

Transforming Numeracy Education

US Math Recovery Council® is a nonprofit 501(c)(3) organization empowering educators to transform numeracy education for all students.

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What is Math Recovery®?

Math Recovery[®] is having the right task, at the right time, for <u>all</u> students.

Combined, Educator Development, Student Assessment, and Instructional Strategies lead to proven, significant, and long-term improvement in student mathematics performance. Math Recovery® professional development is built on the foundation of strong and ongoing research.



Educator Development

Increase knowledge relating to the teaching and learning of mathematics, which facilitates improvements in instructional practices.



Student Assessment

Use dynamic diagnostic assessments to understand a student's current thinking, then build from the student's ways of knowing with learning progressions.



Instructional Strategies

Promote student inquiry through thoughtful and purposeful selection of teaching topics, instructional settings, and tasks within your current math program.



Educator Benefits

Outcomes for Teachers:

- Sustain improvement in student mathematics attitudes and performance.
- Ability to better unpack the hows and whys of curriculum.
- Reinforce a multi-tiered system of support by aiding core instruction and providing intervention for struggling students.
- Organize and use formative assessment data to inform decision-making related to professional development activities, resource allocation, and coaching.
- Increase understanding of local standards and the skills and concepts needed for proficiency.

Outcomes for Educational Leaders:

- Establish effective district and school level leadership teams.
- Develop and implement a multi-year strategic mathematics plan based on needs assessment and student data.
- Build multi-tiered systems of support utilizing research-based practices, approaches, and instructional tools.
- Create a consistent teacher knowledge base on the essential elements of mathematics and principles of effective instruction.
- Explore the practices of effective mathematics leaders which are essential to guiding longterm changes in classroom pedagogy and student outcomes.
- Ability to guide the work of others in understanding local standards and the skills and concepts needed for proficiency.

Hear what educators are saying: mathrecovery.org/testimonials



"This intensive course (MRSp1) has allowed me to learn more about mathematics **than any other professional development course** in my 20-year career."

Course Participant in Aspen, Colorado

Professional Development

Math Recovery® provides dynamic professional development which impacts the way professional educators think about student numeracy learning.

With US Math Recovery Council[®] course offerings you are able to **develop a personal**, **school**, **or district plan to improve student numeracy** by selecting courses to address tiers of support for kindergarten through 8th grade number topics.





Math Recovery® Specialist is a rigorous course that provides intensive professional development focused on intervention teaching experience and highly specialized knowledge in Math Recovery® content, assessment, and teaching. Each course contains in-person and/or virtual training, independent learning experiences, active work with students throughout the year, collegial team meetings, and 1:1 coaching from a Math Recovery® Leader.

These intensive, blended-learning professional development experiences include continual cycles of instruction, reflection, and refinement resulting in a high level of expertise in mathematics intervention and Math Recovery® specialization. Courses includes teacher course-specific handbook, assessment kits, intervention teaching materials, course textbooks, along with personalized on-going support provided by USMRC.

Math Recovery[®] Specialist: Part 1 (MRSp1)

Math Recovery® Specialist, Part 1 (MRSp1): Intervention and Specialization in Number Learning for the Primary Grades includes the assessment and teaching topics of addition and subtraction, structuring numbers, number word sequences, numeral identification, and conceptual place value. The MRSp1 course length is typically 9-12 months. After completion of this course, participants are well prepared for providing targeted intervention students and are a valuable resource for supporting school- or district-wide initiatives. MRSp1 develops interventionists who can provide effective short-term intervention, and can support developing local leadership and sustainability for district or school mathematics education.

Math Recovery[®] Specialist: Part 2 (MRSp2)

Math Recovery® Specialist, Part 2 (MRSp2): Intervention and Specialization in Number Learning for the Intermediate Grades expands on Part 1 and includes the assessment and teaching topics of higher decade addition and subtraction, addition and subtraction to 100 and multiplication and division. The MRSp2 course length is typically 6-9 months. After completion of this course, participants are well prepared for providing targeted intervention students and are a valuable resource for supporting school- or district-wide initiatives.





Add+VantageMR® (AVMR) professional development courses focus on numeracy development. AVMR supports elementary & middle school educators, special education instructors, math interventionists, and math coaches in diagnosing and advancing student understanding and growth.

During these professional learning opportunities, participants will be actively involved in rich discussions around students' mathematical thinking. Participants leave the course ready to work with students and implement new knowledge in their teaching practices to meet the needs of a diverse range of students. Courses include teacher course-specific handbook, assessment kits, intervention teaching materials, and course textbooks.

Add+VantageMR[®] Course 1 (AVMR 1)

AVMR 1 empowers participants to use dynamic diagnostic assessments and learning trajectories to guide the teaching topics such as number words and numerals, structuring numbers, and addition and subtraction - all of which impact affect the development of future mathematical understanding.

Add+VantageMR[®] Course 2 (AVMR 2)

AVMR 2 expands and deepens knowledge and understanding of the mathematical development for all students from Course 1. This course includes dynamic diagnostic assessments of multiplication and division strategies and place value understanding - critical concepts for more advanced mathematics. During this professional learning opportunity, participants are actively engaged in rich discussions about student mathematical thinking.

Add+VantageMR[®] Fractions (AVMR Fractions)

AVMR Fractions is a 3-month long virtual course consisting of a series of 8 collegial team meetings combined with independent learning activities. Participants can expect approximately 60-120 additional minutes each week of online learning modules, course reading, and time to implement assessments and instructional activities with students.

"This is the best professional development I have taken in my career. It was the best learning experience to date because I learned how children learn and develop their mathematical skills and concepts."

Teacher Participant in Rapid City, South Dakota

Research & Results

Real Student Results

The Solon (Ohio) City School District conducted a longitudinal follow-up of Math Recovery® intervention students. Data was collected from twenty students who received Math Recovery® services in their first grade year from their state exams in third grade. Of those twenty students, **95% were proficient, accelerated, or advanced** as third graders. (Silvestri, 2015).

STEMworks Rates Math Recovery[®] as Accomplished

Math Recovery® underwent a rigorous evaluation process with STEMworks, resulting in a rating of "accomplished" in the below Design Principles for Effective STEM education. According to STEMworks, **"the programs in (US Math Recovery Council®) clear a high bar."** (stemworks.wested.org/program/math-recovery)

- Need Identify and target a compelling and well-defined need
- **Evaluation** Use rigorous evaluation to continuously measure and inform progress towards the compelling need identified
- Sustainability Ensure work is sustainable
- Replication & Scalability Demonstrate replicability and scalability
- Partnerships Create high impact partnerships
- Capacity Ensure organizational capacity to achieve goals
- Challenging & Relevant Content Offer challenging and relevant STEM content
- Under-Represented Groups Identify and address the needs of under-represented groups

Student Growth in the Classroom

The Kentucky Center for Mathematics led a state-funded initiative established to improve math instruction and learning across the state. The evaluation used convenience samples of the student Terra Nova CAT6 Version 2 results of schools that elected to implement one of two different math interventions, one of which was Math Recovery® intervention. CAT6 was administered, pre and post to all intervention students with a subset of 59 matched pairs from each intervention. Average grade level gains were calculated for the participants of each intervention. While the average growth for both interventions exceeded a year's growth, the analysis of matched pairs revealed that the **Math Recovery® students made an average gain of 2.22 grade levels of growth in one school year** while students from the other intervention made an average of 1.56 years growth. (Ludwig, Jordan, Maltbie, & Marks, 2007).



See the data including the Efficacy and Effectiveness Research: **mathrecovery.org/research**



Over 20 years of transforming instruction and improving student learning

The US Math Recovery Council[®] is dedicated to developing, overseeing and supporting the Math Recovery[®] professional development program and its materials in the United States.

The Council is a registered 501(c)(3) nonprofit organization. As a nonprofit, the cost of Math Recovery® professional development is significantly less than you will find for comparable professional development hours and depth of instruction through for-profit companies. The professional development fees you pay are funneled directly back into support for teachers after courses, the continual development of new courses, updating current courses with latest research, opportunities for other teachers across the United States to take Math Recovery® professional development, and maintaining the organization.

The work USMRC engages in is based on the research of Dr. Robert J. Wright, the originator of Maths Recovery Programme from Southern Cross University, Lismore, Australia. Ann Stafford Dillon studied Maths Recovery with Dr. Wright at Southern Cross, and upon returning to the United States, she was intregral in founding the US Math Recovery Council®.

The Mission of the US Math Recovery Council®

- Transform numeracy education
- Connect research with practice
- Empower educators to advance student mathematical thinking and success

Diversity, Equity, and Inclusion

The US Math Recovery Council® is committed to and accountable for advancing diversity, equity, and inclusion in all its forms. We embrace the development of a healthy, educational ecosystem which engages all individuals (leaders, teachers, students, community, etc.) to thrive. Math Recovery® principles are a vehicle for increased equitable practices. We pledge to continue our own learning about diversity, equity, and inclusion and to transform numeracy education by dismantling systemic barriers within mathematics education.

Learn more about us: mathrecovery.org/about



Learn more at mathrecovery.org

