

EMBRACING THE IMPLEMENTATION JOURNEY

How Mount Horeb Area School District Achieved Their Academic Vision Through Thoughtful Implementation

RIVET EDUCATION

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Executive Summary

In 2018, the teachers and leaders in Mount Horeb Area School District (MHASD) in southern Wisconsin made a bold choice: they would adopt a new math curriculum despite students performing fairly well on state assessments. The catalyst? Teachers noticed that students struggled when given more challenging math work like problems that required students to conceptualize math, explain their thinking, and apply mathematical concepts to real-world situations. Teachers also knew that their current curriculum wasn't focusing instruction on these critical skills, and their students deserved better.

To shift to a new math curriculum, the district began by defining a vision for highquality mathematics instruction. An adoption team representing a variety of stakeholders then carefully reviewed math curricula against that vision before selecting The Math Learning Center's Bridges in Mathematics.

To ensure their investment in their new math curriculum would be maximized for teachers and students, MHASD developed and executed an implementation plan focused on achieving these milestones:

Set and communicate clear expectations for implementation to school leaders and teachers.

Establish the school conditions, structures, and policies required to support strong implementation.

Ensure all educators, including principals, instructional coaches, and specialists, participate in the initial launch training of Bridges.



Provide teachers with regular, job-embedded professional learning on their curriculum, including:

- Collaborative planning time to internalize units and lessons, review student work, and make adjustments to instruction; and
- Coaching and feedback centered on helping teachers understand and skillfully use their high-quality instructional materials (HQIM).

And it worked. Teachers learned how to leverage the curriculum to deliver the math instruction they wanted for their students. Expectations for consistent implementation were clear, and employees across the entire school system understood their unique roles and contributions to the implementation effort, working as a unit to achieve the academic vision.

Most importantly, the students benefited.

Between 2020 and 2023, state assessment scores rose by an average of more than 13%, with even bigger gains seen in grades 3 and 4 where students were exposed to Bridges for longer.

Teachers began to see the mathematical sense-making and skills application they had previously felt were missing in the classroom.

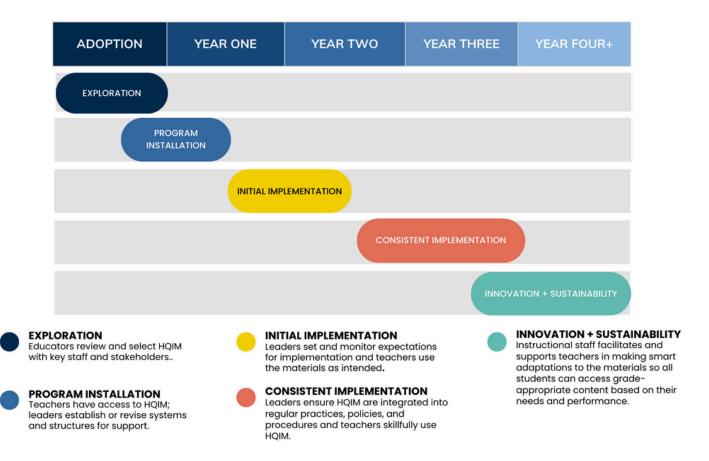
In this case study, we'll take an in-depth look at each stage of MHASD's implementation journey and the key action steps they took within each one.



The Curriculum Implementation Journey

Research shows that providing teachers access to high-quality instructional materials (HQIM) is essential to improving teaching and learning. However, simply adopting HQIM is unlikely to lead to significant improvements in these areas. Successfully implementing HQIM often requires a pronounced shift in approach and the sustained effort of educators at all system levels.

It will take three or more years to effectively implement a new curriculum once selected and purchased. The chart below documents that journey from year 1 (establishing structures and policies; using materials) to year 2 (routinizing structures, policies, and practices; skillfully using materials) to year three and beyond (adapting, innovating, and sustaining).



For the past two years, Rivet Education has studied MHASD's implementation of Bridges in Mathematics and partnership with local professional learning provider <u>Cooperative Educational Service Agency 2</u> (CESA 2) to observe role-specific actions at each phase of the implementation journey that correlates with success.

Meet Mount Horeb Area School District

Mount Horeb Area School District (MHASD) is a small, rural school district in southern Wisconsin. The district serves 2,400 students in grades PK-12 across five schools, all located within the village of Mount Horeb.

MHASD recommended to their Board of Education that they adopt The Math Learning Center's Bridges in Mathematics in January 2020. Due to the COVID-19 pandemic and district-wide virtual learning, the district only launched Bridges fully in kindergarten during the 2020-2021 school year, while grades 1–5 implemented Number Corner, a skills component of Bridges. MHASD fully implemented all portions of Bridges in grades K-5 during the 2021-2022 school year.

MHASD's Adoption Timeline



MHASD identifies the need for a better math curriculum.

MHASD partners with CESA 2 to create a vision for math instruction.

CESA 2 works with MHASD math team to review math materials, and they select Bridges in Mathematics.

MHASD launches Bridges curriculum in kindergarten and pilots Bridges' Number Corner in grades 1-5.

MHASD launches Bridges in all classrooms K-5.

Key Stats District Stats

2.400 Students enrolled

5 Schools

15.5% Low income

85% White 1% Black 5.4% Hispanic 5% Other

Implementation Stats

HOIM **Bridges in Mathematics**

Year 3 of implementation

Year 3 Teacher Ratings for Bridges

Active student engagement

Supporting students' mastery of grade-level content

Alignment to state assessment

Average growth in math proficiency on state assessment



13%

MHASD and CESA 2 recognized that reaping the maximum benefit of the Bridges curriculum would require patience and an intentional and cohesive implementation plan centered around curriculum-based professional learning. While the professional learning plan has been refined over time, its foundational components have remained unchanged based on feedback from CESA 2, school leaders, and teachers.

A COMPREHENSIVE PROFESSIONAL LEARNING PLAN





COLLABORATIVE PLANNING

- **OBSERVATIONS**
- Discuss what, why, and how students are mastering grade-level content
- Review arc of learning
- Practice as students
- Proactively problem-solve

- One-on-one support for teachers by CESA 2
- Address places where students are struggling in a unit or lesson



- COACHING
- Peer observation of lessons
- Short debrief of lessons with actionable feedback for teachers and observers



LESSON MODELING

• Peers or CESA 2 model a lesson to demonstrate effective delivery of a strategy or full lesson.

Exploration

In the Exploration phase, education leaders review and select highquality instructional materials with input from key stakeholders.

In 2018, educators in MHASD began to notice that while students were faring well on the state assessment in mathematics, they struggled on more challenging math assignments that required them to explain their thinking. Educators felt strongly that students deserved a more profound, conceptual understanding of math. After more digging, MHASD realized this was mainly because the math curriculum guiding teachers' daily instruction did not emphasize the skills students needed to succeed in math. While students were strong at providing answers, procedural skills, and fluency, their curriculum did not consistently challenge them to build conceptual understanding, articulate their reasoning, or apply the math skills they had mastered to real-life problems. They needed a program that did more, and they set out to find one.



"Our new math specialist started observing students during math lessons and found that they were not mastering the concepts behind the math because our current curriculum was so procedural. We wanted a curriculum to build students' conceptual understanding and confidence in math."

- Katie Haugue, Principal, MHASD Intermediate School

Exploration

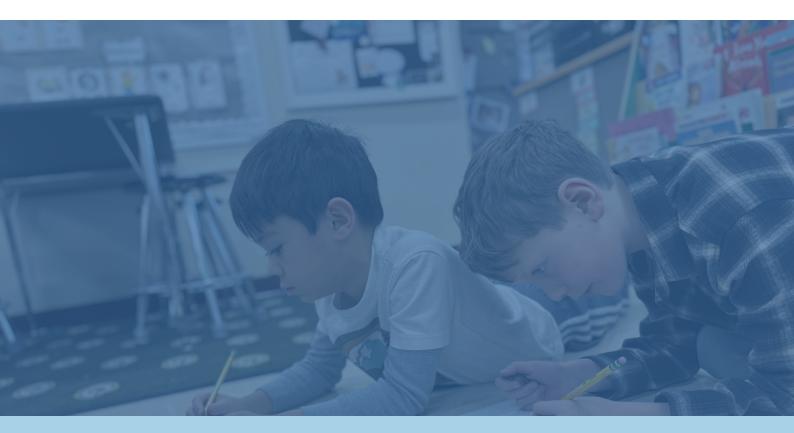
Here is an overview of MHASD's search for a new math curriculum.

Phase Success Criteria	MHASD Actions
Establish a vision for effective and equitable instruction.	In partnership with <u>CESA 2</u> , MHASD district leaders initiated conversations with K–5 math teachers about what good math instruction looks like. These conversations led to the creation of a coherent academic vision for mathematics.
Engage professional learning providers to support the process.	After creating a coherent academic vision for mathematics, MHASD and CESA 2 continued training and conversations with the district's math teachers in 2019 on the mathematical practices, assessing student work, and the role HQIM plays in student learning and instructional practice.
Solicit stakeholder input.	MHASD formed a math team of multiple stakeholders, including school leaders and teachers, to review high-quality math curricula, or those rated "green" on <u>EdReports</u> , with support and guidance from CESA 2.
Plan the adoption process.	MHASD took a year to create its academic vision for mathematics and review and select its curriculum as grounded in the academic vision. They were committed to ensuring that their review committee was well-equipped to analyze the strengths and weaknesses of various "all-green" programs, ultimately selecting a curriculum that best aligned with their academic vision.

Program Installation

In the program installation phase, education leaders establish or update the processes and procedures that support the initial implementation of high-quality instructional materials.

For all K-5 teachers to feel confident in their instruction and to see early success with Bridges, MHASD and CESA 2 recognized that they would need to set and communicate clear expectations for what teachers should know and be able to do during the first few months of implementation.



"We focused on getting clear on what we want students to know and do in classrooms regularly and gave teachers a framework for effective planning and implementation that would achieve these student goals."

Steven Mijajlovic, CESA 2 Math Coach

Program Installation

Here is an overview of MHASD's program installation of Bridges in Mathematics.

Phase Success Criteria	MHASD Actions
Communicate and invest stakeholders in a content-specific vision for instruction.	MHASD leaders and CESA 2 were committed to building teachers' understanding of how the curriculum's approach and design supported the achievement of the district's vision for math instruction. Then, they looked at the connectivity between lessons, units, and modules within a grade and the cohesive or comprehensive progression of skills across multiple grade levels so that teachers fully understood the "why" of their new curriculum.
Define and communicate expectations for implementation.	MHASD leadership communicated what teachers and students should know and be able to do during the first few months of implementation and worked with CESA 2 to provide teachers with training through workshops, coaching, and PLCs to achieve those goals. Teachers were instructed to use the program as intended, adjusting in real time to meet unique student needs, but always remaining true to the program design and unit goals.
Create the initial enabling conditions to maximize the instructional materials.	MHASD adjusted school schedules to allow teachers to collaboratively plan weekly as grade-level teams, observe each other's lessons, and provide feedback. They also created the time and space for teachers to receive one-on-one coaching from CESA 2 each month.

Initial Implementation

In the initial implementation phase, teachers begin using the instructional materials, and students have consistent opportunities to engage with grade-level content and tasks.

MHASD strengthened its partnership with CESA 2 at the start of the 2021–2022 school year to fully support the implementation of Bridges in K-5. Due to a substituteteacher-shortage created by the COVID-19 pandemic and a belief that training workshops alone wouldn't adequately prepare teachers to skillfully use their new HQIM, MHASD and CESA 2 created an innovative launch plan that relied on peer-topeer coaching and in-the-moment and responsive professional learning.



"One-and-done, workshop-based, professional learning doesn't work. Teachers need a mix of observations, lesson studies, modeling, and PLCs. All these professional learning structures make for a successful professional learning plan."

Latricia Johnson, CESA 2 Math Coach

Initial Implementation

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Here is an overview of MHASD's initial implementation of Bridges in Mathematics.

Phase Success Criteria	MHASD Actions
Teachers use the curriculum as intended.	CESA 2 familiarized teachers with the arc of learning for each unit and lesson and supported their mastery of the logistical components of the curriculum. Grade-level teachers also worked together to divide up the pre-work for each unit so that one teacher wouldn't be solely responsible for pulling together all of the materials and manipulatives for each lesson.
Teachers and leaders participate in frequent, job-embedded, curriculum- based professional learning and receive feedback on curriculum implementation.	MHASD leaders worked with CESA 2 to create a multi-faceted PL plan (with clearly articulated roles for teachers, school leaders, coaches, and other specialists) to support the implementation of Bridges that included workshops, collaborative planning, observations, peer-to-peer coaching, and lesson modeling.
District and school leaders have a plan for monitoring implementation and providing feedback to teachers.	CESA 2 collected data and provided feedback to teachers and leaders on curriculum implementation through multiple formats, reflecting on information from walkthroughs, coaching notes, and analysis of student work. These data were used to continuously refine the PL plan throughout the first year of implementation; two of the most impactful data sources were classroom walkthroughs and feedback cycles.

of surveyed teachers said they receive feedback on their curriculum implementation weekly or monthly.

Consistent Implementation

In the consistent implementation phase, instructional materials are integrated into teachers' regular practice, leading to consistent, skillful use. District and school policies and procedures align with and support the implementation of the instructional materials.

Building off its initial implementation plan, MHASD has maintained a professional learning system grounded in coaching, peer-to-peer observations, and feedback to support teachers' consistent use of Bridges. Teachers new to the profession or the district undergo a Bridges induction at the start of the year and participate in customized coaching cycles to build their capacity to implement the curriculum as intended.



"We knew we had to be flexible in our learning models for teachers. The job-embedded professional learning that we developed with CESA 2, which research shows changes teacher practice, was key for us to meet the needs of our teachers truly."

Sarah Straka, MHASD Director of Instruction

Consistent Implementation

Here is an overview of MHASD's consistent implementation of Bridges in Mathematics.

Phase Success Criteria	MHASD Actions
Teachers use the curriculum and embedded scaffolds for the majority of the lesson to support all students in meeting grade-level expectations.	One hundred percent of MHASD teachers surveyed indicated that they are expected to use their curriculum as written, making only minor modifications to meet student needs that are aligned with the program's design and grade-level content. Teachers also stated that using multiple strategies and scaffolds allowed all students to engage in grade-level work because teachers could select the best strategy for students and their academic needs.

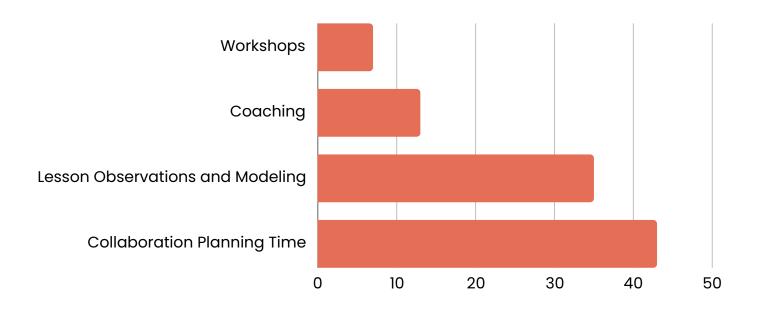
station of surveyed teachers said they were expected to use the curriculum as written, making only minor modifications to meet student needs

School leaders provide professional learning and feedback to teachers focused on curriculum implementation.	MHASD's professional learning plan is centered on job- embedded professional learning. Instructional coaches created a plan for all teachers, whether new to teaching or the district or veteran, to participate in coaching cycles. The frequency of these cycles is based on teacher needs. Each teacher observes and is observed by other teachers throughout the year to share best practices for curriculum implementation.
Leaders regularly monitor the quality of HQIM implementation.	School and district leaders and coaches regularly observe curriculum implementation and provide feedback directly to teachers or share observations in building leadership meetings or weekly grade-level meetings.
District leaders shift ownership of curriculum implementation and monitoring to school leaders and coaches.	In year two, CESA 2 built the capacity of MHASD's instructional coaches to support curriculum implementation in their buildings in year three and beyond.

Innovation & Sustainability

In the innovation and sustainability phase, district and school leaders shift implementation leadership and innovation to teachers who, in turn, make smart and deliberate adaptations to the highquality instructional materials to meet the needs of all students.

From day one, MHASD has empowered its teachers to take ownership of their learning. Over time, district leadership and CESA 2 have built the capacity of the district's coaches and K-5 math teachers to become instructional leaders in their schools. Teachers and coaches lead weekly collaborative planning meetings and have the autonomy to create and engage in the professional learning structures needed to improve their instructional practice.



Most Effective Professional Learning Types

"I have learned to get out of my team leaders' way. One person can't do it all. So we empower our people to take ownership in the decision-making process.

Rachel Johnson, Principal, Mt. Horeb Early Learning and Primary Centers

Innovation & Sustainability

Here is an overview of how MHASD is innovating and sustaining its implementation of Bridges in Mathematics.

Phase Success Criteria	MHASD Actions
Teachers take ownership of collaborative planning and feedback structures.	Teachers lead their own weekly grade-level meetings to discuss curriculum implementation, internalize units and lessons, analyze student work and assessment data, and address other miscellaneous issues for their grade level. Instructional coaches and school leaders participate in the meetings only as observers or until their input is needed. When surveyed, 44 percent of teachers indicated that this collaborative planning time was the most effective in supporting their curriculum implementation.
School leaders begin to equip teachers to support implementation.	MHASD has created a collaborative leadership structure that supports HQIM implementation. School leaders empower teachers to make instructional decisions that are in the best interest of their students and peers by putting them in leadership roles within the school. Some teachers serve as grade-level chairs and lead weekly grade-level meetings. Other teachers serve on school committees aligned with school-wide goals and make decisions for the school in service to those goals.
District leaders maintain a culture of continuous improvement.	MHASD is consistently collecting data to inform changes to their implementation and professional learning plans. For example, based on feedback from teachers and coaches, the district is revamping its coaching program to provide teachers with more intentional support throughout the year while still trusting its teachers to ask when they need help.

RECOMMENDATIONS FOR DISTRICT AND SCHOOL LEADERS

RECOMMENDATIONS

Beyond Mount Horeb's successes, there is growing research highlighting that curriculum-based professional learning (which is inherently anchored in the context of teachers' everyday work) improves teachers' abilities to engage students with rigorous content and grows teachers' understanding of relevant content and content pedagogy.¹

Purchasing a new HQIM is just step one in the process. Rivet's <u>Instructional Materials</u> <u>Implementation Tool</u> identifies the key actions that systems leaders, school leaders, and teachers must take at each phase of the implementation journey. Here is a quick look at the highest-leverage actions highlighted in the tool:



Set and communicate clear expectations for school leaders and teachers in curriculum implementation.



Establish the conditions, structures, and policies required to support strong implementation.



Ensure all educators, including principals, instructional coaches, and specialists, participate in the initial launch training of a new curriculum.



Provide teachers with regular, job-embedded professional learning on their curriculum, including:

- Collaborative planning time to internalize units and lessons, review student work, and make adjustments to instruction; and
- Coaching and feedback centered on helping teachers understand and skillfully use their HQIM.

1 Gallagher, Alix. (2016) Professional Development to Support Instructional Improvement: Lessons From Research. SRI International. Retrieved from: https://www.sri.com/wp-content/uploads/2021/12/professional_development_to_support_instructional_improvement.pdf. Short, J. & Hirsh, S. (2020, November). The Elements: Transforming Teaching through Curriculum-Based Professional Learning. Carnegie Corporation of New York. Retrieved from: https://media.carnegie.org/filer_public/47/94/47947a81-4fdf-421b-a5e8-fbb211898ee0/elements_report_november_2020.pdf. Wiener, R. & Pimentel, S. (2017). Practice What You Teach: Connecting Curriculum & Professional Learning in Schools. Washington, DC: The Aspen Institute. Retrieved from https://assets.aspeninstitute.org/content/uploads/2017/04/Practice-What-You-Teach.pdf.

ABOUT RIVET EDUCATION

Rivet Education supports every stage of high-quality instructional materials implementation. We devise simple, practical, and scalable strategies that promote excellent instruction for every student in every classroom, every day. Our work is driven by Rivet's core values-an unwavering commitment to students, equity, and quality.

To learn more, visit riveteducation.org.

CONTACT

riveteducation.org info@riveteducation.org



@rivet_education



in @rivet-education

