Learning Sciences Research Institute

UIC

Metro Chicago Mathematics Initiative

A program of UIC's Learning Sciences Research Institute

Proposed Supports to District 90

July 1, 2022 – June 30, 2023

The MCMI Mathematics Instructional support services are designed to sustain the mathematics improvement efforts in District 90 and to continue to build the capacity of administrators and coaches and teachers to implement a high quality mathematics program. Building on several years of work and established relationships, the Metro Chicago Mathematics Initiative will provide 14 days of specialized professional learning and coaching support.

District Goals and Recommendations

The support for the District 90 coaches will be designed to:

- Build their capacity to support teachers to develop content and pedagogical content knowledge with a focus on student learning;
- Build their coaching skills and abilities, for both individual teachers and groups of teachers;
- Build their capacity to develop routines to analyze student work during grade level meetings;
- Build their capacity to reflect on student learning within and across grade levels;
- Build their capacity to implement formative assessment practices and intervention strategies to address the needs of a wide variety of students;
- Build their capacity to reflect on and improve systems, structures and routines that promotes teacher reflection on best practices for promoting student learning;
- Use resources and tools to support their practice including administering and scoring performance assessments (MARS tasks) and use this data to inform program and instructional decisions.

During the 2022-2023 school year, MCMI staff in collaboration with D90 coaches will use the Teaching for Robust Understanding (TRU) Framework to guide the work that is focused on mathematics teaching and learning; the framework includes student learning and teaching practices exemplified in mathematically powerful classrooms. MCMI will:

- Collaborate with coaches as they work with teachers to use high quality instructional resources and assessments to promote essential grade level standards, such as reviewing unit plans and monitoring student growth over time.
- **Collaborate with coaches as they work with teachers** to develop teachers' pedagogical content knowledge and instructional decision making, such as looking at student work from common assessments and developing routines to improve student learning.

 Provide professional learning opportunities for administrators via the MCMI Instructional Leadership Institute to support high quality mathematics teaching and learning and equitable opportunities for all students.

Build the D90 coaches capacity to facilitate collaboration among teachers

The MCMI coach will collaborate with the D90 coaches as they work with teams of mathematics teachers to build effective teaching and learning teams aligned with the school's vision for mathematics teaching and learning. **Teacher collaboration is central to enable and sustain changes in instructional practice.** Supports may include:

- Facilitating and supporting grade level and/or vertical team meetings focused on mathematics;
- Contributing to the development of a learning community that supports the teaching and learning of mathematics among the staff, students, families, and the community;
- Developing collaborative working relationships and common teaching practices
- Supporting D90 coaches and teachers through Classroom Connections sessions. These sessions are an opportunity to look closely at student thinking in the context of a single lesson and connect to teaching practices. The classroom embedded context of these sessions is designed to promote collaboration and reflect on the practices of a mathematically powerful classroom. Each session will include a planning session, a focused classroom observation, and a session for reflection.

Provide access to and facilitate the use of high quality assessment resources

The MCMI team will score MARS tasks from the Silicon Valley Mathematics Initiative and engage in an analysis of five tasks for two grade levels of students at about 170 students per grade level.

Access to high-quality mathematics instructional resources and network learning opportunities

- Access to Silicon Valley Mathematics Initiative resources (MARS Tasks, Problems of the Month, Math Talk, etc.) that support the formative assessment process;
- Access to MCMI's coaching and instructional protocols that are designed to promote reflection through the lens of students learning;
- Invitation for all D90 teachers to attend the 2022 MCMI Summer Institute for no additional cost.
- Access to all MCMI special events and virtual book studies at no additional cost. (MCMI PD series and institutes are not included in this agreement.)

Expert support for the use of these tools will be integrated into coaching visits and of professional learning sessions. Teachers and teams will be able to draw on these resources to implement and expand practices in their own classrooms and schools across grade levels and content domains, and they will also provide a common language for collaboration among educators across the district.

Provide professional learning opportunities for administrators

Deepen the capacity of school leaders to support improved mathematics teaching and learning, including the observation of student thinking in classrooms and collaborative inquiry to support teacher reflection. Principals and district leadership are welcome to attend the Instructional Leadership Institute, focused on supporting mathematically powerful classrooms (TRU), offered by the Metro Chicago Mathematics Initiative.

Proposed Services and Timeline

Consistent with decades of school improvement research, MCMI has found that districts get the most value from coaching, and achieve better and more lasting results, when they:

- Make mathematics improvement a district priority
- Ensure structures and support for substantive teacher collaboration focused on student learning, including regular common planning time
- Enable administrator engagement through time for learning and collaboration, to help ensure common messages from MCMI support, supervisors, and in evaluation
- Ensure that assessment policies and structures provide time and support for teachers' use of data to make instructional decisions that support student learning
- Continue a District Mathematics Leadership Team with diverse stakeholders, which is provided time to develop a district vision for mathematics, promote dialogue, and problem-solve together
- Examine district structures and policies closely to ensure they support student learning (*e.g.*, time for math instruction, teacher assignment and schedules, course tracking)

Change takes time and can involve complex interactions among various district staff. Success is most likely when all stakeholders are aligned both on the *goals* — what we want mathematics classrooms to look like to best support student learning — and on the *process* of getting there, so multiple levers can work together to improve student learning. Mathematics instructional coaching is an effective support to transfer professional learning into practice, and achieve sustainable mathematics improvement within districts and schools.

The UIC coach will work with district coaches monthly, eight times during the school year, to prepare to work with teachers to:

- review unit plans to accommodate student needs;
- review data to inform teacher decision making;
- plan re-engagement and next steps and
- analyze student growth over time.

UIC staff will score and analyze MARS tasks near the end of the school year.

Totals:

8 days of onsite coaching

6 days for UIC staff to use qAssess to score and analyze MARS tasks.

District 90 commits to allocate \$20,600 for 14 days of mathematics consulting and coaching, Instructional Leadership Institute for administrators, and access to resources during the 2022-2023 school year. (The coach the district would like to be supported by is Margie Pigge)

District Number <u>90</u>	Address : 7776 West Lake Street River Fores	<u>t, IL 60305</u>
Superintendent Signature		
Superintendent Name: Edward J. Condon		
Date	Email	
Dhana		
Phone	Fax (optional)	