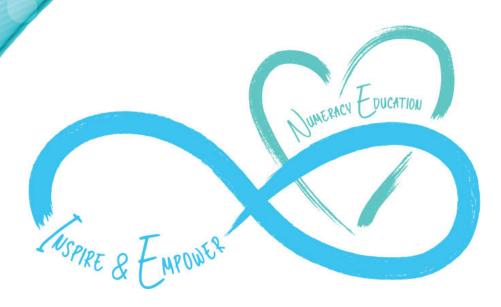


US MATH RECOVERY COUNCIL® NATIONAL CONFERENCE



AT THE HEART

OF MATH RECOVERY®

APRIL 25-28, 2022 • HYATT LODGE HOTEL 2815 JORIE BOULEVARD • OAK BROOK, ILLINOIS



US Math Recovery Council® 510 Lone Oak Road, Suite 600 Eagan, Minnesota 55121 p: 952-683-1521 info@mathrecovery.org mathrecovery.org

WELCOME to the 2022 US Math Recovery Council® National Conference!

We are so glad you are here. It has been a long time since we have been able to gather in-person as a community to talk math. The past two years have revealed to us that Math Recovery is needed in our schools now more than ever. With that in mind, we are pleased to bring together an exciting collection of Math Recovery authors, community members, staff, and board members to share their knowledge and love of math through our two keynotes, mini courses, and over 50 breakout sessions. Collectively they bring to life the theme for this year's conference: At the Heart of Math Recovery: Inspire & Empower.

It is our hope that over the next few days you feel connected, supported, and renewed... and that you return to your districts, schools, classrooms, and students feeling inspired and equipped for action. This year's conference is dedicated to mathematics as a vehicle for equity. Math Recovery seeks to provide opportunities and experiences for all students to develop a positive mathematics identity. At its core, it is a student-centered, strength-based approach that first pinpoints where students are at, builds on what students know, and then supports students in growing and developing more sophisticated strategies. When we build capacity in ourselves through reflecting on our approaches, practices, and expectations around math learning, we can build capacity in children. We must continue to advocate for and create learning environments where math is a gateway, not a gatekeeper to student success.

We have a rich plenary of sessions designed to dig into topics of implementation. You have the enjoyable challenge of choosing amongst a selection of topics curated to spark curiosity, deepen understanding, ignite inspiration, and strengthen our ability to empower others. Our speakers are covering topics that include asset-based approaches, special education, addressing unfinished learning, culturally responsive teaching, and much more. And finally, you will also have an opportunity to hear about some of the positive Math Recovery developments that came out of these past two years of change and uncertainty – Math Champs, our first direct-to-student tutoring services and Ready Set Math, our first digital teacher resources for mini lessons and independent activities.

On behalf of everyone at US Math Recovery Council®, have a wonderful time learning, reflecting, and connecting. Thank you for being a part of this community.

You make a difference.

Christina Miller, PhD

Executive Director

The mission of the US Math Recovery Council® is

To **transform** numeracy education

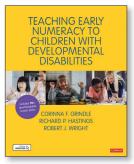
To **connect** research with practice

To **empower** educators to advance student

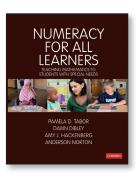
mathematical thinking and success

...through Math Recovery® principles.

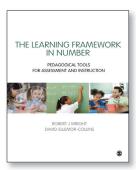
The Math Recovery® Series provides intensive instruction for early number learning. The inquiry-based approach assesses and builds upon children's knowledge to develop a firm foundation of understanding and confidence in mathematics.



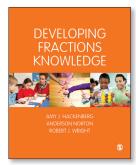
ISBN: 978-1-5264-8753-7 \$37.00



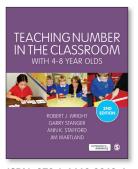
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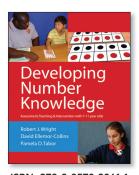
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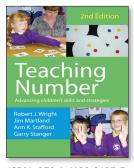
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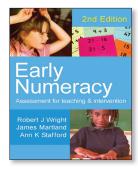
ISBN: 978-1-4462-8269-4 \$45.00



ISBN: 978-0-8570-2061-1 \$48.00



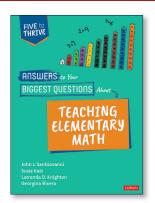
ISBN: 978-1-4129-2185-5 \$50.00



ISBN: 978-1-4129-1020-0 \$48.00

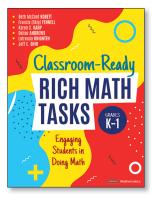
For more information, visit corwin.com/mathrecovery

New from Corwin Mathematics



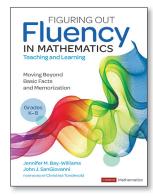
ISBN: 978-1-0718-5771-7 \$29.95

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For more information, visit corwin.com/math





IMPORTANT CONFERENCE FEATURES

MEALS & NAME TAGS

Enjoy your delicious breakfast and lunch buffets provided as part of your conference registration. Please note that all food on the buffet will be labeled for ingredients and allergies. If you have dietary restrictions and have questions about any of the buffet food, please speak to a Hyatt Lodge Hotel banquet staff member.

Please have your conference name tag available and visible at all events. This is your meal ticket and supports our speakers during sessions. Please turn in your badge holder to any US Math Recovery Council® staff member as you leave the conference.

WELCOME RECEPTION & INSTRUCTIONAL ACTIVITY SHOWCASE

Tuesday evening, April 26th, from 3:30 p.m. to 4:30 p.m. the **US Math Recovery Council®**, together with **SAGE & Corwin Publishing, MathImagine, MathRack, & Forefront Education** will host a Welcome Reception. Mix and mingle with US Math Recovery Council® Board of Directors, staff members, speakers, Math Recovery® members and colleagues from around the U.S. Hors d'oeuvres will be served and a cash bar will be available.

Additionally the Instructional Activity Showcase will run concurrently with the Welcome Reception. We hope you will join us in celebrating "At the Heart of Math Recovery: Inspire . Empower . Numeracy Education." Check the schedule for room location.

ANNUAL MEETING OF MEMBERSHIP

US Math Recovery Council® will hold its **Annual Meeting of Membership, At the Heart of Math Recovery: Inspire . Empower . Numeracy Education** on Wednesday, April 27th, from 8:00 a.m. to 9:25 a.m. Please be sure to attend! The vision and information is always worth it! Everyone is welcome!

EVALUATIONS & MISCELLANEOUS REMINDERS

The US Math Recovery Council® Board of Directors and staff hope your conference experience helps to Inspire & Empower Math Recovery hearts. Please submit an evaluation found in the conference app at the end of every session you attend and one for the full conference as you exit. Your input and feedback on evaluations are extremely important and help us to better plan and execute future conferences tailored to meet your needs.

MISCELLANEOUS

- Your conference certificate can be located in your Math Recovery® account on our website a week after the conference has ended. Find and print your certificate located in "My Academy --> My Conferences" on your MR dashboard. The certificate will include the total number of contact hours based on your days in attendance.
- Please join us on Twitter throughout the entire conference #MRCONF22.
- Have fun connecting with others Tuesday–Wednesday and see how many items you can find for the Scavenger Hunt. Tweet them out to win a prize #MRHUNT.
- Attend the Fun Run or Walk Event on Tuesday, April 26th from 5:00 p.m.-6:00 p.m. on the beautiful grounds of the Hyatt Lodge Hotel. Meet in the Hyatt Lodge Hotel Lobby at 4:45 p.m.



NOTICE OF CONFERENCE PHOTOGRAPHY

As a courtesy, the US Math Recovery Council®, Inc. (USMRC) would like to alert all conference attendees, member speakers, presentation speakers, presentation co-speakers, and special guests that the 2022 US Math Recovery Council® National Conference entitled, "At the Heart of Math Recovery® Inspire & Empower Numeracy Education" will have photographers taking pictures and video throughout the conference week. It is possible that you may be included in these photos by being present at this conference.

By remaining in the immediate vicinity of the Hyatt Lodge, Oak Brook, Illinois you are automatically giving US Math Recovery Council® your consent to photograph and video your picture and likeness. You further authorize the following:

- The US Math Recovery Council® and its agents to photograph, and/or otherwise record your image with the understanding that the US Math Recovery Council® will own these photos.
- The US Math Recovery Council® to display, publish, and distribute any photographs on our approved websites, publications, displays and any other medium. The US Math Recovery Council® will never sell or offer any images, likeness, etc. to any outside agent.
- You waive the right to inspect or approve any images or materials that may be used with these conference photographs now or in the future, whether the use is known to you or not.
- You release the US Math Recovery Council®, its regents, employees and agents from all liability arising out of the use of these photographs, including but not limited to any claims arising out of your rights of privacy or right of publicity and any claims based on any distortions, optical illusions or faculty mechanical reproductions.
- You understand that you will not be compensated for any use of these photographs or images.

If for whatever reason you are unable to have your picture or likeness displayed publicly through the mediums listed above, you need to send an email to info@mathrecovery.org with the subject line,

"2022 MR Conference Photos." Tell us your first and last name, and list any and all conference sessions you attended in the body of the email. Please attach a recent photo of yourself to the email so that we can identify you in any conference photos and ensure that these particular images are not used.

Thank you!

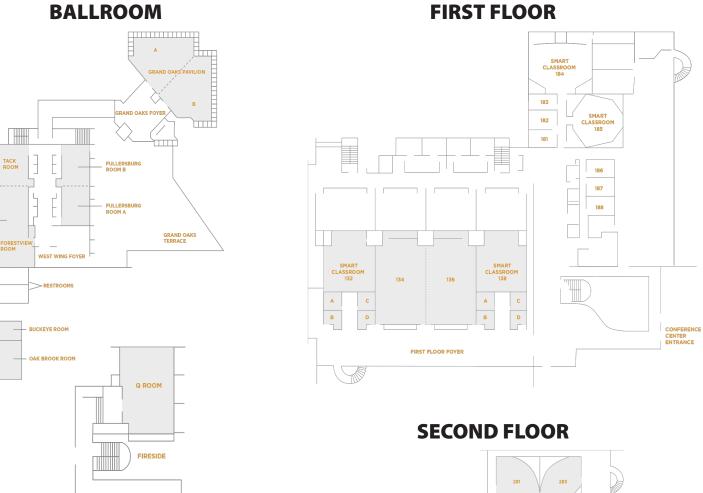
US Math Recovery Council® April 2022

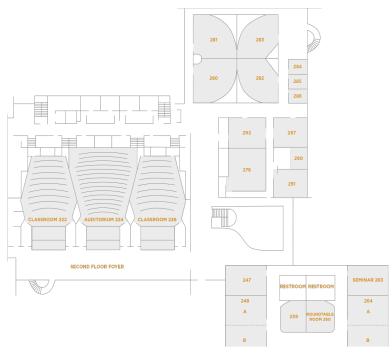




CONFERENCE MAPS

HYATT LODGE CONFERENCE CENTER

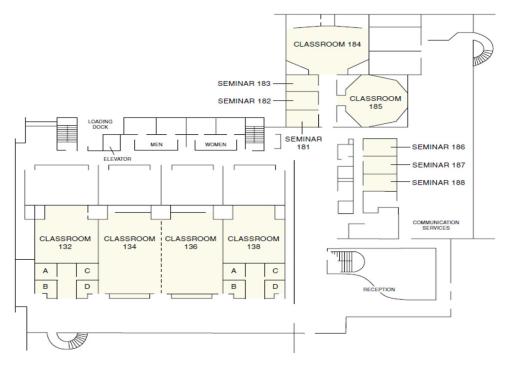




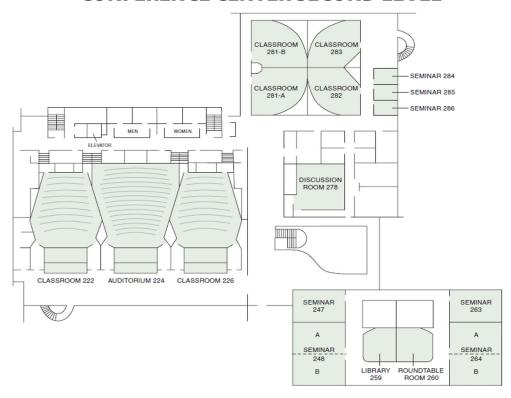


CONFERENCE MAPS

CONFERENCE CENTER FIRST LEVEL



CONFERENCE CENTER SECOND LEVEL





CONFERENCE KEYNOTE SPEAKERS



DR. AMY J. HACKENBERG

Associate Professor of Mathematics Education, Indiana University

Keynote: Tuesday, April 26: 8:45 a.m. - CC 224

Breakout Session: Tuesday, April 26: 12:30 p.m. - CC 226

Dr. Amy J. Hackenberg taught middle and high school students for 9 years in Los Angeles and the Chicago area. Currently she is an associate professor of mathematics education at Indiana University-Bloomington. She has conducted research on how middle school students construct fractions and rational number knowledge, on relationships between middle school

students' rational number knowledge and algebraic reasoning, and on how to differentiate instruction for students with diverse mathematical ways of thinking. In her current project, she is studying her own teaching as well as working with practicing teachers.



DAWN DIBLEY

Instructional Coach, US Math Recovery Council® **Keynote:** Wednesday, April 27: 3:00 p.m. - CC 224

Breakout Session: Tuesday, April 26: 10:20 a.m. - CC 247

Dawn Dibley, a special educator with 30 years of experience as a music therapist, classroom teacher, and mathematics coach is currently an instructional coach for the US Math Recovery Council®. From the time of her initial training as a Math Recovery® Intervention Specialist in 2007, she began exploring the use of the Learning Framework in Number (LFIN) in teaching

numeracy to students with disabilities. She spent several years facilitating the USMRC's Add+VantageMR® Professional Development courses to specifically address the concerns of teachers of students with special needs. Her interest in students with disabilities and the teachers who teach them, led her to co-author the book *Numeracy for All Learners: Teaching Mathematics to Students with Special Needs*. She holds a bachelor's degree in Music Therapy and master's degrees in music therapy and developmental cognitive disabilities from the University of Minnesota.



MONDAY, APRIL 25, 2022 - PRE-CONFERENCE

Monday, April 25 Planning Guide

Mini-Course Session Times	1st Choice	2nd Choice
8:30 a.m. – 11:30 a.m.		
8:30 a.m. – 3:30 p.m.		
12:30 p.m. – 3:30 p.m.		

SESSION TIMES SESSION DETAILS

7:00 a.m. – 10:00 a.m. Registration/Information Desk - CC Foyer

7:30 a.m. – 8:30 a.m. Breakfast - CC 134 & 136

8:30 a.m. – 3:30 p.m. Full Day Mini-Courses

8:30 a.m. – 11:30 a.m. AM Half Day Mini-Courses

11:30 a.m. – 12:30 p.m. Lunch - CC 134 & 136

12:30 p.m. – 3:30 p.m. PM Half Day Mini-Courses

FULL DAY SESSIONS (8:30 a.m. – 3:30 p.m.)

Linking Fraction Intervention to Add+VantageMR® through Units Coordination: A trajectory for instruction (Full Day)

Presenter: Christy Lyle Location: CC 278

As we attempt to move students through the constructs on the Model for the Development of Fractions Concepts, what does that look like in a practical sense? Following Steffe's reorganization hypothesis, by building student strengths and units coordination in whole number, specifically in higher decade addition and subtraction and multiplication/division, we support the move into fractional thinking. Consider excerpts from a series of recorded lessons with two 3rd grade students as we work to move from a part/whole model to the measurement world of fractions, ever mindful of the supporting concepts and skills necessary for this transition. Building upon what was learned through the intervention, we will deepen our understanding of units coordination leading to an effective teaching skill leading to student understandings.

Prerequisite: AVMR Fractions



Location: CC 264A/B

Location: CC 281

MONDAY, APRIL 25, 2022 - PRE-CONFERENCE CONTINUED

Math Recovery Leader for Math Recovery Specialist, Part 2 Course (Full Day)

Presenters: Kate Anderson & Kurt Kinsey

Join us for the launch of the Math Recovery Leader for Math Recovery Specialist, Part 2 (MRSp2 Leader) course. We will extend our knowledge of the learning progressions and pedagogical tools for assessment and teaching in the middle number band of the Learning Framework. During this session, you will collaborate with others to build understanding, explore the activities in the rollout of the MRSp2 course, and delve into the theory and content within the Domains of Additional and Subtraction to 100, Early Multiplication and Division, and Multiplicative Basic Facts. This pre-conference session is the beginning of the MRSp2 Leader course in which participants develop the depth of knowledge necessary to facilitate and support a Math Recovery Specialist, Part 2 course. Additional virtual meetings throughout the summer and fall are required as part of the course. To be designated as an MRSp2 Leader, full completion of the course, leader projects and the facilitation of an MRSp2 course are required.

Prerequisite: MRSp1 Course & MRSp2 Course Completion

MORNING SESSIONS (8:30 a.m. – 11:30 a.m.)

Exploring a Trajectory of Subtraction within Instructional Phases: Progressing from Initial Number Sequences to Facile Number Sequences and Beyond

Presenters: Dina Mendola & Mollie Gabrielson

Join us as we experience how to recognize and build a vital foundation for future mathematical learning, starting with students' earliest experiences with backwards sequences and extending into structures and strategies relating to subtraction. In this session, we will work to understand and discover where students currently are at in their understanding and where they are going within the trajectory towards conceptual understanding with subtraction to provide access for all students. We will analyze video to determine student thinking, explore a wide range of supportive tasks, and draw connections across grade level bands for a deeper understanding on how to develop facile subtractive skills and knowledge for all students.

An Inquiry-Based Approach to Structuring Numbers to 20: From Early Structuring to Facility with Addition & Subtraction Basic Facts

Presenters: Sherry Hornbacher & Amanda Roble

This pre-conference session will explore an instructional progression that begins with Early Structuring and ends with facility with the basic facts. We will focus heavily on questioning and prompts that move away from telling and showing to actively engaging the student in inquiry mode.

Prerequisite: MRIS, MRSp1 Certification

Audience: MRIS, MRSp, AVMR Champions, MR Leaders



Location: CC 281

Location: CC 264A/B

MONDAY, APRIL 25, 2022 - PRE-CONFERENCE CONTINUED

Going Beyond the Assessment Schedules: Assessing Students Within Classroom Instruction

Presenters: Melissa Wilke & Amy Cook

In this session participants will have the opportunity to deepen their knowledge of the Add+VantageMR® (AVMR) models and sharpen their skill of ongoing assessment within their classroom. It is the goal of this session to expand teachers' knowledge of the learning framework and AVMR models in order to allow them freedom to assess students beyond the confines of the AVMR assessments. Teachers will engage in video observation of regular lessons and analysis of where students are within the LFIN and models.

AFTERNOON SESSIONS (12:30 p.m. – 3:30 p.m.)

Instructional Coaching: Developing Critical Learning Behaviors

Presenters: Sherry Hornbacher & Mollie Gabrielson

This pre-conference session will explore the nuances of working with adult learners. We will identify critical learning behaviors and discuss individualizing feedback to match learning preferences.

The Best Way Out is Always Through: Getting Unstuck in the World of Repeated Addition and Subtraction

Presenters: Dina Mendola, Lori Loehr & Marria Carrington

Are your students stuck in the world of repeated addition and subtraction? While the idea of repeated addition and subtraction is certainly a significant part of multiplicative reasoning, the transition from counting-based strategies to multiplicative structuring and strategies is a crucial driving force towards developing a rich understanding of number relationships and conceptual fluency. Units coordination is instrumental in providing children opportunities to develop structures and ways of seeing mathematical concepts that will build bridges towards developing rich, meaningful, and flexible mental strategies for multiplication and division. Come explore an intentional trajectory of units coordination and prioritizing number relationships in order to develop flexible mental strategy-based approaches which highlight number relationships. The goal is to equip students with a strong number sense foundation that serves as a catalyst for larger values. This progression will provide opportunities to explore fundamental number concepts, deepen math reasoning and encourage strategic thinking.



Congratulations TO THE 2020 & 2021 WINNERS OF THE EDUCATOR AWARDS



The US Math Recovery® Educator Award honors individuals who have demonstrated highly effective engagement with students and other educators in the mathematics teaching and learning. These honorees have dedicated service to their school, community and/or the US Math Recovery Council®, and have a significant commitment to their own professional growth.

The US Math Recovery Council® is proud to announce the 2020 and 2021 US Math Recovery® Educator Award winners. Each of these individuals was nominated by their peers for this prestigious award and has demonstrated the qualities, passion and commitment necessary to ensure Math Recovery positively impacts their schools and communities.

Beth Brady, the **2020 US Math Recovery® Educator of the Year**, is a dedicated, knowledgeable, and enthusiastic Math Recovery® AVMR Champion and Math Recovery Specialist. Since taking her first AVMR Course 1 in 2015 she worked tirelessly to help students and teachers gain from what she has learned. As shared by a colleague, "Beth has worked side-by-side with teachers, math coaches, department chairs, and the Director of Curriculum to improve the mathematical understandings of her district's children. She has worked hard to accomplish this feat and has brought her district of teachers to a new and higher level of mathematical appreciation for the difference extraordinary instruction can have on all children's lives." Beth's current role is as a Mathematics Instructional Coach in Holyoke, MA and she is working tirelessly to help any student or teacher every day.



Jenny Lynch, of Spokane Public Schools in Spokane, WA, is the 2021 US Math Recovery® Educator of the Year. Jenny is known to be a thoughtful and caring leader, math coach and interventionist. Jenny's journey with US Math Recovery® began in 2012. Jenny is an incredible asset to the Spokane, WA community. She always goes above and beyond to ensure children have the best opportunities possible. On any given day you will find Jenny teaching students and supporting teachers, para educators and volunteers. She has been described by her peers as, creating a "can do" environment, ensuring Math Recovery® has a positive impact in every possible way. During the pandemic Jenny supported remote learning by recording and sharing short math lessons that students and families could access online. As noted by friends



and colleagues, she is always willing to do what is needed and put herself out there as an example for others.

Congratulations Beth and Jenny! We are proud to honor your achievements!

Nominate an exceptional mathematics educator today! Nominations are open for the 2022 US Math Recovery Council® Annual Meeting at www.mathrecovery.org/educator-award



TUESDAY, APRIL 26, 2022 - DAY 1 SCHEDULE

Tuesday, April 26 Planning Guide

Session Time	1st Choice	2nd Choice
7:50 a.m. – 8:00 a.m.	Welcome	N/A
8:00 a.m. – 8:45 a.m.	Board Chair Address and Educator Award Presentation	N/A
8:45 a.m. – 10:00 a.m.	Keynote Session	N/A
10:20 a.m. – 11:30 a.m.		
11:30 a.m. – 12:30 p.m.	Lunch	
12:30 p.m. – 1:40 p.m.		
2:00 p.m. – 3:10 p.m.		
3:30 p.m. – 4:30 p.m.	Welcome Reception & Instructional Activity Showcase	
5:00 p.m. – 6:00 p.m.	Math Recovery Fun Run/Walk	



TRACKS KEY:

Leadership

New to MR

Special Ed

Secondary

Interest areas as indicated

by the presenter.

TUESDAY, APRIL 26, 2022 - DAY 1 SCHEDULE

SESSION TIMES	SESSION DETAILS
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6:30 a.m. – 10:00 a.m. Registration/Information Desk – CC Foyer

6:45 a.m. – 7:40 a.m. Breakfast – CC 134 & 136

7:50 a.m. – 8:00 a.m. Welcome – CC 224

8:00 a.m. – 8:45 a.m. Board Chair Address, Educator Award Presentation

CC 224

8:45 a.m. – 10:00 a.m. Keynote Session

10:20 a.m. – 11:30 a.m. Breakout Sessions

11:30 a.m. – 12:30 p.m. Lunch – CC 134 & 136

12:30 p.m. – 1:40 p.m. Breakout Sessions

2:00 p.m. – 3:10 p.m. Breakout Sessions

3:30 p.m. – 4:30 p.m. Welcome Reception & Instructional Activity Showcase

Grand Oaks Pavillion

5:00 p.m. – 6:00 p.m. Math Recovery Fun Run/Walk – Meet in Hotel Lobby

OPENING SESSION (7:50 a.m. – 8:45 a.m.)

Welcome, Board Chair Address, and Educator Award Presenation

Presenters: Christina Miller, Julie Holmes, and Beth MacDonald Location: CC 224

KEYNOTE SESSION (8:45 a.m. – 10:00 a.m.)

Differentiating Instruction for Diverse Mathematical Learners

Keynote: Amy Hackenberg

Students construct mathematics through productive struggle, by engaging in tasks with appropriate cognitive demand. Students meet this demand by relying on their available mathematical structures and coordinating them through working memory. This talk introduces unit transformation capacity (UTC) to model students' mathematical power in meeting the cognitive demands of tasks and constructing new mathematical structures. UTC describes the way students construct and transform units—including whole units like 1 and fractional units like 1/5—to solve mathematical tasks. We will consider the neurological underpinnings of working memory and the frontal-to-parietal shift in brain activity that corresponds to mathematical development. We will also consider implications for instruction and intervention for students with special needs.

DAY 1 SESSIONS continued next page

Location: CC 224



SESSION TIMES SESSION DETAILS

10:00 a.m. – 10:20 a.m. Break

10:20 a.m. – 11:30 a.m. Breakout Sessions

MORNING BREAKOUT SESSIONS (10:20 a.m. – 11:30 a.m.)

MathRack Developmental Progression

Presenter: Lynn Rule Location: CC 278



Participants will learn that the most effective developmental progression to become automatic with facts begins with a MathRack 5 to build a foundation for prioritizing 5. This instruction will encompass quick images, number strings, conversations, and various activities connected to text. Students will begin to understand conservation, commutativity, compensation, associativity, and part/whole relations. Then students will use the MathRack 10 to develop fluency with addition and subtraction facts up to 10. Understanding and envisioning the 5 and 10 is the precursor for working with the MathRack 20.

Supporting Administrators by Building Capacity

Presenter: Julie Holmes Location: CC 280



Location: CC 281

This session will focus on ways district administrators can support teachers in implementing AVMR assessments and teaching within their universal curriculum and intervention teaching. We will discuss the pitfalls of implementation and ways to overcome them. Time will be spent discussing ways to empower principals to ask the right question and use data that guides their school goals and improves student learning.

Supporting Numeracy throughout the Math Instructional Block – Moving Beyond One-on-One and Small Group Instruction

Presenters: Erica Beckett & Wendy Wall

Two coaches will share strategies and examples of planning for math instructional blocks that incorporate the Learning Framework in Number that meet the needs of all students. Participants will learn about ways to align the Learning Framework in Number trajectories with prescribed state/national standards in a teaching and learning cycle. Participants will network with each other about their current and desired state and gain ideas about how to refine practices in their respective roles while also hearing about two different experiences within the same school district, leaving with ideas about how to amplify their impact on student learning and scale up these practices with other stakeholders invested in student learning.



Location: CC 226

Location: CC 264A/B

Location: CC 283

TUESDAY, APRIL 26, 2022 - DAY 1 CONTINUED

Morning Breakout Sessions 10:20 a.m. - 11:30 a.m.

I'm a Champion! Now What?

Presenter: Brad Thornburgh

Being a Champion is about helping others explore, write, and tell their stories. Whether you are a new or seasoned Champion, math coach, classroom teacher, interventionist, or administrator, your story matters. Brad will share and reflect on his story, blending what he has learned as a new Champion with past experiences, values, and hard-learned lessons. Partnering with teachers on their journey is critical in supporting successful implementation of Math Recovery strategies to cultivate students' understanding of math. Telling and reflecting on our own story is a critical first step in supporting teachers in answering the question, "Where do I begin?" Participants will have time to explore and share their own stories. Your story matters!

Addressing Unfinished Learning

Presenter: Kristin Frang

Addressing Unfinished Learning while planning for grade level content has always been a challenge for classroom teachers. AVMR provides diagnostic tasks that are a vehicle for gathering essential data and instructional techniques for planning just in time supports that allow students to engage in grade-level problems. This session will explore a simple process for planning for unfinished learning to support student success.

Co-teaching and Math Recovery®: Meeting the Needs of Special Education Students in the General Education Setting

Presenters: Carrie Rzasa, Thuc-Khanh Park & Susan Whited

We will share how Math Recovery content can be used within a co-teaching model to serve special education students. Topics include: creating whole class routines that supported the development of numeracy in all students, using small groups to provide targeted instruction, assessing and progress monitoring, evaluating and adapting curriculum using a Math Recovery lens, and IEP considerations. Examples of this framework will be highlighted in 1st, 2nd and 9th grades. This session could be of interest to both special and general education teachers as they work to

Ready Set Math: Addition & Subtraction

Presenters: Andrew Potter & Laurie Rogers-Karl

support the learning needs of all students.

Join us to learn more about our new resource, Ready Set Math! Grounded in Math Recovery research, Ready Set Math is organized into modules that focus on the domains in our Learning Framework in Number. You will have an opportunity to discover how this resource will enhance math instruction in your classroom. We will explore the instructional activities for large, small and independent learning and navigate the tools in Ready Set Math to help advance your students' mathematical thinking.

DAY 1 SESSIONS continued next page



Morning Breakout Sessions 10:20 a.m. – 11:30 a.m.

Cross Number Discovery Puzzles & Games

Presenter: Dawn Dibley Location: CC 247

Have you been looking for independent work and games to support your instruction? The Cross Number Discovery Puzzles & Games are aligned with the Learning Framework in Number. This session will give you hands on experience with the puzzles and games and we will discuss ways to incorporate this resource into your instruction.

SESSION TIMES SESSION DETAILS

Lunch - CC 134 & 136 11:30 a.m. – 12:30 p.m. **Breakout Sessions** 12:30 p.m. – 1:40 p.m. 2:00 p.m. – 3:10 p.m. **Breakout Sessions**

AFTERNOON BREAKOUT SESSIONS (12:30 p.m. - 1:40 p.m.)

Differentiating Fractions Instruction

Presenter: Amy Hackenberg

Location: CC 226

Location: CC 278

During this session, we will consider the tough question of how to work productively on fractions with students at units coordination Stages 1, 2, and 3 in the same classroom. This range of thinking in a single classroom is a challenge that requires differentiating instruction. So, we will consider assessment tasks, problems, and teaching practices to support students at different stages to develop basic fractions concepts, fraction multiplication, and fraction addition.

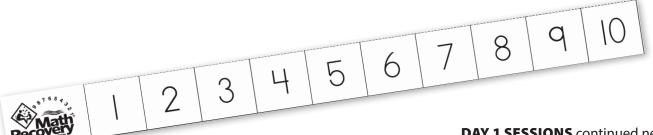
Math Recovery Roadmap: Detours and Destinations

Presenters: Sara Schneeberger, Chelsee Schram, Missy Bruckman,

& Kassie Lawhorne

AVMR trained and can't figure out what to do next? This session is for attendees who want ideas on how to begin implementation in their own classroom or to support teachers in their district. Learn how a team of teachers from Mid-Michigan decided how to begin this process. They will share their roadmap, including their detours along the way. Presenters will share experiences from their own districts, including successes and struggles. See the resources they

created to accomplish this process. Participants will also have access to planning and organization documents.



DAY 1 SESSIONS continued next page



TUESDAY, APRIL 26, 2022 - DAY 1 CONTINUED

Afternoon Breakout Sessions 12:30 p.m. – 1:40 p.m.

Implementing a Follow-up Coaching Model

Presenters: Mike Vallier & Amy Pratt

Nobody wants a teacher to say, "We did Math Recovery, and it didn't work." Research shows that instructional coaching results in far better student outcomes than any sit-down training session. I have been able to categorize my coaching along two lines: teachers who want to use AVMR content in their classroom, and teachers serving in an intervention role. These two paths have required two different objectives from their coach. I will share the implementation quidance tool that I have developed (and continue to refine). This tool serves as my "developmental model" for teachers as they move from an excited novice to an expert pedagogical engineer.

Innovations That Make Life Easier for Any Teacher

Location: CC 281 **Presenter: Beth Brady**

Experienced teacher, Beth Brady has tons of time-saving savvy tips, from making materials to storing and organizing materials. Come discover how a mat can make playing Treasure Hunt and other card games easier. From setting the game up to picking cards up from the table, this simple mat can help. Using a mat for bundling sticks: how can providing a template provide structural support for kids to help them notice the structure more independently and leverage their understandings of the 10-frame? Let's explore this idea together.

Is It Ever Too Late for Math Recovery?

Presenters: Jenny Lynch & Kim Hagman

Location: CC 283

Follow the journey of Trinity as a mathematician from 2nd grade to middle school. As a middle schooler, Trinity finally had the opportunity to participate in a one-on-one math recovery intervention cycle. With an IEP based solely in behaviorist instructional strategies, Trinity received many accommodations that have caused her to lose some early number skills. Is it too late for a student to begin receiving intentional one-on-one intervention as a middle schooler? Join us as we present Trinity's journey and see the action research collected over the years.

Meeting Teachers Where They Are: Creating Ongoing Learning Opportunities for a Range of Needs

Presenter: Sarah Hopson Location: CC 247

Continuing the learning after the course ends is a crucial component of implementation success, but what does that look like? Agawam District has tried many things: book studies, domain specific refreshers, setting support sessions, make and takes, self-directed learning, and PD Day offerings. This session will talk about each of these structures, who they've seemed to work best for, how to prepare for them, and lessons learned in the process. We'll also discuss how support needs vary by teacher role and recency of training and how to think holistically about a plan of action for the year. Although no one-size-fits-all solution exists, resources will be shared for offering ongoing learning opportunities to teachers in your own school or district.



Afternoon Breakout Sessions 12:30 p.m. - 1:40 p.m.

Why Is Subtraction So Hard? Building in Reasoning Through Subtractive Structures

Presenter: Dina Mendola Location: CC 264A/B



Subtraction is a difficult skill for students to master! Join us as we experience how to recognize and build a vital foundation for future mathematical learning that extends beyond students' earliest experiences with backwards sequences into structures and strategies relating to subtraction. In this session, we will discuss the progression of instruction that can be used to support students with their development of conceptual understanding as it relates to structuring numbers with subtractive tasks. Thus, drawing connections across grade level skills with contextual problems towards the pathway to fluency.

Ideas on Preparing Administrators to Inspire and Empower after AVMR

Presenters: Mike Busch & Marria Carrington



The professional life of administrators is busy and full of scheduled and unscheduled events. The reality of attending a 4-day course or being able to complete eight 2-hour virtual sessions has become ever more challenging for our local leaders. In this session we will highlight some of the work we have recently done with administrators, discuss what administrators need to know about Add+VantageMR, and share ideas on how administrators can support implementation of Add+VantageMR.

Exploring the LFIN and Math with Me to Advance the Early Childhood Student

Presenters: Kate Anderson & Amy Cook

Location: CC 282

In this session participants explore how the domains of the Learning Framework in Number help support the needs of students in the early childhood classroom. We will examine Number Words and Numerals, Early Structuring, and Early Counting in connection with additional research in early childhood education. Highlighted during the session will be the newly created USMRC product, Math With Me: Kindergarten Math Readiness & Engagement Pack. Discussions will include how this product can support family engagement and classroom teachers.



TUESDAY, APRIL 26, 2022 - DAY 1 CONTINUED

AFTERNOON BREAKOUT SESSIONS (2:00 p.m. - 3:10 p.m.)

Summer Math Camp- Learning and Fun Wrapped Into One!

Presenter: Meghan Neveau Location: CC 278

In a fun yet organized learning environment, come and find out how to extend the school year with a Summer Math Camp. Goals for the camp are to deepen math skills, to prevent summer slide, and to create stronger relationships with students. By using end of the year AVMR data, you can create a fun summer learning opportunity for students in your school. The AVMR data is used to determine students' current levels of understanding to plan just the right lessons and activities!

Goals for the session:

- Learn how to create a Summer Math Camp
- Explore how to form sessions using AVMR data
- Learn how to structure lessons and activities based on AVMR data

Math is Not a Spectator Sport, SO LET'S PLAY! Strengthening Partnerships through Family Math Nights

Presenters: Shelly Kiteley, Andrea Fletcher & Christa Burgess

Collaboration is central to impacting student learning! It's time we come together and put a new focus on mathematics, starting in the classroom, but continuing at home. A great way to start is an evening focused on playing with math! We will share our journey in creating and implementing an engaging Family Math Night that incorporates interactive Math Recovery based games. We will provide ideas for out-of-school mathematical experiences, such as games or other resources that can be used in fun and engaging ways. Participants will receive resources to help plan their own successful Family Math Night. Join us in showing parents that math no longer is just worksheets, but rather fun activities and games they can incorporate into daily life.

The Dimensions of AVMR Coaching: Our District's Journey

Presenter: Rose Palmer Location: CC 247

Successful implementation of AVMR within our district requires additional assistance for teachers beyond the AVMR courses. In Waukesha we have created a network of opportunities to provide further coaching for teachers. These coaching opportunities have helped to improve implementation in classrooms and alignment throughout our district. In this session we will explore a variety of professional development opportunities we designed at an individual, building, and district level to create a well-rounded support structure for teachers.



Afternoon Breakout Sessions 2:00 p.m. - 3:10 p.m.

Subitizing and Units Construction Relationships

Presenter: Beth MacDonald Location: CC 226

Often, educators see their children quickly, confidently, and accurately enumerate a small, patterned set of items, such as those on the face of a die. Kaufmann and colleagues (1949) first defined this activity as Subitizing, and Clements (1999) first described this activity as related to young children's number development. Recently, MacDonald and Colleagues (2019) found that one child created patterned actions and material to stand in for the items she subitized. These patterned actions took the form of pointing and flashing of her fingers. The materials she used were perceptual counters, which she placed on a piece of paper to represent the pattern and number she quickly saw. By creating these patterned actions and material, Wilkins and colleagues (2021) believe kindergarten children are more able to construct INS in first grade. In fact, they found in their examination of over 3,000 students that when kindergarten students subitized three items and five items, they were almost twice more likely to count-on (evidence of INS) in first grade. To explore these critical relations between children's subitizing and units construction, I will share activities and participants will engage in these activities. By discussing relations between both, connections between subitizing and counting sequences will be explicated. Frameworks of subitized units will be shared to help teachers plan ways to use these games and categorize their students' units construction activity.

Enhancing My Lessons with AVMR

Presenters: Rachel Rogers & Megan Coonan



After becoming certified in AVMR, you were so excited to dive right in and use all that you had learned in your classrooms. However, now you are wondering, what does this look like? Come join us for an AVMR Lesson Planning session where we will discuss how AVMR instruction can fit right into your classroom instruction. We will support you through a lesson planning process and highlight key ways to encourage inquiry-based Tier 1 instruction in your classroom.

Is Your Teaching Focused on Conceptual or Conventional Place Value? It Does Make a Difference

Presenter: Tonda Thompson

Location: CC 282



Come review the Instructional Conceptual Place Value Phases and leave with a deeper understanding of how to proceed with instruction to 100 and beyond. You will also leave with additional resources to teach virtual and face-to-face with students. It is recommended that you bring your laptop or tablet.



Afternoon Breakout Sessions 2:00 p.m. – 3:10 p.m.

At the Heart of Figurative Thinking: Empowering Children to Progress from **Perceptual to Figurative Counting**

Presenters: Susan Whited & Thuc-Khanh Park



Location: CC 264A/B

Congratulations! Your students are accurately counting visible items. Now what? Why is the figurative stage important? What experiences engender the development of a child's ability to keep track when counting concealed objects, especially beyond finger range?

If you need answers to these questions, this session is for you! In this session participants will have the opportunity to deepen their knowledge of the instructional progression in early arithmetical strategies. It is the goal of this session to expand teachers' knowledge of this important cognitive shift and provide the facility needed to aid in students' progression to more sophisticated thinking.

Ready Set Math: How Does it Fit?

Presenters: Laurie Rogers-Karl & Andrew Potter

In this session we will discuss how some teachers and districts are already using the Ready Set Math resources! We will engage in a conversation about how Ready Set Math instructional resources fit with other Math Recovery professional learning and support students in their mathematics journey.

WELCOME RECEPTION

3:30 p.m. – 4:30 p.m. – Welcome Reception & Instructional Activity Showcase

Mingle with educators at an hors d'oeuvre reception Tuesday evening. Meet new people, catch up with old friends and network with colleagues from around the United States and internationally! Try new games and activities at each Instructional Activity Showcase table and gather ideas to use in your home district.

Meeting Room: Grand Oaks Pavillion – Hors d'oeuvres & Cash Bar

Sponsored by: US Math Recovery Council®, SAGE & CORWIN Publishing, Forefront Education, MathImagine and MathRack



INSTRUCTIONAL ACTIVITY SHOWCASE

The **Instructional Activity Showcase** allows participants to share a fun teaching idea, a new teaching tool, management techniques and/or other fun ways to teach math! It is designed for Math Recovery® teachers to share classroom games, activities, or ideas in a round robin setting. Don't miss out on the fun!

Meeting Room: Grand Oaks Pavilion

ACTIVITY	FACILITATED BY
Family Engagement: Math with Me	Kate Anderson
Math Champs	USMRC Math Champs Team
MathRack Activity Cards	Lynn Rule
Putting the Math Pieces Together with Cross-Number Puzzles & Games	Dawn Dibley & Roni Kraut
Ready Set Math - Ferris Wheel Ride	Amy Cook
Ready Set Math - Hit the Bullseye	Laurie Rogers-Karl
Ready Set Math - Division Number Battle & Snake Around the Frame Multiple	Andrew Potter
Ready Set Math - Three Strikes, You're Out!	Melissa Wilke
Ready Set Math - Super Double Trouble	Melissa Wilke
The Math Recovery® Book Series	SAGE & Corwin Publishing
Universal Screeners for Number Sense: An Open-Source Assessment Project	David Woodward

US Math Recovery Council® wishes to thank all facilitators and sponsors who made contributions towards the Welcome Reception and Instructional Activity Showcase. Sponsorships include SAGE & Corwin Publishing, Forefront Education, MathImagine, and MathRack.

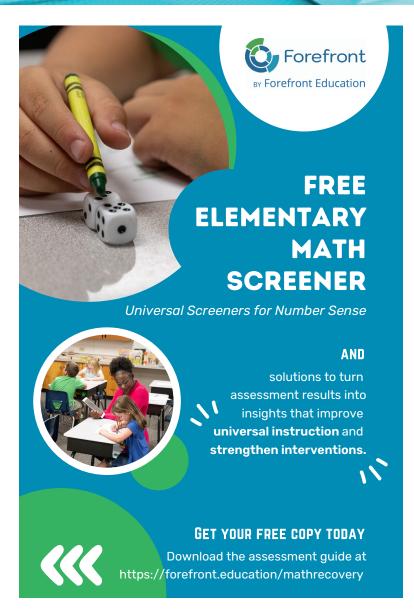
MATH RECOVERY FUN RUN/WALK

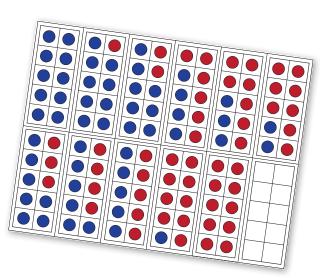


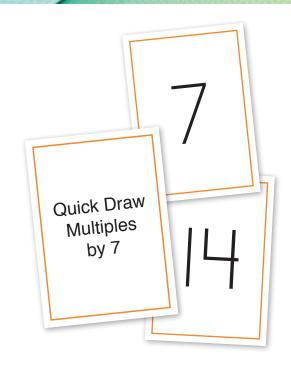
5:00 p.m. - 6:00 p.m. - Meet in Hotel Lobby at 4:45 p.m.

Interested in going for a run during the conference with your peers? Join us Wednesday night at 4:45 p.m. Pick your distance. Pick your pace. When you run with this group, everyone is supported no matter the pace.













WEDNESDAY, APRIL 27, 2022 - DAY 2 SCHEDULE

Wednesday, April 27 Planning Guide

Session Time	1st Choice	2nd Choice
8:00 a.m. – 9:25 a.m.	Welcome, Annual Membership Meeting, and Leadership Awards Presentation	N/A
9:45 a.m. – 10:55 a.m.		
11:15 a.m. – 12:25 p.m.		
12:25 p.m. – 1:25 p.m.	Lunch	
1:40 p.m. – 2:50 p.m.		
3:00 p.m. – 4:20 p.m.	Keynote Session	N/A
4:20 p.m. – 4:30 p.m.	2-Day Closing Session	N/A



WEDNESDAY, APRIL 27, 2022 - DAY 2 SCHEDULE

SESSION TIMES	SESSION DETAILS
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6:30 a.m. – 10:00 a.m. Registration/Information Desk -

Hyatt Lodge Prairie Ballroom Lobby

7:00 a.m. – 8:00 a.m. Breakfast – Hyatt Lodge Prairie Ballroom

8:00 a.m. – 9:25 a.m. Welcome; Annual Membership Meeting;

Leadership Awards Presentation –

Hyatt Lodge Prairie Ballroom

9:45 a.m. – 10:55 a.m. Breakout Sessions

11:15 a.m. – 12:25 p.m. Breakout Sessions

12:25 p.m. – 1:25 p.m. Lunch – Hyatt Lodge Prairie Ballroom

1:40 p.m. – 2:50 p.m. Breakout Sessions

3:00 p.m. – 4:20 p.m. Keynote Speaker – CC 224

4:20 p.m. – 4:30 p.m. 2-Day Closing Session – CC 224

TRACKS KEY:

Leadership

New to MR

Special Ed

Secondary

Interest areas as indicated by the presenter.

OPENING SESSION (8:00 a.m. – 9:25 a.m.)

Welcome & Annual Membership Meeting

Presenter: Christina Miller

Christina Miller, PhD, US Math Recovery Council's Executive Director will present an overview of the organization's operating and financial activities over the past year. She will share how USMRC navigated the challenges of the past two years, highlight two new and exciting pandemic-inspired developments, offer inspiration through stories of how Math Recovery is transforming numeracy education around the country, and give us a glimpse into the future of USMRC. This presentation is not limited to Math Recovery Members. All conference attendees are welcome.

Leadership Awards Presentation

Presenters: Jenni Scholla, Petey MacCarty, Mollie Gabrielson, Kristin Frang, Christina Miller, Kate Anderson, Christy Lyle & Dina Mendola **Location: Hyatt Lodge Prairie Ballroom**

Location: Hyatt Lodge Prairie Ballroom

Developing local leadership for Math Recovery is an important part of sustaining Math Recovery in districts. Through USMRC leadership courses, participants work to deepen their content knowledge and learn to facilitate Math Recovery courses with educators in their own districts as Champions or Leaders. Our Champions and Leaders are strong advocates for Math Recovery and collaborative partners in working to empower teachers and advance student success. Join us to honor those who have recently completed a USMRC leadership course: Add+VantageMR® Champion, Add+VantageMR® Fractions Champion, Math Recovery Intervention Specialist Leader, and Math Recovery Specialist, Part 1 Leader.

DAY 2 SESSIONS continued on next page



MORNING BREAKOUT SESSIONS (9:45 a.m. – 10:55 a.m.)

Asset-based Approaches to Support Students with LD in Number and **Fractions Concepts**

Location: CC 278 Presenter: Jessica Hunt



Come and learn about how you can support students with learning disabilities to build number and fraction concepts. We will discuss students' conceptual pathways and teaching strategies that teachers can use to support students to both notice and reflect upon their actions during problem-solving. We will also discuss how teachers can position students as capable of reasoning during small or whole group share outs.

Tool Time: Building a Foundation in Numeracy Using High Quality Tools

Presenters: Mary Anne H'Doubler & Andrea Pullan





Limited to 40 Participants. Hands-on session exploring some of the high-quality instructional tools and materials embedded in Math Recovery Professional Development. Participants will explore tasks using ten frames, bead strings, place value arrows, and a variety of card sets including Ten Grid cards, Treasure Hunt and Quick Draw Multiple cards. Videos will be shared as well.

Humanizing Mathematics: How Student Strengths Can Drive Our Instruction

Presenters: Wendy Wall & Mimi Hale

Location: CC 281

Location: CC 282



In this session, participants will examine their identity as a mathematician, their identity as a teacher of mathematics, and how they impact the mathematics identity of their students. Participants will practice naming strengths as we review an AVMR Course 1 coded assessment and video. Participants will network with each other about their next steps as they strive to create a strength-based environment where all students are welcomed as they are and seen as capable doers of mathematics.

Students Win: Building and Sustaining Math Recovery Leadership

Presenters: Lesley Maxfield & Sharon Leonard

Sustaining Math Recovery Implementation takes focus, planning, perseverance, and creativity. How do you continually support your MR leadership (Leaders, Champions, MRIS) and plan for continuous teacher training and professional development? Spokane Public Schools developed a partnership between their Elementary Curriculum and Special Programs departments to deepen the implementation in the 3rd largest district in the state of Washington. We will be sharing our initial leadership design and the current ways we are growing Math Recovery's impact in our district through MR leadership and teacher support.



Morning Breakout Sessions 9:45 a.m. - 10:55 a.m.

What About Division? Where Does it Fit in the Trajectory? Building Reasoning with Structures and Strategies for Division

Presenter: Dina Mendola Location: CC 280



Location: CC 247

Location: CC 283

Where does division fall within the Models and Phases of Instruction? Come address this all-too-common question with us as we experience how to recognize and build a vital foundation for division through the Phases of Instruction. We will start with students' earliest experiences with fair shares and repeated subtraction into reasoning with division by using structures and strategies. Together, we will unpack the division progression and explore tasks that will support student understanding towards developing stronger reasoning. It's time to untangle the division trajectory to promote a deeper conceptual understanding towards developing facile division knowledge.

Feeling Stumped With Small Group Lesson Planning

Presenters: Katie Leadbetter & Tamara Kerns

Planning for small groups can be much more challenging than planning for one-on-one lessons. Learn how to use your student data, the MSRp1 models, and the Teaching Charts to create effective small group lesson plans. Participants are encouraged to bring their own student data to use during the work session to create a small group lesson plan.

Exploring the LFIN and Math with Me to Advance the Early Childhood Student

Presenters: Amy Cook & Kate Anderson

In this session participants explore how the domains of the Learning Framework in Number help support the needs of students in the early childhood classroom. We will examine Number Words and Numerals, Early Structuring, and Early Counting in connection with additional research in early childhood education. Highlighted during the session will be the newly created USMRC product, Math With Me: Kindergarten Math Readiness & Engagement Pack. Discussions will include how this product can support family engagement and classroom teachers.

Analyzing Student Work with Fractions to Inform Instructional Decisions

Presenters: Amanda Roble & Christy Lyle



How does pedagogical engineering play out in planning a real lesson? Join us to practice using your Fractions knowledge to consider a lesson in which prior understanding of fractions is presumed. First, consider student work samples through a Units Coordination lens. Next, calibrate by coming to consensus about student Stages. Finally, consider a sample 'upcoming lesson' and use the Model for the Development of Fractions concepts to discuss with colleagues the Guiding Principles and Dimensions of Mathematization that support instructional moves for students based on their Stage.



Morning Breakout Sessions 9:45 a.m. – 10:55 a.m.

Informal Question & Answer Opportunity for Administrators and Decision Makers

Presenters: Mike Busch & Marria Carrington

Location: CC 263



Come to this session with questions and wonderings about US Math Recovery professional development offerings, services, and products. A team of US Math Recovery staff, all of which have been involved in work with administrators and decision-makers on a regular basis will be available to field your questions during this session. Possible discussion topics can include but are not limited to, courses, follow-up support experiences, Math Champs (USMRC student services), product design, Ready Set Math, and implementation. Come and be part of the conversation.

SESSION TIMES SESSION DETAILS

10:55 a.m. – 11:15 a.m. Break

11:15 a.m. – 12:25 p.m. Breakout Sessions

MORNING BREAKOUT SESSIONS (11:15 a.m. – 12:25 p.m.)

At the Heart of our Classroom AVMR Implementation (K-3)

Presenters: Margaret Nugent, Colleen Koch & Carey Jensen

Is your district just beginning its AVMR journey? Are you wondering how other districts bring AVMR into everyday classroom instruction? After 8 years in our district, we finally have an articulated and mapped out plan for integrating AVMR into our general education classroom assessment and instruction. We have developed areas of focus for each grade level K-3 to target core understandings at that grade. Our district implementation plan comes together to deliver a comprehensive plan to address the heart of early numeracy development for each child.

Integrating AVMR Fractions into Universal Instruction

Presenter: Rose Palmer Location: CC 263



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Location: CC 283

After taking the AVMR Fractions course, there are often questions about how to integrate the learning into what is already happening in the classroom. In our district, we started to look at how we could alter our curriculum to help support fraction understanding across the grade levels. Come to this session to find out how numeracy routines, math tasks, and activities were incorporated into the expectations for teachers at a variety of grade levels to foster deeper conceptual understanding of fractions.



Morning Breakout Sessions 11:15 a.m. – 12:25 p.m.

Culturally Responsive Teaching & AVMR: How AVMR Structures Can Support Students From Marginalized Groups

Presenter: Dr. Rachael Mahmood



Discover common cognitive structures/learning styles used by students who come from marginalized groups. Connections will be presented between components of AVMR and these learning styles, such as communal learning, gamifying, call and response, and others. Recommendations will help participants recognize how to be mindful of culturally responsive teaching when choosing the correct structure for the correct student. Data will be shared showing how math students, from marginalized groups, increased their achievement with the use of culturally responsive AVMR.

Universally Designing Mathematics Assessments and Instruction

Presenters: Jonathan Bostic, Tim Folger, Noah Brown & Emily Evans



Universal Design for Learning (UDL) is a framework for fostering access, equity, and opportunities for each learner to be successful in the classroom. In this session, we will share research-based practices that can be integrated into your math classrooms. First, we will explore UDL and assessing students learning in meaningful, valid approaches. Second, we will share ways to integrate UDL into your everyday assessment practices that work online and in face-to-face settings. Finally, we will discuss challenges and opportunities around the use of valid classroom assessments.

Considerations When AVMR1 is Applied With Students With **Developmental Disabilities**

Presenters: Marci Glessner & Tim Harms



Location: CC 281

The session will discuss the adaptations to Math Recovery teaching approaches used when students have various developmental disabilities. Outcomes will be shared of a book study on Teaching Early Numeracy to Children with Developmental Disabilities that was used to develop a college AVMR 1 course. This session explores considerations when working with students who have developmental disabilities for pre-service and in-service teachers who will be AVMR 1 certified.

AVMR with Early Childhood in Mind

Presenters: Crystal Bissing & Megan Coonan

Children encounter early mathematical learning at such a young age. It is stated, "For infants, as soon as they start to make sense of spoken language, number words are commonly used" (Wright et al., 2006). With so many foundational experiences happening in the early childhood years, it is important to promote students' early numeracy knowledge and understanding. Join us in taking a closer look into early numeracy learning and trajectories.



Afternoon Breakout Sessions 11:15 a.m. – 12:25 p.m.

The Right Setting for the Right Student at the Right Time

Presenters: Thuc-Khanh Park & Susan Whited





Explore a variety of material settings for the topics and teaching procedures of Teaching Chart 3D: Addition and Subtraction to 100. In this interactive session you will experience solving tasks using materials such as 100-bead strings, dot materials, ten frames, and others. Learn which features leverage and engender specific mental strategies when adding and subtracting to 100. Choosing the appropriate material setting for delivering instruction is easy! Leave with many new ideas to help your students.

Ready Set Math: Multiplication and Division

Presenters: Laurie Rogers-Karl & Andrew Potter

Join us to learn more about our new resource, Ready Set Math! Grounded in Math Recovery research, Ready Set Math is organized into modules that focus on the domains in our Learning Framework in Number. You will have an opportunity to discover how this resource will enhance math instruction in your classroom. We will explore the instructional activities for large, small and independent learning and navigate the tools in Ready Set Math to help advance your students' mathematical thinking.

Collegial Learning Through Video Analysis

Presenter: Kurt Kinsey

Location: CC 278

Location: CC 282



Come join others from the Math Recovery community for some in-depth discussion around MR and AVMR teaching and learning. Discussion will evolve from video-recorded points of interest from MR and AVMR assessment and teaching. Participants are encouraged to bring a video excerpt to share with the group. This is a great opportunity to bring your questions and share your experiences in a supportive collegial environment.

SESSION TIMES

12:25 p.m. – 1:25 p.m.

1:40 p.m. – 2:50 p.m.

SESSION DETAILS

Lunch - Hyatt Lodge Prairie Ballroom



DAY 2 SESSIONS continued next page



AFTERNOON BREAKOUT SESSIONS (1:40 p.m. - 2:50 p.m.)

Asset-Based Approaches to Support Students with LD in Number and Fractions Concepts

Presenter: Jessica Hunt Location: CC 226



Come and learn about how you can support students with learning disabilities to build number and fraction concepts. We will discuss students' conceptual pathways and teaching strategies that teachers can use to support students to both notice and reflect upon their actions during problem-solving. We will also discuss how teachers can position students as capable of reasoning during small or whole group share outs.

MathRack Developmental Progression

Presenter: Lynn Rule

Location CC 264A/B



Participants will learn that the most effective developmental progression to become automatic with facts begins with a MathRack 5 to build a foundation for prioritizing 5. This instruction will encompass quick images, number strings, conversations, and various activities connected to text. Students will begin to understand conservation, commutativity, compensation, associativity, and part/whole relations. Then students will use the MathRack 10 to develop fluency with addition and subtraction facts up to 10. Understanding and envisioning the 5 and 10 is the precursor for working with the MathRack 20.

Counting Matters: Results of a Research Study Utilizing Steffe's Framework for **Number to Predict Student Performance**

Presenter: David Woodward Location: CC 247



Utilizing results from a 2nd grade fall screening assessment designed around the principles of Math Recovery and aligned with Steffe's framework for understanding the development of number sequences, we (Jay Wilkins, Andrew Norton, and David Woodward) were able to predict student performance on state assessments, and later development of multiplicative and fractional thinking. We will present the results of the research and discuss how the ideas fit into the Math Recovery framework. We will also consider the implications for systematic and instructional responses.



Afternoon Breakout Sessions 1:40 p.m. - 2:50 p.m.

Developing AVMR Resource Libraries to Support AVMR Trainings

Presenter: Amy Adamus



You have just completed an amazing AVMR training, but how do you transfer your new knowledge into your classroom immediately with activities and games? This session will take you through the planning process of creating bins of AVMR leveled activities and games, or an "AVMR Resource Library", to be utilized in small group and whole group instruction at a building level. This session will also provide ideas on how to organize a digital resource library, that aligns AVMR games and resources with state standards.

Middle School Alternative Math Makeover: Empowering Students to Move to Core

Presenters: Jill Leier & Sarah Anderson





What happens when you mix teacher passion and dedication with AVMR training? You get a powerful explosion of change. Join us as we share the journey Liberty Middle School interventionists are taking to put students in charge of their learning. From the good and the bad to the challenges and celebrations, teachers are seeing change and students are feeling hope. Let our experience be your motivation to help students find their path back to core.

Leveraging the 3 Brain States to Maximize Your Intervention: Executive, Emotional, and Survival

Presenter: Courtney Willert



The goal of this session is to build teacher understanding of the states of the brain. This critical and sometimes forgotten understanding will promote student success during an intervention - especially with our hardest to teach students who many times need intervention the most. Attendees will develop an understanding of the three states of the brain and identify the state that promotes learning. Next, they will take a deeper look at challenging behaviors seen in students to identify what state of brain a child is in and how to get them ready for learning with strategies they can use daily. The session will end with time for attendees to make a plan to support student learning when behaviors are challenging.

Differentiate Fractions Instruction through Guiding Principles and Dimensions of Mathematization

Presenter: Christy Lyle Location: CC 281



Using Guiding Principles and Dimensions of Mathematization as a lens, we'll consider a lesson from an open source curriculum and pedagogically engineer the lesson for a range of student prior knowledge.



WEDNESDAY, APRIL 27, 2022 - DAY 2 CONTINUED

Afternoon Breakout Sessions 1:40 p.m. - 2:50 p.m.

When Combinations and Partitions of Numbers are Not Enough

Presenters: Tamara Kerns & Amanda Roble

Do you have students who can say their combinations and partitions of numbers on assessments, but struggle to apply this understanding to add and subtract? Join us as we unpack the steps in the structuring teaching progression. We will examine how the Dimensions of Mathematization support students' development and application of combinations and partitions through examples of tasks used with students during small group instruction.

Session Objectives:

- Unpack the Steps in the Teaching Progression for Structuring including the 2B and 3B teaching charts.
- Consider Dimensions of Mathematization to support intentional instructional moves to develop student conceptual understanding.
- Understand how notating, generalization and organization support the application of structuring knowledge to higher decade addition and subtraction.

Just in Time Supports for Students in Tier 1

Presenters: Crystal Bissing & Marria Carrington



Participating in AVMR Courses is just the beginning of an exciting mathematics journey. As you eagerly return to your schools and classrooms, you may be thinking about how you will incorporate all you have learned into your instruction. You may be pondering what it really means to implement just in time support for students in Tier 1? What does it look like with a focus on small groups instruction? In this session, we will be looking at lesson planning with an eye on planning just in time support for small groups.

SESSION TIMES SESSION DETAILS

2:50 p.m. – 3:00 p.m. Break

3:00 p.m. – 4:20 p.m. Keynote Session

4:20 p.m. – 4:30 p.m. 2-Day Closing - CC 224

KEYNOTE SESSION (3:00 p.m. – 4:20 p.m.)

Lessons from Numeracy for All

Keynote: Dawn Dibley

This keynote session is based on the book *Numeracy for All Learners* (the brown book). How do we ensure that all students benefit from assessment and instruction based on the Learning Framework in Number and Math Recovery teaching practices? How do we ensure that all students have opportunities to engage with mathematics in ways that are meaningful to them? How do we support teachers as they continue to construct their understanding of how all students develop numeracy skills? These are the questions the authors explored in *Numeracy for All Learners*. This presentation will take you on a brief tour of the book and the lessons one author learned in writing the book.

Location: CC 224



THURSDAY, APRIL 28, 2022 - LEADERSHIP SUMMIT

Thursday, April 28 Planning Guide

Session Time	
7:00 a.m. – 7:45 a.m.	Breakfast
8:00 a.m. – 8:45 a.m.	Elevating Math Recovery Leadership
9:00 a.m. – 9:45 a.m.	Breakout Sessions
9:45 a.m. – 10:30 a.m.	Mid-morning snack, Network, & check-out
10:30 a.m. – 11:15 a.m.	Breakout Sessions
11:15 a.m. – 12:00 p.m.	Math Recovery® Leadership Networking

SESSION TIMES SESSION DETAILS

7:00 a.m. – 7:45 a.m. Breakfast – CC 134 & 136

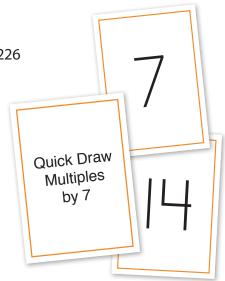
8:00 a.m. – 8:45 a.m. Elevating Math Recovery Leadership – CC 226

9:00 a.m. – 9:45 a.m. Breakout Sessions

9:45 a.m. – 10:30 a.m. Break - CC 134 & 136

10:30 a.m. – 11:15 a.m. Breakout Sessions

11:15 a.m. - 12:00 p.m. Math Recovery® Leadership Networking



LEADERSHIP SUMMIT continued next page



THURSDAY, APRIL, 28, 2022 - LEADERSHIP SUMMIT CONTINUED

SESSION TIMES SESSION DETAILS

7:00 a.m. – 7:45 a.m. Breakfast Location: CC 134 & 136

GENERAL SESSION (8:00 a.m. – 8:45 a.m.)

Elevating Math Recovery Leadership

Presenters: Math Recovery Leadership Team

Learn and grow with your peers and USMRC staff to support the delivery and implementation of Math Recovery assessment and instructional strategies. Gather new perspectives, discuss common challenges, and network with others to help you in your Champion or Leader role. Topics such as USMRC website changes, virtual AVMR 1 & 2 facilitation, video share opportunities, and more.

SESSION TIMES SESSION DETAILS

8:45 a.m. – 9:00 a.m. Break

9:00 a.m. – 9:45 a.m. Breakout Sessions

BREAKOUT SESSIONS (9:00 a.m. - 9:45 a.m.)

Math Recovery Coaching Essentials

Presenters: Lori Loehr, Kate Anderson, Sherry Hornbacher & Mollie Gabrielson Location: CC 278

What makes a great coaching session? How does Math Recovery coaching support look different from other types of support? Participants will examine assessment and instructional coaching from questions and prompts to logistics such as what or how much to write on coaching forms. Instructional coaching for small group instruction will also be discussed. Support is designed to be collaborative building relationships that foster improvement, equity, and quality instruction using Math Recovery principles and philosophies.

From AVMR Courses to Implementation: Using Coaching to Support Teachers

Presenters: Katie Leadbetter, Amanda Roble, Thuc-Khanh Park, Location: CC 280 Susan Whited & Tamara Kerns

From the excitement of taking an AVMR course to implementing new learning can be overwhelming and daunting. Learn about the bridge of support that we have created through observation, coaching, and collaboration to help teachers implement AVMR practices in small groups.



Location: CC 283

THURSDAY, APRIL 28, 2022 - LEADERSHIP SUMMIT CONTINUED

Beyond Courses: District Implementation Support

Presenter: Kristin Frang Location: CC 264A/B

Do you have an implementation challenge you are thinking about? No matter the implementation challenge, the chances are that someone somewhere in our Champion/Leader Network has wrestled with it, or at least some of its component parts. Participate in a quick feedback protocol to think in new ways about your challenge. Participants are also welcome to observe the feedback protocol as a structure to bring back to use in local districts.

Course 1 & 2 Resources: Virtual Engagement Techniques and Updated Presenter Notes

Presenters: Rachel Rogers, Megan Coonan, & Crystal Bissing

"The person doing the talking is often the person doing the learning." Champions know this quote from Jen York Barr to be true, but how do we invite all participants to engage? Champions will be introduced to Course 1 and Course 2 virtual updates including engagement opportunities and detailed presenter notes. Join us to explore and dig into some of our favorite tools and strategies to increase participation in the virtual meeting room and take a closer look at the updated, detailed presenter notes.

Ready Set Math: Question & Answer Info Session

Presenter: Melissa Wilke Location: CC 282

Ready Set Math includes high-quality, engaging mini-lessons and activities that can be used to support math instruction across primary, intermediate, and middle school classrooms. This is an opportunity to learn more about our newest resource that is grounded in the research of the Learning Framework in Number (LFIN) and inspired by the Math Recovery Guiding Principles for Classroom Teaching. Whether you are looking for ways to support implementation of AVMR or enhancing your current curricular math resources, Ready Set Math may be what your district is looking for. This session will allow for your questions and wonderings to be asked and addressed.

Math Recovery Dashboard Tour

Presenters: Margie Broman & Tonda Thompson

Math Recovery's organizational growth perpetuates changes and innovations to our website. You've most likely noticed changes in your member dashboard – which is what you see right when you log in to your Math Recovery account. Join us for a hands on tour of what's new in the member dashboard. Time at the end of the session will be designated for Q&A.

SESSION TIMES SESSION DETAILS

9:45 a.m. – 10:30 a.m. Break

10:30 a.m. – 11:15 a.m. Breakout Sessions

LEADERSHIP SUMMIT continued next page



THURSDAY, APRIL 28, 2022 - LEADERSHIP SUMMIT CONTINUED

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THURSDAY, APRIL 28, 2022 - LEADERSHIP SUMMIT CONTINUED

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MATH RECOVERY LEADERSHIP NETWORKING (11:15 a.m. – 12:00 p.m.)



Teaching Tools to Support Mathematical Thinking Strategies

Making Sense of Number Sense

MathRack products are teaching tools designed to support and stretch primary student's mathematical thinking strategies and in turn their understanding of number sense, addition, subtraction and problem solving.

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OUR MISSION

The mission of the US Math Recovery Council® is

To **transform** numeracy education

To **connect** research with practice

To **empower** educators to advance student

mathematical thinking and success

...through Math Recovery® principles.



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