technical capacity to address.

How does it work?

MEP provides a structure and support for interns throughout all stages of the internship process, from brokering initial connections to support the production of research, to the sharing of results.

Graduate students learn of the MEP Internship opportunity primarily through their participation in the [Interdisciplinary Training Program](#) (ITP), a pre-doctoral training program for students from diverse academic fields that offers training in causal inference methods in preparation for careers in applied research. The ITP program provides funding through a federal IES grant for students to complete a required apprenticeship, which may be research-based or translational in nature. MEP staff assist in getting graduate students' ideas off the ground, refining research questions and desired methodological approaches by providing feedback on initial drafts of prospective interns' proposals. MEP staff then work within the MMSD system, leveraging practice-side relationships and brokering internally to identify interested clients within the district central office, then facilitating connections between the graduate student and the MMSD staff client. Once a client match is secured, interns begin their projects. Structures and approaches vary based on project needs, but typically interns meet regularly with district clients throughout the duration of their project.

The MEP team supports the intern in navigating complex district systems, expediting data use agreement processes and data pulls, and providing ongoing ad hoc support from the MEP Project Manager. MEP also convenes an intern Community of Practice. The Community of Practice meetings, held quarterly over lunch, which provides a forum for connection and reflection with the goals of creating community among interns and learning more about interns' individual projects, the challenges and the "wins" they experience while conducting collaborative research in MMSD, and how MEP can improve their intern experience. During these convenings, MEP staff facilitate opportunities for interns to explicitly give feedback and use this information to adjust the support given to interns.

As interns finalize their projects, MEP staff help interns craft their final products to ensure they are accessible and appropriate for practitioner audiences. MEP staff also broker within the district to identify interested stakeholders, beyond the initial intern client, who might learn from the evidence generated through the project. Internships typically conclude with durable products and presentations attended by practitioner clients.

What did we learn in 2023-24?

Throughout the year, MEP staff learned about the challenges that graduate student researchers face in collaborative research internships and how organizations like MEP can better support them in these endeavors. Our learnings, described below, came in part from direct intern feedback; other learnings we gleaned from project observations.

What challenges do interns face in conducting collaborative research in a school district setting?

Our graduate student interns faced many common challenges during the course of their internship experiences, including:

- Navigating complicated district procedures and bureaucratic "red tape," such as identifying and obtaining the necessary permissions for the data needed for their project and understanding district organizational structures and personnel.
- Managing relationships with busy district clients. Some interns mentioned "scope creep," or finding the boundaries of their original work plan shifting and changing as the year progressed based on client needs or interests. Others expressed uncertainty about how much to push or be flexible with timelines, stick to consistent routines, or ensure that they got what they needed from the client to make adequate progress in the work.
- Challenges with the research itself, such as the uncertainty that comes with applying research techniques they had studied in their coursework to real-life projects. In some cases, interns incorporated methodologies that were brand new to them, and discussed challenges and learnings associated with putting these new skills into practice. For example, interns expressed surprise at how long it can take to analyze qualitative data and described learning how challenging it can be to recruit students/families to participate in research.

Interns generally discussed these difficulties as exciting, acknowledging that the challenge of the work was growing their research skills and honing their relational abilities as researchers working in the translational space.

How can organizations like MEP structure internship programs to support aspiring researchers?

We also learned about how organizations like MEP can respond to challenges that interns encounter through their structure and support.

- **Maintain a cohesive internship identity:** Early in the year, several students expressed confusion about what it meant to be a MEP intern, including the role of MEP in supporting their project work. Interns knew they were receiving funding from the ITP program and were working with an MMSD staff member on a project, but did not always find clear how to leverage MEP to find the support they needed because MEP's role was not always made explicit. In response, we implemented changes to how we organized the program. We introduced new onboarding resources, including a one-stop hub of intern information housed in a shareable Google folder with examples of prior work products, data use agreements, client meeting agendas. We also gifted interns with MEP "swag" and convened a Community of Practice to promote their connection to the RPP.
- **Foster shared learning through community:** Our initial intention with the Community of Practice was to infuse a sense of camaraderie and connection to MEP to the intern experience. In practice, however, we observed that bringing interns together regularly also became a useful structure to foster shared learning and support among interns. We regularly saw interns help each other think through challenges or share ideas that could strengthen their research (such as tools, articles, campus resources) and/or their relationship with their clients.
- **Actively broker throughout:** We learned that interns benefited when we leveraged MEP's role as brokers throughout the entirety of the intern cycle. In the past, we envisioned MEP's role as engaging in the early "matchmaking" process primarily, but learned that active support is typically highly useful at other key junctures of the research project, including crafting and enacting DUAs, supporting the intern with relationship building and management, and in sharing final results.

What did the 2023-24 interns do?

In 2023-24, MEP brought on six interns, each working on an individual project. Descriptions to follow:

Kat Swerbenski, Graduate Student in Psychology, MMSD Liaison: Bri Monahan, RAI
Belonging Measure Assessment

This project focused on understanding patterns in the data collected on belonging in the climate survey, as well as novel qualitative data collected from students about their experiences of belonging at school. The researcher analyzed district administrative data from the 2021-2022 through 2022-2023 school years. By the end of this apprenticeship, a revised version of the belonging measure will be developed to be used in future iterations of the climate survey. Additionally, she will generate recommendations for how the district can foster a sense of belonging among students in the district.

Victor Feagins, Graduate Student in Quantitative Methods, MMSD Liaison: Eric Lequesne & Grady Brown, RAI

Improving MMSD Dashboards and Streamlining Reporting to the Board of Education (BOE)

This apprenticeship consisted of two projects supporting the RAI team. The first focused on developing interactive data visuals, including a dashboard on postsecondary enrollment results and trends, to provide accessible information to administrators and central office staff, including understanding the needs of leadership throughout the development process. The second focused on supporting RAI's work to create content for Board of Education (BOE) Instructional Workgroup. This element involved collaborating with RAI staff and content areas experts across MMSD to understand their programs and generating presentation content to inform the BOE.

Tory Jay, Graduate Student in Psychology, MMSD Liaison: Patti Schaefer, Secondary C&I

Supporting algebra and algebra-readiness in the Madison Metropolitan School District

This project involves observing classroom lessons, interviewing teachers, and reviewing curriculum to understand the barriers to and affordances for supporting conceptual knowledge of mathematics in MMSD middle school algebra and algebra-readiness classes. This work will help the district identify curricular supports and professional development opportunities to support teachers in promoting student conceptual knowledge in the classroom. Researchers will analyze district administrative data, classroom observation data, and teacher interviews to determine curriculum supports and professional development needs to support teachers and students in learning algebra.

Tory Ash, Graduate Student in Psychology, MMSD Liaison: Lachele Fisher, PLLD

Project Title: Evaluation of Equity Focused Initiatives

This project focused on the Professional Learning & Leadership Development (PLLD) department by providing support for evaluating the beginning teacher mentoring and professional development program, which is aimed at promoting new teacher effectiveness and retention within the district.

Becca Bier, Graduate Student in Sociology, MMSD Liaison: Culleen Witthun, Early Learning

Peers in the early years: Peer networks and learning in early childhood classrooms

This study examined friendship network formation in 4-year old kindergarten (4K) classrooms to build on evidence from later grades that friends may provide an important source of learning. The project also sought to understand teachers' perceptions of their roles in facilitating friendship in preschool and uses survey data from teachers, linked to MMSD administrative data, to map preschooler friendship networks and evaluate their relationship to student outcomes.

Alex Latham, *Graduate Student in School Psychology*, MMSD Liaison: Caroline Racine Gilles, RAI
Evaluating Academic Universal Screening Assessments in MMSD

This project aimed to ascertain whether academic screeners used in MMSD are functioning as intended, as MMSD data reveals that kindergarteners score lower on reading assessments throughout the year and significant proportions of students end the year in the 'at-risk' category than at the beginning of the year. This project explored the function of these assessments through factor analysis and classification accuracy tabulation for students in both Dual Language and Monolingual programs. This project included analysis of district academic screening data, state test data, and school enrollment data to calculate factor analysis values and classification accuracy statistics (i.e., how many students who screen as 'at-risk' reach non-proficiency on the Forward). This work will help identify ways to change the screening process to more effectively, efficiently, and equitably provide supports to students.