<table>
<thead>
<tr>
<th><strong>Vision</strong></th>
<th><strong>Mission</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Wisconsin Mathematics Council will have organizational structures and communication systems to provide leadership, services, and resources in support of quality mathematics education in Wisconsin.</td>
<td>The mission of the Wisconsin Mathematics Council is to lead in the development and promotion of quality mathematics education that enhances learning for all students.</td>
</tr>
</tbody>
</table>
## Meetings and Events Overview

**Wednesday, May 6, 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:30–8:30 a.m.</td>
<td>Pre-Conference Registration and Check-in (Kraft Centre Lobby)</td>
</tr>
<tr>
<td></td>
<td>Breakfast Served (Kraft Centre Dining Room)</td>
</tr>
<tr>
<td>11:30–1:30 p.m.</td>
<td>Pre-Conference Lunch (Kraft Centre Dining Room)</td>
</tr>
<tr>
<td>8:30 a.m.–4:00 p.m.</td>
<td>Pre-Conference Workshops</td>
</tr>
<tr>
<td>3:30-5:00 p.m.</td>
<td>Exhibit Hall Open House (Pillsbury)</td>
</tr>
<tr>
<td>10:00 a.m.–3:00 p.m.</td>
<td>Exhibitor Check-in (Pillsbury)</td>
</tr>
<tr>
<td>5:00–6:30 p.m.</td>
<td>Dinner served in Kraft Centre Dining Room (requires separate ticket purchased from Green Lake Conference Center)</td>
</tr>
<tr>
<td>4:00–8:00 p.m.</td>
<td>Conference Registration and Check-in (Kraft Centre Lobby)</td>
</tr>
<tr>
<td>7:00 – 9:00 p.m.</td>
<td>WMC’s IGNITE and Welcome Reception (Kraft Centre Dining Room)</td>
</tr>
</tbody>
</table>

## Pre-Conference Workshops

**8:30 a.m. – 4:00 p.m.**

**Playing with Tens:**

*Games and Activities to Build Number Sense*

*Grades PK-2*

*Location TBA*

Let's have fun building number sense! Come learn games and activities that support the development of number sense in early elementary, particularly around making tens. We will practice different ways of orchestrating classroom discussions in order to highlight the important mathematical thinking that is generated as students play with ideas. Ways to differentiate the games and activities to meet different learning needs will also be addressed.

---

**Math is Figureoutable!**

*Grades PK-12*

*Location TBA*

As more teachers look to add high-yield tasks to their repertoire, the struggle to make it all work becomes real. Let’s examine how problem-based lessons can be used throughout the scope of a unit and how we can harness their power to move student thinking forward. We’ll identify strategies and explore some tasks that help us find a healthy balance between application, conceptual understanding, and procedural fluency.

---

**Dr. Christy Pettis, UW River Falls**

Christy Pettis is an Assistant Profession in Teacher Education at the University of Wisconsin – River Falls where she teaches coursework in elementary and secondary mathematics education.

---

**Pam Harris, Texas State University**

Pam Harris is the author of several math teacher resource books, curricula materials, and a book for PD leaders. A former secondary mathematics teacher, Pam currently teaches at Texas State University, is a K-12 mathematics education consultant, and an author and coauthor of several professional development workshops.
Neurodiversity and Universal Design for Learning; Meaningful Mathematics Experiences for Students with Disabilities

General Interest
Location TBA

Dr. Rachel Lambert, UC – Santa Barbara

Dr. Rachel Lambert is a former classroom teacher, special education teacher, and currently an assistant professor in the Gervitz Graduate School of Education at University of California Santa Barbara. Her scholarly work investigates the intersections between disability studies in education and mathematics education. She is currently working on understanding the differences in research and practice across mathematics education and special education and understanding how teachers can deepen participation in the standards of mathematical practice.

After the pre-conference, be sure to visit the Exhibit Hall from 3:30-5:00 p.m. to find a wealth of information and items from a variety of and exhibitors. Get your exhibit passport stamped for your chance to win daily door prize drawings.
### Thursday Meetings and Events Overview

**Thursday, May 7, 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| **6:30 a.m.–4:30 p.m.** | Conference Registration  
(Kraft Centre Lobby)  
First Timers Welcome/Orientation  
7:00-7:30 a.m. Tower Dining Room  
WMC Board members will provide an overview of the conference and answer your questions. Grab breakfast and stop by for valuable information to make the most of your conference experience. |
| **6:30–8:30 a.m.** | Breakfast Served (Kraft Centre Dining Room)  
Effective Leaders, Effective Educators Administrator Series: The following series has been uniquely designed for school leaders!  
Schedule Coming Soon |
| **7:00–7:30 a.m.** | First Timer Orientation  
(Tower Dining Room)  
ELEE Administrator Series (Mitchell Dining Room)  
**8:00 a.m.–4:00 p.m.** | Visit the Exhibit hall  
(Pillsbury)  
WI-AMTE Teacher Candidate Poster Session |
| **8:00 a.m.–4:30 p.m.** | Sessions  
**11:00 a.m.–1:00 p.m.** | Lunch  
**11:30 a.m.–12:30 p.m.** | WMC President’s Luncheon (Mitchell Dining Room)  
**3:45–4:30 p.m.** | Wisconsin Mathematics Council Annual Meeting  
(Bauer-Beaty)  
**4:00-4:30 p.m. Bauer - Beaty**  
You ARE INVITED to learn about the business of WMC. Enjoy conversation with WMC board and committee members as they share plans and review the past year’s accomplishments. |
| **4:30–7:30 p.m.** | Celebrate WMC  
4:30-7:30 p.m.  
Kraft Main Dining Room  
Plan to attend the Celebrate WMC Reception and meet WMC leadership and colleagues while you enjoy a variety of hors d’oeuvres, a cash bar, and great conversation. A short awards program will be part of the reception as well as the WMEF Heads & Tails and Raffle events.  
Celebrate WMC  
Including the WMEF Events |

---

A note about reading the room locations: **Throughout the book, the first name indicates the building; the name after the dash indicates the room.**
Thursday, May 7, 2020
8:00 – 9:00 am

Thursday, 8:00-9:00
Bauer Beaty
*General Interest*

10 Equitable Classroom Practices you can do RIGHT NOW!
As teachers, we work hard to create systems and supports for all of our students to experience success. Come experience 10 (research-based and researcher studied) practices that contribute to forming an equitable environment in our school. You will leave with a (figurative) tool bag that you can implement on Monday!

Beth Ott, Middleton Cross Plains Area School District
*Mary Lee Mckenzie*

Thursday, 8:00-9:00
Bauer Boddie/La Due
*Grades 3-5*

Want to include all students? Focus on Flexibility and Fluency! Now that’s Fun!
Join me on our journey to get students the help they need in math. Using the data from Math Running Records, as well as a modified fluency assessment, we have differentiated activities and games that we use within the classroom math block and during our math intervention team time. Please come ready to share what you have done in your classrooms to include all students! Relevant for grades 1-6.

Connie Roetzer, River Falls
*Ashley Gorman*

Thursday, 8:00-9:00
Bauer Lightbody
*Grades 6-8*

The First Years of Illustrative Mathematics: A Tale of Two Districts
A district with one site and another district with two sites discuss IM implementation. We will share our successes, pain points, and how implementation looks now in year two. See how we collaborated as district teams and together. We’ll share things to think about and help you learn from our mistakes. Additionally, we will share how we ensured all of our students were using the new resources.

Lori Rugotska, Hartford Joint#1
*Curtis Bartlett*

Thursday, 8:00-9:00
Bauer Morehouse A
*Grades 3-5*

Two heads are better than one: A co-teaching math model for elementary success
Our session will actively engage participants by modeling co-teaching. We will use participants as the students and demonstrate what co-teaching looks like with the participants acting as students for parts of the presentation. In addition, we will provide structured turn and talks to give participants an opportunity to discuss and debrief next-steps or ways that they could utilize some or parts of the models discussed.

Jill Davies, Oostburg School District
*Julie Bieber & Aaron White*
Thursday, May 7, 2020
8:00 – 9:00 am

Thursday, 8:00-9:00
Bauer Morehouse B/C
Grades PK-2

Playing with Tens: Games to Build Number Sense
It’s game time! Come play games that support the development of number sense, particularly around making tens. We’ll discuss ways to differentiate the games to meet different learning needs, and how to orchestrate discussions about the mathematics in the games.
Christy Pettis, UW River Falls

Thursday, 8:00-9:00
Kern Boehr/Cary
Grades 6-8

Rock the Block
If you are new to block scheduling or you have been doing a block schedule and aren’t sure if you are using the time to its fullest, come experience the engagement and excitement of this format. This session will feature stations, projects, formative assessments, and collaborative learning. In addition, you will hear some ways to differentiate so all of your students are provided with instruction needed to maximize their learning potential.
Elizabeth Trochil, Oconto Falls
Jane Lewis

Thursday, 8:00-9:00
Kern Brayton Case B
General Interest

Increasing geometric-thinking, problem-solving and visual literacy using 3D Box Creations
Students are asked to become well-versed in geometric concepts. By looking at consumer boxes, and using flat geometric nets, made from one small or large piece of paper, this project allows students to be creative, while at the same time engages them in challenging problem-solving, visual literacy & geometry. Students start by making cubes and pyramids and move on to pentagonal dodecahedrons and much more.
Peter Wilson, University Lake School

Thursday, 8:00-9:00
Kern Brown
Grades PK-2

Counting Collections Round Two
Are you new to Counting Collections in PreK and Kindergarten? Have you started counting collections in your early childhood classroom and are looking for fresh ideas? Let me share my experience working with collections from ten to one hundred and beyond!
Brittany DeWindt, School District of Waukesha

Thursday, 8:00-9:00
Kern Johnson
Grades 6-8

Inspirational Ideas for Middle School Math Teachers
Are you a new math teacher looking for ideas? An experienced educator who wants to be inspired? This fast-paced session will explore ways to spice up your classroom and increase student engagement! We will discuss new approaches, specific activities and online resources that can have a profound impact on you and your students. Come and rekindle your passion for teaching! Note: Similar to last years session by the same name.
John Marzion, Oak Creek Franklin School District

Thursday, 8:00-9:00
Kern Stansbury/Hanson
Grades 3-5

Problem Solving Tasks
Participants will learn how to use problem solving tasks to enrich their math workshop. They will work through a collaborative task, along with being provided with a multitude of resources.
Terri Froiland, Waukesha
Thursday, May 7, 2020
8:00 – 9:00 am

Thursday, 8:00-9:00
MLK
General Interest

The Power of Aspirations: NCWIT Aspirations in Computing Award
NCWIT Aspirations in Computing provides a long-term community for female technologists, from K-12 through higher education and beyond, encouraging persistence in computing through continuous engagement and ongoing encouragement at each pivotal stage of their educational and professional development. Explore how you can nominate a student, a fellow educator or yourself for this impactful award.

Olivia Dachel, Merrill High School

Thursday, 8:00-9:00
RWI Crystal
Grades 6-8

Gamify Your Middle School Classroom
Do your student’s love to play games? Mine sure do. Games help promote strategic thinking, explore fundamental concepts, and support student’s development of procedural fluency. Attendees will participate in a jammed packed session of games and fun. Everyone will leave with materials and directions in order to play each game immediately in the classroom. There is a game for everyone! Come join the fun!

Travis Logslett, Ellsworth Community School District

Thursday, 8:00-9:00
RWI Mahaney
Grades 9-12

It’s Knot What You Think
Exploration activity into using knot theory principles applied to probability will be introduced. Session will explore various applications of probabilistic models. Basic probability and counting techniques applicable to high school statistics classes will be addressed through short activities.

Susan Baloun, Cochrane Fountain City High School

Thursday, 8:00-9:00
Staughton
General Interest

Challenging Deficit Myths about Students with Disabilities; Neurodiversity and Mathematics
TBA

Rachel Lambert, University of California Santa Barbara

Thursday, 8:00-9:00
YC Cummings
Grades 9-12

Green Bay Lambeau Field Renovation Activity – The Math Behind Keeping the Field Warm
Lambeau Field was renovated in 2018. While touring it, I developed a math activity. Some questions: cost of tubing under field, length of tubing in miles, volume of solution in tubing in gallons, volume of plastic needed to make tubing? To solve, students must ask for data needed. Problem solving, units conversion, volume, slope. Student and teacher materials, solutions, and photos provided. Bonus: program to draw Packers logo on TI-calculator.

Tom Reardon, Fitch High School / Youngstown State University
Thursday, May 7, 2020
8:00 – 9:00 am

Thursday, 8:00-9:00
YC Dominguez Cox

**Grades 9-12**

**Early Math Placement Tool (EMPT): Preparing Students for College-Level Math**
The EMPT is a free program that assists students in planning and preparing for the expectations of college-level math.

Mark Schroeder, Center for Placement Testing

Sonya Sedivy

Thursday, 8:00-9:00
YC Fordham-Ballenger

**Grades 9-12**

**Co-teaching in an Inclusive Classroom: Achieving success with Grade Level Content for All Students.**
Inclusive classrooms are becoming more popular each year with the goal of engaging all students with grade-level content. We will be sharing strategies that have worked for us as an algebra co-teaching team, including co-planning and implementing lessons and assessments that allow all students to access and experience success with grade-level content standards, instructional activities to engage all learners, and student data and testimonies.

Melissa Manley, St. Francis School District

Gerriann Crawley

Thursday, 8:00-9:00
YC Huber-Evans

**Grades 9-12**

**Enriching the Geometry Experience**
In this session, we will explore changing the focus of a geometry class with rich, exploratory tasks that apply knowledge of transformations and properties of two and three dimensional figures. These tasks draw on students’ experiences and problem solving skills to develop an appreciation for the subject—especially among students’ who are underserved in the traditional environment.

Matthew Chedister, University of Wisconsin La Crosse

Thursday, 8:00-9:00
YC NG-Jones

**Grades 9-12**

**Teaching Probability in AP Stats - Part I**
Do enjoy teaching probability? Is is your favorite part of the curriculum? We will look at ways to better understand how to attack probability questions on the AP Exam, breakdown recent AP exam questions, and share some activities to better help students enjoy probability.

Jason Dahl, Oconomowoc High School

Allison Hopkins, Steven Sollom, Bill Fehrenbach, & Todd Brahm
Thursday, 9:30-11:00
Kraft Tower Dining

**Grades 9-12**

**Math in Global Issues: A Course for All Mathematicians**
Are you tired of your students asking, “when is this ever useful?” Join us as we share how we created a course that answers that ubiquitous question. We’ll share our planning process along with how students reacted and participated in the math.

Allison Hopkins, Oconomowoc High School
Kathryn Hayes

Thursday, 9:30-11:00
Bauer Beaty

**General Interest**

**Personalized Learning: How to personalize your math class so students learn through experience!!!**
Have you ever given a test knowing some students were going to fail? Have you ever had students fail a test and continued on with your next unit? What sense does it make to do these things? Here you will learn how we turned our classroom into a personalized system for every student, to move along at their own pace and how to use experiences as learning opportunities and assessments to ensure students are learning.

Tim Smyth, Luck School District

Thursday, 9:30-11:00
Bauer Boddie/La Due

**Grades 3-5**

**Place Value Progression K-5: The ABC’s of NBT**
Utilize hands-on activities to engage students and develop conceptual understanding around the Number Operations & Place Value learning progressions. Develop strategies to build a community of mathematical thinkers, promote discourse, incorporate visual models and reflect on the Math Practices. Leave with ideas to use in your classroom tomorrow!

Ryan Hausmann, Math Learning Center
Paula Muehler

---

Thursday, 9:30-11:00
Bauer Lightbody

**Grades 3-5**

**Tape Diagrams for All**
“I never learned how to use a tape diagram. It is just confusing!” Come one, come all...beginners to experts. Learn how to use tape diagrams to help more students build their conceptual understanding and attack difficult word problems. We will start with addition and work up through algebraic concepts.

Dan Pochinski, Waukesha

Thursday, 9:30-11:00
Bauer Morehouse B/C

**Grades PK-2**

**Fluency Doesn’t Just Happen: Developing Math Fact Power**
Are your students still having trouble learning their basic facts? If so, come and learn how to change everything in this hands-on, engaging, academically rigorous, research based session on developing math fact fluency. We will look at Math Running Records, Differentiated Fluency Workstations, small group lessons and whole group fluency energizers and routines. We will explore ways to build number sense so that students learn their facts.

Dr. Nicki Newton, Newton Education Solutions
Thursday, 9:30-11:00
Kern Boehr/Cary
*Grades 6-8*

**Geometry in the Intermediate/Middle School Classroom**
Analyzing the Geometry Progressions and standards at the Intermediate/Middle Levels. Looking at the Geometry Progressions will assist teachers at the various levels to develop a deeper understanding and make connections to their own grade level standards. Teachers will come away with instructional strategies that highlight Geometry Vocabulary, Classroom Activities, Geometry Tasks, along with differentiated instructional strategies.

Lynn Schaal, New London Middle School

Thursday, 9:30-11:00
Kern Brayton Case A
*Grades 9-12*

**Illustrative Mathematics: Explore a High School Open Education Resource (OER)**
Check out the free, OER mathematics curriculum from Illustrative Mathematics! IM’s Algebra 1, Geometry, Algebra 2 is a problem-based curriculum where students learn by doing math through solving real-world and mathematical problems and includes Algebra 1 Extra Support Materials. Join this interactive session to experience content routines and learn about the lesson structure. Bring a device for guided exploration of the free online platform.

Sara Brown, Math Institute of WI

Thursday, 9:30-11:00
Kern Brayton Case B
*General Interest*

**Inclusion in the Math Classroom**
Strategies, adaptations, and modifications for the successful inclusion of students with special needs within the math classroom will be shared during this session. A deeper look at the mindsets about inclusion and resources to address these mindsets will also be shared. Come join us in learning ways to make inclusion a success!

Tammy Moynihan, CESA 8

Thursday, 9:30-11:00
Kern Brown
*Grades PK-2*

**Building Fact Fluency for Addition and Subtraction**
Fluency standards for basic addition and subtraction facts appear in the standards from Kindergarten to 2nd grade. Come learn strategies to build fact fluency that move beyond memorization.

Participants will leave with a better understanding of which mathematical tools can support this learning, how to strategically remove these tools, and which facts should be practiced first.

Rachel Kozicke, School District of Waukesha

Thursday, 9:30-11:00
Kern Johnson
*Grades PK-2*

**Growing Inclusion and Equity through Culturally Responsive Math Instruction**
During this session, we will dive into how to 1. Communicate High Expectations, 2. Make Content Relevant, 3. Attend to Students’ Mathematical Identities, and 4. Ensure Shared Power. Through tying together Trauma-Sensitive Strategies and the Standards for Mathematical Practice, we will model what this looks like in the classroom and discuss how this promotes inclusion and equity.

Derek Johnsrud, Sun Prairie Area School District

Lisa Henness
Strengthen Your Core—One Activity at a Time
The importance of strong core skills is fundamental in learning math. Students can build new understanding onto foundations built in previous years. But what do teachers do when that foundation is not there? In this session we will share engaging teacher tested games, activities, and stations designed to help students build and strengthen their core. The activities will help to build students’ procedural fluency and conceptual understanding.

Jane Lewis, Gibraltar Secondary School
Tara Meinke

There’s so much out there! How do I pick a good mathematical task?
Mathematical learning for all students hinges on the selection of a good task. Given the volume of mathematical tasks and lessons that are available online, teachers sometimes have to sort through massive amounts of information just to find that one good task or lesson to use with their students. I will provide some techniques for finding and implementing high cognitive demand tasks that attend to the learning goals you set for a lesson.

Jenny Sagrillo, University of Wisconsin - Milwaukee

Visualizing Expressions & Equations
Participants will engage in middle level tasks that allow them to use area models, tape diagrams, and hangar diagrams to represent expressions and solve equations.
Erick Hofacker, University of Wisconsin - River Falls

Making Student Thinking Visible
This presentation would focus on using both math manipulatives and anchor charts to make student thinking visible to all. It would show how to explain a mathematical concept conceptually so that students are able to visualize what it is they are doing with numbers and then later explain it. It would also show teachers how students move through concrete, representational and abstract thinking.
Kari Stein, School District of Waukesha
Terri Froiland

Using Math Routines and Teacher Talk Moves to Build Number Sense and Increase Student Engagement in Grades K-5
Math routines provide a structure to engage students in mathematical thinking, reasoning, discourse, and the development of number sense. In this session, participants will engage in several math routines focused on problem solving and building number sense, learn about a set of teacher talk moves that can be used to increase and deepen student discourse, and walk away with ideas for using math routines to create meaningful math talk.
Jennifer Metke, School District of Slinger
Eric Kanter
Thursday, May 7, 2020
9:30 – 11:00 am

Thursday, 9:30-11:00
YC Cummings
Grades 9-12

Integrate Problem Solving, Technology and Math Modeling Using Data Involving Important Social Issues
Challenge your students to solve rigorous, relevant math problems that create social awareness. Climate change, opioid deaths, payday loans, US debt, hot car temp deaths, all provide excellent data that can be modeled, interpreted mathematically. Learn how to implement these activities into your classroom. Get ALL materials: data, student worksheets, teacher notes, and detailed step-by-step blogs. Grades 8 - 12.

Tom Reardon, Fitch High School / Youngstown State University

Thursday, 9:30-11:00
YC Dominguez Cox
Grades 9-12

Teaching Mathematics with Technology
Learn how to integrate technology into your teaching. Technology allows all students to learn in an active, self-directed environment and changes math learning and teaching. In this session, participants will experience the following: QR codes, Poll Everywhere, Desmos/Desmos Activity Builder, Geogebra, Quizlet, graphing calculators and motion sensors.

Joan Masek, Milwaukee Public Schools
Erin McReynolds, Mary Zietlow, & Michael Moore

Thursday, 9:30-11:00
YC Fordham-Ballenger
Grades 9-12

Proficiency Mathematics at UW-Parkside:
Approaches Taken, Successes Achieved, and Lessons Learned
Believing that students with appropriate support would meet the challenge of high standards in terms of both content and achievement, UW-Parkside launched its proficiency model for developmental mathematics courses in Fall 2012. This talk will highlight the structure and evolution of the proficiency model, its effect upon student success, and its potential to provide useful information to high school teachers.

Richard Karwatka, UW-Parkside
Thursday, May 7, 2020
9:30 – 11:00 am

Thursday, 9:30-11:00
YC Huber-Evans
Grades 9-12

A Further Look at Some Fun and Amazing Geometry Theorems
This is a continuation of last year’s talk where some Fun and Amazing Geometry theorems were looked at. We will look at fascinating Geometry theorems that are accessible to student discovery with the use of any dynamic geometry system. The features of the TI-Nspire CX handheld will be used in this hands-on workshop. Some of these theorems will be proved and others will simply be looked on in wonder. No previous experience is needed.

Ray Klein, T3--Teachers Teaching with Technology

Thursday, May 7, 2020
11:30 am – 12:30 pm

Thursday, 11:30-12:30
Bauer Beaty
Grades 305

Equity in Math? Getting Closer
Join us on our journey where we will share how our district is striving for equity in math by implementing Math Workshop using rich tasks, fluency games, and number talks within the classroom to leverage students’ strengths. We’ll show you our attempts at incorporating math across different curricular areas ensuring that each child has access to meaningful mathematics!

Ashley Gorman, River Falls
Connie Roetzer

Thursday, 9:30-11:00
YC NG-Jones
Grades 9-12

Increasing Engagement in Mathematics through Computer Science
In this session, we will look at creative ways that you can bring coding into your math classroom to enhance student learning. Teachers will leave this session with concrete strategies to enhance their instruction through the use of coding.

Jessica Kachur, Kenosha Unified School District

Thursday, 11:30-12:30
Bauer Boddie/La Due
General Interest

Regardless of Zip Code: Equity and Access to Quality Digital Instructional Materials
Just Google it, right? The practice of searching and finding instructional materials online has become commonplace with the increase of leveraging of digital tools in classroom instruction. Consider, what determines quality in said instructional materials? This session will address access and equity to high-quality instructional materials for all learners including a walk through WISELearn.

Jan Wickboldt, CESA #11
Thursday, May 7, 2020
11:30 am – 12:30 pm

Thursday, 11:30-12:30
Bauer Lightbody
*General Interest*

**How to successfully transition students to higher-level math content**
In this session, participants will learn to 1) Quickly identify if students are ready for higher-level math content; 2) Pinpoint critical math skill gaps that may be holding students back; 3) Engage students at all levels in effective math practice to build their skills; 4) Monitor students’ progress toward mastery of [State] math standards; and Ensure students build the math skills needed for college and career success.

Ellen Kaye, Renaissance
*Brian Karsbaek*

---

Thursday, 11:30-12:30
Kern Boehr/Cary
*Grades 3-5*

**From Gaps to Growth: Moving Students Towards Multiplicative Automaticity**
Finding a balance between conceptual understanding & automaticity can be challenging! Explore strategy-based approaches that build bridges towards automaticity by prioritize number relationships to serve as a catalyst for larger values. Intentional tasks & activities will increase the enjoyment of math, as well as mastery of multiplication facts.

Dina Mendola, US Math Recovery Council

---

Thursday, 11:30-12:30
Kern Brayton Case A
*Grades PK-2*

**What Are the Rest of the Students Doing?**
Are you looking for ways to differentiate instruction in application time? Keep it simple by effectively and efficiently planning for independent student practice that maximizes student engagement. Accountability and evidence of learning are important pieces of learner agency.

Terri Froiland, School District of Waukesha

---

Thursday, 11:30-12:30
Kern Brayton Case B
*General Interest*

**Making Math Accessible to English Language Learners**
Participants will learn strategies and scaffolded instructional practices that will ensure that English Language Learners have the supports to learn math content while learning the language of math.

Rachel Elliott, School District of Waukesha
*Julie Jordan*
<table>
<thead>
<tr>
<th>Thursday, May 7, 2020</th>
<th>Thursday, May 7, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30 am – 12:30 pm</td>
<td>11:30 am – 12:30 pm</td>
</tr>
<tr>
<td><strong>Thursday, 11:30-12:30</strong></td>
<td><strong>Thursday, 11:30-12:30</strong></td>
</tr>
<tr>
<td>Kern Brown</td>
<td>Kern Stansbury/Hanson</td>
</tr>
<tr>
<td><em>Grades PK-2</em></td>
<td><em>Grades 6-8</em></td>
</tr>
<tr>
<td><strong>Deepening Understanding of Addition &amp; Subtraction through the Modes of Mathematical Representations</strong></td>
<td><strong>Self Assessment &amp; Illustrative Math: Meeting The Needs Of All Learners</strong></td>
</tr>
<tr>
<td>This session will focus on how you can infuse different types of mathematical representation (physical, visual, symbolic, contextual, and verbal) into many of your common classroom routines and math tasks. Participants will leave with ideas for routines and activities to engage each and every student in deep understanding through using and connecting different math representations.</td>
<td>We will discuss self reported grades (Hattie's second largest effect size) and how it applies to math, specifically the Illustrative Math Curriculum. Participants will go through a mock activity of what self assessment looks like in our school, discuss various ways to use this assessment tool, and then we will have an open forum on the Illustrative curriculum.</td>
</tr>
<tr>
<td>Kelsey Guenther, Muskego-Norway School District</td>
<td>Brandon Marcis, Medford School District</td>
</tr>
<tr>
<td><strong>Thursday, 11:30-12:30</strong></td>
<td><strong>Thursday, 11:30-12:30</strong></td>
</tr>
<tr>
<td>Kern Johnson</td>
<td>Kern Johnson</td>
</tr>
<tr>
<td><em>Grades 6-8</em></td>
<td><em>Grades 6-8</em></td>
</tr>
<tr>
<td><strong>Building Thinkers in a Middle School Math Classroom</strong></td>
<td><strong>Self Assessment &amp; Illustrative Math: Meeting The Needs Of All Learners</strong></td>
</tr>
<tr>
<td>Tired of begging students to engage in tough math problems? We’ve created a way to build excitement around math application. We’ll share how to build interest to solve rigorous problems, facilitate strategy sharing, &amp; teach kids to question each other. You’ll learn to LOVE problems you skip because they seem too hard...they’re a gold mine for implementing the Math Practices! There is diverse thinking in your room that’s begging to be uncovered.</td>
<td>We will discuss self reported grades (Hattie's second largest effect size) and how it applies to math, specifically the Illustrative Math Curriculum. Participants will go through a mock activity of what self assessment looks like in our school, discuss various ways to use this assessment tool, and then we will have an open forum on the Illustrative curriculum.</td>
</tr>
<tr>
<td>Cara Flach, Oak Creek Franklin School District</td>
<td>Brandon Marcis, Medford School District</td>
</tr>
<tr>
<td><strong>Thursday, 11:30-12:30</strong></td>
<td><strong>Thursday, 11:30-12:30</strong></td>
</tr>
<tr>
<td>John Marzion</td>
<td>John Marzion</td>
</tr>
<tr>
<td><strong>Teaching and Recruiting students for Computer Science in Rural Districts</strong></td>
<td><strong>Teaching and Recruiting students for Computer Science in Rural Districts</strong></td>
</tr>
<tr>
<td>Being a rural school does not mean you cannot offer Computer Science to your students. Learn from districts about overcoming barriers to implementing CS in their schools, free options for professional development, read sources and strategies for introducing or strengthening your CS program in your district. Join us for a round table discussion, problem solving and work time to implement an action plan to incorporate CS in your school.</td>
<td>Being a rural school does not mean you cannot offer Computer Science to your students. Learn from districts about overcoming barriers to implementing CS in their schools, free options for professional development, read sources and strategies for introducing or strengthening your CS program in your district. Join us for a round table discussion, problem solving and work time to implement an action plan to incorporate CS in your school.</td>
</tr>
<tr>
<td>Olivia Dachel, Merrill High School</td>
<td>Olivia Dachel, Merrill High School</td>
</tr>
</tbody>
</table>
Thursday, May 7, 2020
11:30 am – 12:30 pm

Thursday, 11:30-12:30
RWI Crystal
General Interest

Bringing the National Math Festival to Your Classroom
Throughout the session, we will share activities from the National Math Festival that are designed to engage people of all ages in doing mathematics. From games and puzzles to problem solving tasks, come celebrate the power and joy of mathematics.

Rebecca Brink, Marinette High School
Jenn Kosiak

Thursday, 11:30-12:30
RWI Mahaney
Grades 9-12

The UW System Mathematics Placement Test
Come learn about the UW System Math placement test! The presenters will provide an overview of the test and how it is developed, share sample items, and discuss how students register to take the exam. There will also be ample time for questions.

Sonya Sedivy, UW Center for Placement Testing
Richard Karwatka

Thursday, 11:30-12:30
RWI McGarvey
Grades 9-12

The Power of Heads Up Tech in the Classroom
The mathematics classroom is the ideal place for sharing ideas, discourse, and collaboration. Instead of students answering closed questions in isolation with the more ubiquitous "heads down" technology, how can we help teachers navigate the sometimes circuitous path of classroom discourse aided by "heads up" digital tools? Participants will learn about the benefits of using technology that is designed to promote and inspire student discourse.

Samantha Falkner, Great Minds

Thursday, 11:30-12:30
Staughton
General Interest

Real Math for All Students
How do different perspectives on learning math affect both the teacher and learner? How can we leverage those differences to help all students construct real mathematics? What is real math versus fake math? In this lively session, Pam will share insights and suggestions for helping more students learn more math.

Pam Harris, Texas State University

Thursday, 11:30-12:30
YC Cummings
Grades 9-12

Learn the Power of the DESMOS Graphing Calculator
DESMOS is an intuitive, beautiful graphing utility freely available to use on any phone, tablet, or computer. Come see why students love it so much. It also has a test mode which makes using it during assessments completely secure.

Mike Tamblyn, Edgerton High School

Thursday, 11:30-12:30
YC Dominguez Cox
Grades 9-12

Hack into a High School Cybersecurity Course
For the past two years, I have worked to develop a high school level Cybersecurity course. After attending numerous summer workshops and receiving much candid student feedback, I am now comfortable sharing my material with others. Come learn the reasons for offering Cybersecurity, suggested content/resources and a glimpse at a couple of lessons. Participants are encouraged to bring your own device for access to all of the material.

Michael Cullen, Cedarburg School District
Thursday, May 7, 2020
11:30 am – 12:30 pm

Thursday, 11:30-12:30
YC Fordham-Ballenger
Grades 9-12

What went wrong? Using error analysis to elicit student thinking and identify misconceptions
Having students analyze incorrectly worked examples is an engaging teaching strategy that gets students reflecting on their own understanding of the concepts while talking about the mathematics behind the errors they see. In this session, you will participate in sample activities, share your own experiences, and leave ready to implement error analysis in your classroom.

Crystal Marie Vesperman, Saint Paul Conservatory for Performing Artists

Thursday, 11:30-12:30
YC Huber-Evans
Grades 9-12

The M^3 Challenge: A Gentle Way to Introduce Real-World Math Modeling to High School Students
Sponsored by SIAM, the M^3 Challenge presents a real-world societal problem to students (e.g., vaping, recycling, reducing food waste, and interurban transportation) and asks them to use mathematics and research skills to create and interpret appropriate models. Although the contest only lasts 14 hours, there can be a lasting impact on learning as students wrestle with applying their math skills to a real-world issue.

Mike Weidner, Nicolet High School District

Thursday, 11:30-12:30
YC NG-Jones
Grades 9-12

Replace Grading Practice with Knowledge Checks
STOP grading everything! Practice is just that, practice. We should be encouraging students to practice, not to receive points in the grade book, but to gain knowledge. Helping students find intrinsic motivation is easier said than done, but please join us as we discuss how we can encourage this culture with in our classrooms.

Laura Crites, Maple School District
Thursday, May 7, 2020
1:00 – 2:00 pm

Thursday, 1:00-2:00
Bauer Beaty
General Interest

Catalyzing Change in Early Childhood and Elementary Mathematics: New Major Recommendations by NCTM
Every child deserves to experience the wonder, joy, and beauty of mathematics and develop deep mathematical understanding. Take a closer look at recommendations in Catalyzing Change in Early Childhood and Elementary Mathematics, released April 2020. Discuss the need to dismantle inequitable structures and create spaces that nurture positive math identities and agency. Leave with ideas to initiate critical conversations in your school or district.

DeAnn Huinker, University of Wisconsin-Milwaukee

Thursday, 1:00-2:00
Bauer Boddie/La Due
Grades 3-5

Problem Solving Tasks Grades 3-5
This session will focus on how to teach and choose high quality math tasks as a routine part of your math curriculum. Participants will experience a low-floor, high ceiling task appropriate for the intermediate classroom, as well as discover a multitude of resources for finding other engaging tasks.

Lindsey Johnston, Waukesha
Terri Froiland

Thursday, 1:00-2:00
Bauer Lightbody
Grades 9-12

Supporting Struggling Students in Required Math Courses
Poynette answered the question "How do we ensure equity?" by developing a support system for all required math courses. This session will discuss the development of the the philosophy of the support system, the curriculum and teaching practices used, and the successes and struggles teachers and students have faced. We will examine the impact support classes have had on grades, work habits, assessments, and students’ attitudes and confidence.

Dr. Leah Hover-Preiss, Poynette School District

Thursday, 1:00-2:00
Bauer Morehouse A
Grades 6-8

Creating a culture of continuous improvement in the middle school mathematics classroom.
In this session, we will look at different quality tools to help students take responsibility for their own learning in an effort to help them work toward the goal of continuous improvement.

Jane Patterson, Greendale Schools

Thursday, 1:00-2:00
Bauer Morehouse B/C
General Interest

How to Help Students Become Problem Solvers, Not Math Robots
If you're frustrated because students seem like they understand what you teach them… until you see their test scores, then you'll love using problems with open middles. Come learn how to implement problems that will clearly show what your kids know, help them become problem solvers, and have them begging for more.

Robert Kaplinsky, Downey Unified School District
Thursday, May 7, 2020
1:00 – 2:00 pm

Thursday, 1:00-2:00
Kern Boehr/Cary
**Grades 9-12**

Creating Continuous and Dynamic Learning for All Students
How do we create a learning habitat for all students? Your apathetic students may actually be isolated! Explore a variety of daily practices that help every student win. Come create a lesson using inquiry-based, active thinking strategies that eliminate isolation, foster risk-taking, and encourage dialog while raising each student's accountability.

Peg Hartwig, Discovery Education

Thursday, 1:00-2:00
Kern Brayton Case A
**Grades PK-2**

Replace Math Anxiety With Math Positivity...FINALLY... FACT AUTOMATICITY!
The concern has existed forever--kids do not know their facts! Research shows us why student's not know their facts but what is missing in their experiences, discussions and our instruction? This session will address the 'whys' and focus on the 'hows' to attain fact automaticity through understanding not memorization! Join the Journey!

Lynn Rule, MathRack

Thursday, 1:00-2:00
Kern Brayton Case B
**Grades 3-5**

Sweet Spot Math: What does your math class look like and why?
How do you structure your math class and why? I don't know about you, but over my ten years of teaching my approaches to thinking, organizing, and delivering math instructional has changed significantly and continues to evolve. I want to share my current workshop model and teaching journey with you, in hopes you will share back! Please join us for this awesome joint learning session to find the sweet spot in your math instruction!

Tristan Kittilson, Glenwood City School District

Thursday, 1:00-2:00
Kern Brown
**Grades PK-2**

Tips & Tricks I've Learned While Implementing Counting Collections in First Grade
Counting Collections have helped my students tremendously, but the logistics took some figuring out. I wondered: “How do I manage them? How can I make sure that students are getting just-right collections? How do Counting Collections fit within the bigger picture of my math block?” I would love to help you fast forward through the implementation process by sharing what I have learned and answer any questions you might have about getting started.

Katy Smith, School District of Waukesha
Michelle Tranchita

Thursday, 1:00-2:00
Kern Johnson
**Grades 9-12**

Coding to Prove in Math
Learn how to write a program for your graphing calculator that will prove the understanding of a math concept. Examples will include coding to calculate the slope, distance, and midpoint of a segment given two points, solving a quadratic equation, and transformation of points.

Mary Walz, Sauk Prairie High School

Thursday, 1:00-2:00
Kern Stansbury/Hanson
**Grades 6-8**

The Art of Problem Solving
The very first Common Core Standard for Mathematical Practice is to "Make sense of problems and persevere in solving them." But what does this process actually look like? Through the distribution of a variety of both simple and complex, open-ended 'problem solving tasks', we have been able to elicit creative and intriguing examples of how students' proceed through the non-linear process of solving a real-world problem.

Josh Wilke, School District of La Crosse
Katy Weber
Thursday, May 7, 2020  
1:00 – 2:00 pm

Thursday, 1:00-2:00  
MLK  
*Grades 9-12*  

**How to create and grow a successful CS program**  
Math teachers are in a special position to help fill the CS shortage. The TEALS approach provides a solution to the shortage and helps build a long-term and sustainable computer science program by partnering teachers new to computer science with industry volunteers with computer science content expertise. In this session, participants will hear about the TEALS approach and discuss how to use industry volunteers to support their own teachers.

Alex Pehler, Microsoft TEALS Program  
Amy Bires

---

Thursday, 1:00-2:00  
RWI Crystal  
*Grades PK-2*  

**Integrating 21st century skills into math workshop**  
Critical thinking, creativity, collaboration, communication, flexibility, and use of technology are all essential 21st century skills that should be integrated into math workshop. Giving students opportunities to learn, practice, and apply these skills during math will allow for high-quality math instruction, effective teaching and learning, and high expectations in order for ALL students to perform at their highest potential.

Melissa Holland, Elmbrook School District

---

Thursday, 1:00-2:00  
RWI Mahaney  
*Grades 9-12*  

**Making a Math PLC work- Reflections from an Algebra PLC team**  
Are you on a math PLC and would like to get more out of meetings? Are you looking to implement a PLC model for math at your school? Learn from teachers on an Algebra PLC that was modeled after the book "Common Core Mathematics in a PLC at Work- High School". This session will discuss our PLC model, data trackers we have used to inform interventions and ways we increased the level of cognitive demand of our assessments and tasks.

Abbey Turchyn, Unified School District of DePere  
Andrew Belter

---

Thursday, 1:00-2:00  
Staughton  
*Grades 3-5*  

**Powerful Moments in Math Class: Why Certain Experiences Stand Out and How We Create More of Them**  
We have all experienced defining moments in our lives. These were moments that shaped our identities, gave us a sense of status within certain communities, and put us on the path to work in mathematics education. As teachers and teacher leaders, we want our lessons and learning experiences to leave long-lasting impressions on those with whom we work. We want to empower those with whom we work with a belief that they too are math capable. When we understand the psychology behind memories, learning, and identity, we can leverage that knowledge to design powerful moments for adults and students alike. According to Heath and Heath (2018) memorable positive experiences contain one or more of the following elements: elevation, insight, pride, and connection. We will explore each of these elements in depth through a mathematical lens and consider how to implement them in our work with students and/or adult learners.

Mike Flynn, Mount Holyoke College, South Hadley, Massachusetts
Thursday, May 7, 2020
1:00 – 2:00 pm

Thursday, 1:00-2:00
YC Cummings
General Interest

Questioning Our Questions
Have you ever posed a question and found yourself surprised that the response did not elicit the kind of thinking that you hoped for? Learn elements of questions from the Cognitive Coaching℠ perspective! The more skillful we are in posing questions, the more likely we are to invite complex thinking. Walk away with increased skills that you can apply through: teaching, coaching, meetings, and any other spaces that you interact with people.

Paige Richards, Mathematics Institute of Wisconsin

Thursday, 1:00-2:00
YC Dominguez Cox
General Interest

Magical Mathematical Movie Moments
There are movies that have mathematics featured as a part of the plot. We will explore a few of these movie moments.

Timothy Deis, UW-Platteville
Jason Thrun

Thursday, 1:00-2:00
YC Fordham-Ballenger
General Interest

Using Egg Cartons to Teach Geometry Concepts
According Common Core State Standards for Mathematics students are expected to have knowledge of the concept of symmetry (including different types of symmetry). In this talk, we will illustrate how to use egg cartons to teach the concepts of symmetry.

Senfeng Liang, University of Wisconsin-Stevens Point
Kaitlyn Schulz

Thursday, 1:00-2:00
YC Huber-Evans
General Interest

Developing a Meaning-Based Understanding of Measurement
What does it mean to measure? How can we shift our instruction from rote and often ill-memorized use of specific tools to a meaning-based understanding of measurement? Come explore the measurement process and learn how to build a foundation for students as they advance to measurement in the upper grades. We will use physical experiences and make use of structure to help students build a conceptual understanding of measurement.

Liz Cutter-Lin, University of Wisconsin-Milwaukee
Erin O’Halloran

Thursday, 1:00-2:00
YC NG-Jones
General Interest

Book Chat on The Five Practices in Practice
The 5 Practices are a powerful way to integrate discussion into the classroom. Building off of The 5 Practices in Practice texts, we invite you to join us in a discussion of how to integrate the practices into your classrooms using participant examples and examples from the field.

Matt Chedister, WI-AMTE
Thursday, May 7, 2020
2:30 – 3:30 pm

Thursday, 2:30-3:30
Bauer Beaty
*Grades PK-2*

**Counting On as a Crucial Milestone That Leads to Thinking in Groups**
Did you know that there are three different types of tasks that learners should be able to solve if counting on is conceptually understood? This session is one district’s look at a building-wide system to monitor & reflect on the teaching and learning of counting on. We will link counting on to readying learners for strategies that leverage group thinking. Timelines, assessment items, and ideas for instructional tasks & scaffolds will be shared.

Margy Guy, Verona Area School District
*Julie Bormett*

---

Thursday, 2:30-3:30
Bauer Lightbody
*Grades 9-12*

**Mathematics of Schotten-Totten: a poker-like card game involving logical deduction**
"Schotten-Totten" (aka. "Battle Line") is a two-player card game. Players alternate playing cards on their side trying to capture stones in the middle of the table. The strength of played cards is based on poker probabilities, but for three cards instead of five. Further, a player may claim a stone early by "proving" they have the stronger set of played cards. The probability and logical deduction aspects of the game will be discussed.

Chris Hlas, UW-Eau Claire

---

Thursday, 2:30-4:00
RWI McGarvey
*Grades 9-12*

**Breaking Tradition**
How many of you feel that at the secondary level we are too crunched for time to get all of our content covered? We just don't have time to incorporate any of the extra nontraditional activities that we would like to. You will leave this session with a toolbox of different rich, engaging activities that will fit right into the lesson rather than adding them on top of the lesson, and even a specific plan of how to get started!

Tanya Amys, Maple School District

---

Thursday, 2:30-3:30
YC Fordham-Ballenger
*General Interest*

**Culture at the Forefront of Mathematics Instruction**
Inequities in mathematics oftentimes stem from a lack of cultural awareness within the classroom. When every student feels embraced and seen, there is an increase in mathematical motivation. This session will provide instructors with ways to bridge cultural barriers within the mathematics classroom while maintaining a strong focus on high quality instruction and excellence.

Lauren Mauel, Lauren Mauel's Academic Coaching
### Thursday, May 7, 2020
**2:30 – 4:00 pm**

**Thursday, 2:30-4:00**  
Bauer Boddie/La Due  
**Grades 3-5**

**Building Community For Equitable and Productive Math Talk**
Productive discourse and student engagement are essential in enhancing students’ mathematical knowledge. In this presentation teachers will be introduced to the A.C.C.T. Formula; Authentic Relationships, Climate, Culture and Teacher Mindset. Teachers will learn how to use these four essential components to build strong effective classroom communities that engage students in mathematics and provide equitable opportunities.

Cynthia Robinson, Enhancing Teacher Practices LLC

**Thursday, 2:30-4:00**  
Bauer Morehouse A  
**Grades 9-12**

**Mathematics Should and Can be Relevant: Making Sense of Data**
Not only the answer to “When will I ever use this?” but also to “Why care?” Real data from interesting contexts such as climate change, income, or rating NFL quarterbacks can engage students in mathematical investigations, mathematical modeling, and provide opportunities to apply some of the skills they are learning.

Gail Burrill, Michigan State University

---

**Thursday, 2:30-4:00**  
Bauer Morehouse B/C  
**General Interest**

**Building Powerful Multiplicative Reasoning**
Students need to know their facts! But they also need to understand mathematical relationships and properties and they need to develop efficient, sophisticated multiplication strategies. We can do both! We need to do both! Come and experience powerful teaching strategies to help all students multiply fluently that also lead to success in higher math.

Pam Harris, Texas State University

**Thursday, 2:30-4:00**  
Kern Boehr/Cary  
**Grades PK-2**

**Differentiating Math Workstations k-2**
In this hands-on session, we will discuss and explore differentiated math workstations, why we need them, when we do them, how they are different from regular math workstations and their impact on student achievement. Our focus will be using fluency, word problems and place value stations throughout the year in meaningful, rigorous, engaging ways. Participants will leave with a framework for getting started.

Dr. Nicki Newton, Newton Education Solutions
Thursday, May 7, 2020
2:30 – 4:00 pm

Thursday, 2:30-4:00
Kern Brayton Case A
**Grades 3-5**

**Basic Fact Fluency: 5 Fundamentals to Provide Targeted Instruction**
Come and learn about the 5 Fundamentals of Basic Fact Fluency. Learn about the different levels of fluency and games to meet and advance their fluency needs. Participants will leave with an understanding of how to assess students to document progress.

Beth Schefelker, School District of South Milwaukee
*Melissa Hedges*

---

Thursday, 2:30-4:00
Kern Brayton Case B
**Grades 3-5**

**Designing Math Centers for Your Classroom**
Are you looking for a way to design math centers based on your essential standards? In this session, you will participate in a centers approach to learning. You will learn about games, apps, and tasks to incorporate in your centers to help students reach their grade-level content goals. You will participate in centers rotations, watch video of centers in action, and create a plan for implementing centers in your classroom.

Nicole Esterling, Little Chute Area School District

---

Thursday, 2:30-4:00
Kern Brown
**Grades 9-12**

**Illustrative Mathematics: Explore a Middle School Open Education Resource (OER)**
Have you heard of the free, OER mathematics curriculum from Illustrative Mathematics? IM 6-8 Math is a problem-based curriculum where students learn by doing math through solving real-world and mathematical problems. Join this interactive session to experience content routines and learn about the lesson structure. Bring a device for guided exploration of the free online platform.

Eric Kanters, Mathematics Institute of Wisconsin
*Sara Brown*
Identifying and Implementing Computational Thinking including Computer Science in Math

Let’s review the four key concepts of computational thinking (CT) along with the CT practices as well as the recently defined ISTE standards for computational thinking. Then we’ll spend time working in small groups discovering how these competencies can enhance your math courses and expose all students to this CS thinking. Bring your ideas and examples to share or just bring yourself to come and think and plan.

Joe Kmoch, CSTA Wisconsin Dairyland

Games in Small Group Instruction: Understanding Multiplication

In this session we will explore the progression of understanding multiplication: from seeing groups to learning math facts. For each stage, ideas will be shared and practiced. Take away a game you can use in your small group next time you’re in the classroom!

Jana Manning, Bethesda Elementary School

Leslie Waltz

Supporting Students Who Struggle: Inspiring all Students to Achieve

All students struggle. Productive struggle is encouraged and expected, yet some students struggle unproductively more than others. How can you support the students who may need intervention without removing the productive struggle? In this session, you will experience activities, investigations, and teaching strategies to support all of your students.

Mike Flynn, Mount Holyoke College, South Hadley, Massachusetts
Leveraging Teacher Collaboration for Student Learning
During this session, we will be identifying the qualities of strong teacher collaboration, referencing norms and roles of collaboration, and how to use analyzing student learning to drive co--planning in a teacher team. Ultimately, this session will hit at the heart of building our own capacity in a team to grow as teachers and the learning for ALL students. Administrators, coaches, and teacher leaders are encouraged to attend.

Lisa Hennessey, Sun Prairie Area School District

Thursday, May 7, 2020
2:30 – 4:00 pm

Thursday, 2:30–4:00
YC Cummings
General Interest

Discovering Math with Square Foot Gardening
Help your students discover math concepts in a fun, hands on way using the simple Square Foot Gardening method. Growing tasty vegetables in squares rather than rows allows children to experience factors, fractions, basic math operations, even exponential growth. Let your imagination take you to endless cross-curricular activities.

Rick Melcher, Goodman - Armstrong Creek
Tara Meinke

Thursday, 2:30–4:00
YC Huber-Evans
General Interest

Transform your Box (or Unboxed!) Curriculum
How can you add valuable skill and content into a set curriculum without adding in extra worksheets, extra grading, extra everything? Classrooms from Pre-K to upper level, traditional to project based can gain from the addition of discourse tools. We’ll share our tools that increase discussion, accountability, and student planning. We will challenge you to create options for all students to think, talk, and write about their thinking around math.

Beth Ott, Clark Street Community School
Mary Lee McKenzie

DRAFT
# Friday Meetings and Events Overview

**Friday, May 8, 2020**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6:15 a.m. – 7:30 a.m.</strong></td>
<td>7ᵗʰ Annual Pi Run/Walk (Kern Lodge)</td>
</tr>
<tr>
<td><strong>6:30 a.m. – 1:30 p.m.</strong></td>
<td>Conference Registration and Check-in (Kraft Centre Lobby)</td>
</tr>
<tr>
<td><strong>6:30 – 8:30 a.m.</strong></td>
<td>Breakfast Served (Kraft Centre Dining Room)</td>
</tr>
<tr>
<td><strong>7:00 – 7:30 a.m.</strong></td>
<td>First Timer Orientation (Tower Dining Room)</td>
</tr>
<tr>
<td><strong>8:00 a.m. – 1:30 p.m.</strong></td>
<td>Visit the Exhibit hall (Pillsbury)</td>
</tr>
<tr>
<td><strong>8:00 a.m. – 3:30 p.m.</strong></td>
<td>Sessions</td>
</tr>
<tr>
<td><strong>8:00 a.m. – 12:30 p.m.</strong></td>
<td>WI-AMTE Sponsored Sessions</td>
</tr>
<tr>
<td><strong>10:30 a.m. – 1:00 p.m.</strong></td>
<td>Lunch</td>
</tr>
</tbody>
</table>

**Annual Pi Run/Walk**  
6:15 a.m. Meet outside of the Kern Lodge parking lot  
Get out your running shoes and participate in the 7ᵗʰ Annual Pi Run, with proceeds benefiting the Wisconsin Mathematics Education Foundation. The 3.14-kilometer fun run/walk around the Green Lake Conference Center wooded grounds starts and finishes on Hillside Road. You can sign up at the Wisconsin Mathematics Education Foundation exhibit located in the entrance of the Exhibit Hall.

**First Timers Welcome/Orientation**  
7:00-7:30 a.m. Tower Dining Room  
WMC Board members will provide an overview of the conference and answer your questions. Grab breakfast and stop by for valuable information to make the most of your conference experience.

**WI AMTE will offer a special track with programming aimed at teacher leaders, coaches, and mathematics teacher educators.**
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker(s)</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
</table>
| Friday, 8:00-9:00 | Bauer Beaty                                  | Grades 6-8                                                           | **Transform Your Teaching with Math Tasks**  
Transform the way you introduce new ideas in the math classroom with Math Tasks. Learn the important parts of a lesson that creates curiosity, builds confidence, encourages the use of different strategies and engages even the most difficult students. We will take tasks and turn them into more valuable experiences for your students that promotes conceptual understanding.  
Lauren Wiske, South District of South Milwaukee  
Brittany Pruss                                                                 |
| Friday, 8:00-9:00 | Bauer Boddie/La Due                           | General Interest                                                    | **Hosting a STEM Fair**  
Are you interested in building mathematical wonder, joy, and beauty among your students? You should host a STEM Fair! I will share how my high school students created stations and shared their love of mathematics with our district's K-4 students. High school and elementary school teachers are encouraged to attend.  
David Ebert, Oregon High School                                                                 |
| Friday, 8:00-9:00 | Bauer Lightbody                               | Grades 9-12                                                         | **Learning More by Grading Less**  
Many of us are overwhelmed by the amount of grading we take on during a school year. Come join me in a discussion how I have worked to create more student self-assessment and feedback opportunities in my classroom via different methods. Student opinions will be shared along with how this shift has allowed me to focus more on instruction and students on practicing their learning.  
Damion Beth, Baraboo School District                                                                 |
| Friday, 8:00-9:00 | Bauer Morehouse A                             | Grades 9-12                                                         | **Co-Teaching in the High School Mathematics Classroom**  
In order to ensure equity, Poynette began co-teaching collaborations between math and special education teachers. A co-teaching pair with multiple years of experience will lead discussions focusing on the different co-teaching models that can be used, the requirements for developing strong co-teaching relationships, the benefits and drawbacks experienced during implementation, and multiple forms of data gathered on the impact of co-teaching.  
Dr. Leah Hover-Preiss, Poynette School District  
Carrie Udell                                                                 |
| Friday, 8:00-9:00 | Bauer Morehouse B/C                           | Grades 9-12                                                         | **Six Strategies for Developing both Conceptual Understanding and Procedural Fluency in Algebra**  
Too often students can "do" in the moment but later cannot recall which procedure to use. Developing robust concept images and analyzing the advantages and disadvantages of different ways of thinking about the mathematics can facilitate both flexible procedural knowledge and deep understanding of ideas such as linearity or solving an equation.  
Gail Burrill, Michigan State University                                                                 |
Friday, May 8, 2020
8:00 – 9:00 am

Friday, 8:00-9:00
Kern Boehr/Cary
Grades 9-12

A 21st Century Approach to Curating and Evaluating Math Homework
Learn how to utilize the Google Suite along with two Chrome add-ons to manage daily homework in secondary mathematics. Since developing this strategy, the presenter has seen a remarkable improvement in the quantity and quality of student work. The approach also improves quantity and quality of feedback and communication with students and parents. This approach enables differentiation of assessment of daily work, thus promoting equity.

Douglas Guyette, Notre Dame Academy

Friday, 8:00-9:00
Kern Brayton Case B
Grades 6-8

A Deeper Dive into Building Thinkers in Middle School Math
The past two years we’ve been asked to go more in depth on our “Building Thinkers in a Middle School Math Classroom” session. This is it! If you are inspired to Build Thinkers in your class, come take a deeper dive into how to choose problems, question students, anticipate roadblocks, and give nudges to prompt thinking. We’ll also share problem solving strategies we use to decrease students’ reliance on teachers and empower them to persevere.

Cara Flach, Oak Creek Franklin School District
John Marzion

Friday, 8:00-9:00
Kern Brown
Grades 9-12

Informational, Intentional, Targeted Assessments
How do you make assessments intentional and aligned to the essential learning targets? Hear about how our math department went from a grading system that was traditional and subjective to a system in which all of our assessments are specific, intentional, and aligned to the standards and learning targets. We will share how we take these assessments transform them into a quality grade that is meaningful and transparent.

Tanya Amys, Maple School District
Laura Crites, Jessica Buran, & Ken Bartelt

Friday, 8:00-9:00
Kern Johnson
Grades 9-12

The Power of Complex Numbers
Are you at a loss when students ask about the importance or application of complex numbers? With the help of TI Nspire technology, you’ll discover how complex numbers unite algebra, geometry, trigonometry, calculus, physics and even art.

Molly Rockstroh, DePere High School

Friday, 8:00-9:00
Kern Stansbury/Hanson

Making Student Thinking Visible with Number Talks
This session will help your students enhance their number sense through math talks. With conceptual understanding being our ultimate goal in math classrooms, performing math talks consistently can help all students build confidence in recognizing patterns and relationships between numbers. Students gain access to seeing multiple representations, learn to communicate their solutions to others and make sense of someone else’s justification.

Angie Kraft, Oconomowoc Area School District
Friday, May 8, 2020
8:00 – 9:00 am

Friday, 8:00-9:00
MLK
*General Interest*

**We Need To Talk: Does Everything Matter or Do a Few Things Matter A Lot?**
What do university math teachers expect their students to know when they reach college? What skills do they need? What do high school teachers prepare students to do in college? Join us for a discussion between university faculty and K-12 teachers to discuss what expectations each group has of the other.

Matt Chedister, WI AMTE

Friday, 8:00-9:00
RWI Crystal
*Grades PK-2*

**K-2 Diving Deeper into Number Corner**
This session will look into diving deeper into Bridges Number Corner activities at the K-2 level, as well as how they correlate between grade levels.

Mark Bussian, Sun Prairie School District

Friday, 8:00-9:00
RWI Mahaney
*Grades 9-12*

**Teaching Probability in AP Statistics - Part II**
Probability can be the toughest topic for students on the AP exam (and teachers too sometimes). Take a look at a simple probability project from a casino-like lens and see how students' creations came to life. Also check out some other probability activities you can implement in your class very easily.

Jason Dahl, Oconomowoc High School
*Allison Hopkins, Steven Sollom, Bill Fehrenbach, & Todd Brahm*

Friday, 8:00-9:00
Staughton
*Grades PK-2*

**TBA**
TBA

Megan Franke, University of California, Los Angeles

Friday, 8:00-9:00
YC Cummings
*Grades 305*

**Beyond answers: planning instruction to empower students to think more deeply about mathematics**
We’re familiar with "process over product" and know math is more than answers. Teaching deeply impacts learning when we plan for student engagement, leverage instructional practices, activate prior learning, and connect math and language. Intentional instructional practices have a lasting impact. Join us to engage in professional learning that will empower your students to think deeply and conceptually and to strengthen their math process skills.

Dr. Maria Franshaw, River Oaks Baptist School

Friday, 8:00-9:00
YC Fordham-Ballenger
*Grades 305*

**CS in Elementary Education**
This session will allow you to hear and explore the wonderful value Computer Science Education has in our elementary schools. Our world is in dire need of more people with deep knowledge of CS and it is vital that we start this instruction early in our children's lives. In our session we will explore different tools that are easily accessible for schools and show how these tools can be integrated into various content areas.

Kevin Reitman, Archdiocese of Milwaukee & MKE Code Club, *Julie Bieber & Aaron White*
Friday, May 8, 2020
8:00 – 9:00 am

Friday, 8:00-9:00
YC Huber-Evans
Grades 305

No More Tricks
"Butterfly" method. "Altogether" always means add. "Big number" always goes on top when subtracting. Students come to us with shortcuts taught by well meaning teachers, or parents, or even a textbook without understanding. Unfortunately, shortcuts can lead to misunderstandings in the future. In this session we will explore a variety of shortcuts/tricks that should no longer be taught in math classes and share what can be done instead.

Deb Heitman, Coleman
Troy Gruszynski

Friday, May 8, 2020
9:30 – 10:30 am

Friday, 9:30-10:30
Kraft Mitchell Dining
General Interest

Get some FACTs: Formative Assessment Classroom Techniques Meetup
Do you have formative assessment strategies that work well in your classroom? Do you need new ideas to expand your current collection? Do you want to find better ways to use these formative assessments to support and challenge your students? Bring your ideas, experiences, research, and questions to this collaborative session.

Crystal Marie Vesperman, Saint Paul Conservatory for Performing Artists

Friday, May 8, 2020
9:30 – 10:30 am

Friday, 9:30-10:30
Kraft Tower Dining
Grades 6-8

What am I asking my students?
Have you ever thought about the types of questions you ask your students? Are you intentionally planning these questions before you teach a lesson? In this session, you will work with a team on a math task from the perspective of a student. Then from the perspective of a teacher, you will write questions you could ask students about this task. Each team will organize their questions by type and by purpose.

#NCTM #PtA #takingaction

Mark Ray, CPM
Friday, May 8, 2020
9:30 – 11:00 am

Friday, 9:30-11:00
Bauer Beaty
Grades PK-2
Math Running Records: How One Assessment Changed the Math Culture of a District
Learn how the powerful, research-based Math Running Record math fact interview created by Dr. Nicki Newton transformed the math culture within a school district. Providing data on all the facets of fact fluency: flexibility, accuracy, efficiency, and automaticity provides the information teachers need to plan their differentiated instructional responses to develop a foundation of flexible math thinking for their students.

Ann Elise Record, Ann Elise Record Consulting LLC

Friday, 9:30-11:00
Bauer Boddie/La Due
General Interest
Making Practice Count and Getting Learning to Stick
Are your students getting the most out of their daily practice work? Are you frustrated with what students seem to be retaining? If you said yes, you are not alone. This session will share with you strategies to help get the most out of your students. In addition, you will be shown some ways to stretch your students processing skills to help spark their curiosity to aid in their equitable opportunities as well as their long term learning.

Jeff Harding, Mundelein High School

Friday, 9:30-11:00
Bauer Lightbody
Grades PK-2
Engaging parents to foster positive change, support students, and build your community
Math pedagogy today is rooted in deep conceptual understanding. Parents are integral to student learning yet remain limited to rote experiences, anxieties, and fears. Combine these and you have a high need for parent math education. Plan parent education to bridge parents’ math gaps, better support student learning, and empower your math community.

Dr. Maria Franshaw, River Oaks Baptist School

Friday, 9:30-11:00
Bauer Morehouse A
General Interest
LGBTQ + YOU: An Expression of Equity
The statistics for students identifying as LGBTQ are increasing every year. The mission of the Wisconsin Mathematics Council is to lead in the development and promotion of quality mathematics education that enhances learning for ALL students. ALL includes our LGBTQ students. This session will focus on fostering an inclusive climate and counteracting unconscious bias. Learn how you as a math educator can save lives of this vulnerable population.

Lisa Koenecke MS, NCC, Lakeland University

Friday, 9:30-11:00
Bauer Morehouse B/C
General Interest
Three Engaging Methods To Uncover and Fix Hidden Student Misconceptions
If you’re like most teachers, then you know how frustrating it is when our students appear to understand our lessons during class, only to find out later that they had many misconceptions. Imagine instead that we had three strategies we could quickly incorporate to reliably spot and fix these issues. What’s better is that students love doing them and they work even if students don’t realize they have misunderstandings. You’ll leave with ready-to-go resources and strategies.

Kristopher Childs, KChilds Solutions, Orlando
**Friday, May 8, 2020**  
**9:30 – 11:00 am**

**Friday, 9:30-11:00**  
Kern Boehr/Cary  
*Grades 9-12*

**Mathematical Modeling**  
Mathematical modeling is often overlooked at higher levels of secondary mathematics. Come and experience some modeling tasks used in an urban district in higher-level math courses from Geometry through Calculus and beyond.

Mary Zietlow, Milwaukee Public Schools  
*Matt Harmon & Michael Moore*

**Friday, 9:30-11:00**  
Kern Brayton Case A  
*Grades PK-2*

**More or Less? Using Learning Progressions to Support Student Understanding of Comparison**  
Comparing sets is challenging for PreK - Grade 2 students. Join us to understand how to use learning progressions and specifically investigate the progression for comparing quantities. Leave with specific research-based strategies to support students as they move through challenging levels on the progression.

Michelle Douglas Meyer, Oak Creek-Franklin Joint School District, *Melissa Hedges*

**Friday, 9:30-11:00**  
Kern Brayton Case B  
*Grades 6-8*

**Mindstorms + Cardboard = Robots**  
Lego Mindstorms present opportunities for building different kinds of robots. The question is, how do we encourage students to creatively approach Mindstorms the same way they approach common crafting materials such as Play-Doh? In this session, we’ll use Mindstorms and cardboard to build simple robot prototypes. Discussion will focus on the potential of these materials for exploring basic ideas in human robot interaction. Bring a laptop/iPad.

Josh Hertel, University of Wisconsin-La Crosse

**Friday, 9:30-11:00**  
Kern Brown  
*General Interest*

**EdPuzzle: make ANY video into a lesson**  
Edpuzzle is the perfect tool for allowing students to watch and engage with videos while the teacher gathers data throughout the lesson. We will go over the basics of the program, and you will walk out with video lessons and assessments ready to go! Edpuzzle is a free site that can be used to create a flipped classroom, provide legitimate sub plans that can be assessed later, allow for absent students to easily make-up work, and so much more!

Angela Crawford, School District of Janesville

**Friday, 9:30-11:00**  
Kern Johnson  
*Grades 9-12*

**Pencil and Paper aside, Let’s talk about the thinking inside each student’s mind.**  
Don’t just say ALL students can learn math at high levels, use a routine that gives a voice to the voiceless and builds a culture of respect & risk taking. You will engage in a variety of number talks, hear student testimonials & leave with a series of number talks to implement next week. You will be provided with the why, the how & the confidence to create a classroom culture that values every learners thoughts, leveling the playing field for ALL.

Jessica Bogie, Indian Prairie School District #204  
*Jackie Palmquist*
Friday, May 8, 2020
9:30 – 11:00 am

Friday, 9:30-11:00
MLK
General Interest

Everyday Steps to Equitable Practice
The AMTE Standards state that ensuring the success of each and every learner requires a deep integrated focus on equity. Equity is something every classroom teacher can tackle. Join in a conversation about ways to increase equity by using strategies around: achievement, access, identity and power.

Lori Rugotska, WI AMTE

Friday, 9:30-11:00
RWI McGarvey
Grades 6-8

Coding and the Standards of Mathematics Practice
Coding promotes problem solving, abstract reasoning, creating structure, constructing arguments, using tools strategically, modeling with mathematics, repeated reasoning, and attending to precision. Participate in various activities connecting Computer Science to both the Standards of Mathematical Practices and Math Content Standards. Collaborate and develop next steps to embed coding into the math content area. Bring your personal device.

Tina Lemmens, CESA 7

Friday, 9:30-11:00
RWI Mahaney
Grades 9-12

The Journey: Building Teacher Leadership in Algebra
Two separate journeys have coincided in Milwaukee: the district’s journey to reimagine Algebra, and a university partnership’s journey to develop math teacher knowledge and leadership. Teachers will share classroom experiences that have resulted in increased student engagement and learning, and district examples of how teacher leadership has grown.

Laura Maly, Milwaukee Public Schools
Joan Masek, Erin McReynolds, & Michael Moore

Friday, 9:30-11:00
Staughton
General Interest

Cooking With Curiosity
There are many ingredients in the recipe for a successful lesson. Curiosity does the work for us, getting a room full of students wondering about a concept, a task, and so much more. In our time together, we will explore a myriad of ways in which we can infuse curiosity, and leave with ideas that are ready to use immediately. Get your chef coat on and be ready to create something amazing!

John Stevens, Chaffey Joint Union High School District, Ontario, California
Friday, May 8, 2020
9:30 – 11:00 am

Friday, 9:30-11:00
YC Cummings
Grades 305

Building Classroom Math Talk Communities Together
In this session, we will illustrate how a team of teachers, coaches, and teacher educators iteratively planned and enacted ideas to build a math talk community in classrooms. We will present our constructed ideas that define a math talk community, created during a cycle of professional development sessions (Learning Labs), and describe how we worked together to establish math talk communities in classrooms to support equitable participation.

Eric Siy, University of Wisconsin Madison, Madison Metropolitan School District

Friday, 9:30-11:00
YC Dominguez Cox
Grades 305

Growing Inclusion and Equity through Culturally Responsive Math Instruction
During this session, we will dive into how to 1. Communicate High Expectations, 2. Make Content Relevant, 3. Attend to Students' Mathematical Identities, and 4. Ensure Shared Power. Through tying together Trauma-Sensitive Strategies and the Standards for Mathematical Practice, we will model what this looks like in the classroom and discuss how this promotes inclusion and equity.

Derek Johnsrud, Sun Prairie Area School District
Lisa Hennessey

Friday, 9:30-11:00
YC Fordham-Ballenger
Grades 305

What's Your Angle on Angles?
Do your students struggle to “see” angle relationships? Are protractors perplexing? This session will provide lessons and hands-on activities to illuminate angle measurement understanding, explore application of angle relationships in middle school, and connect this understanding to transformational geometry and high school trigonometry.

Elizabeth Peyser, Curriculum Associates

Friday, 9:30-11:00
YC Huber-Evans
Grades 305

The Power of Language in Math
Are you pleased with how your students ask questions and write in math? Dig into strategies and supports that will grow questioning skills and written math responses in your classroom. Explore tools that measure student use of mathematical language. An emphasis on language learner scaffolds will benefit ALL! Join our journey as we strengthen our understanding around supporting language acquisition in math!

Rachel Boario, School District of Waukesha
Leslie Waltz
**Friday, May 8, 2020**

**11:30 am – 12:30 pm**

**Friday, 11:30-12:30**
Bauer Beaty
*Grades 9-12*

TBA
TBA

Barbara Bales, Wisconsin Math Alignment Taskforce

**Friday, 11:30-12:30**
Bauer Boddie/La Due
*Grades 9-12*

**DIY Active Learning Classroom**
Do you dream of a student-centered, technology-rich classroom? Active learning classrooms can create excitement, passion, and desire for learning. The classroom design supports and encourages group work and problem-solving and allows students to take ownership of their learning by providing opportunities for brainstorming, solving, analyzing and testing ideas. Come learn how to create and facilitate in this student-centered environment!

Samantha Falkner, Great Minds

**Friday, 11:30-12:30**
Bauer Lightbody
*Grades 9-12*

**You made it through the AP Calculus Exam, now what?**
What do your Calculus students do after the AP exam? I will share some of the things my students do in AB and BC Calculus including: food projects, scavenger hunt, videos, labs and more. There will also be time for you to share your ideas.

Mary Damkot, West Bend West High School
*Holly Walls*

**Friday, 11:30-12:30**
Bauer Morehouse A
*General Interest*

**Burnout Prevention with The Better Teacher Project**
Our job is hard! If you are feeling burnt out, come take a breath and join us. With just a few tweaks and changes, you can breathe new life into your teaching practices. The world needs teachers like us, so let’s learn how to cultivate staying power, change our mindsets and challenge ourselves to pour into our own cup first.

Beth Ott, Clark Street Community School, Middleton Cross Plains School District

**Friday, 11:30-12:30**
Bauer Morehouse B/C
TBA
TBA

**Friday, 11:30-12:30**
Kern Boehr/Cary
*Grades PK-2*

**Number Ninjas Math Club Implementation**
Learn about my journey implementing a math club. Besides the academic benefits, math club is a great way to meet new people and develop teamwork skills. See sample parent letters, mission statements, agendas, and experience the games first hand that include interactive puzzles, math board games, breakout boxes, and other activities that are designed to stimulate, challenge, and engage the kids! Everything you need to start your own math club!

Heather Gehri, Manitowoc School District
Friday, May 8, 2020
11:30 am – 12:30 pm

Friday, 11:30-12:30
Kern Brayton Case A

**General Interest**

**Gaming Can Level Up Your STEM**
Teaching STEM concepts can be a challenge, but there are several innovative ways that can help get the message through! Join Shareef Jackson as he walks through how to communicate diversity and STEM messages using video games, board games, and table top games. No experience required. Come to have fun and learn a little bit!
Shareef Jackson, Math Looks Good LLC

Friday, 11:30-12:30
Kern Brayton Case B

**Grades 6-8**

**Orchestrating Productive Discourse in the Middle School Classroom**
We will discuss how we use the 5 Practices for Orchestrating a Productive Math Discussion with middle school math tasks. We will engage the audience in a rich mathematical task and role play how to implement the 5 Practices. Teams will then be provided a rich math task and student work in order to participate in using the 5 Practices themselves.

Erick Hofacker, University of Wisconsin - River Falls

Friday, 11:30-12:30
Kern Brown

**Grades PK-2**

**Bridges "Meet Up"**
This session provides a time and place for teachers & administrators to share and ask questions about adopting the Bridges in Mathematics curriculum in an elementary school. As facilitator, I will put up a number of topic posters where participants can ask questions that can then be answered by others in the room. No formal presentation will take place.

Lori Williams, Manitowoc Public Schools

Friday, 11:30-12:30
Kern Johnson

**Grades 3-5**

**Building Mathematical Muscle Memory through Number Talks**
A goal of every teacher is to help students learn basic facts efficiently, gain fluency with their use, and retain fluency over time. Participants will hear how number talks implemented with upper elementary at-risk and special education students helped to build their mathematical muscle memory and learn flexibility and fluency with number operations. This workshop is grounded in research and best practices of the brain and learning applied to students who need the most support.

Stephanie Bernander, UW-Oshkosh

Friday, 11:30-12:30
Kern Stansbury/Hanson

**Grades 6-8**

**Moving English Language Learners Toward Success**
As the population of ELs increases, so does the need to provide supports and scaffolds in the math classroom. This session would explore how to help English language learners access the language of math through scaffolds, supports and differentiation. Session attendees are encouraged to bring a lesson to engage in looking the precise language of math and making sure ALL students understand and succeed.

Ann Williams, SPASD

Pa Thao
Friday, May 8, 2020
11:30 am – 12:30 pm

Friday, 11:30-12:30
MLK
General Interest

From Novice to Expert: Strengthening the Pathway to Teaching in Wisconsin
Discussion will focus specifically on how to attract more students to the teacher pipeline, how to support and retain those teacher candidates during their student teaching and first years of service, and how to develop them into expert teachers and future mentors and coaches. All participants will work together to share and discuss what we can do, both individually and collectively to meet those goals with a focus on creating working groups to continue this work through the upcoming year and years in order to strengthen mathematics teacher education in Wisconsin.

Lynn Schaal, WI AMTE

Friday, 11:30-12:30
RWI Crystal
Grades 6-8

The Power of Tape Diagrams: Helping students solve problems by improving conceptual understanding
Learn how tape diagrams help students break down word problems by allowing them to write an equation or number sentence to represent the situation. Tape diagrams are universal tools that help students develop a plan of action for solving a problem. As a result, students become more efficient problem solvers and solve without drawing models.

David Keech, Wisconsin Rapids Public Schools
Missy Henneman & Danielle Heuer

Friday, 11:30-12:30
RWI Mahaney
General Interest

CPM (College Preparatory Mathematics) Networking Session
Teachers who have been using the CPM program or teachers who are interested in learning more about CPM should join this networking session. See how the program is being implemented in a variety of districts and get ideas for topics including differentiation, intervention, assessment, student and teacher collaboration, course sequencing, professional development opportunities.

Bruce Brusoe, CPM Educational Program

Friday, 11:30-12:30
RWI McGarvey
General Interest

The New AP CSA Labs
Do you need some time to sit and work through the new AP CSA labs? Collaborate with other teachers on the best way to utilize them? This session offers teachers time to sit and do that! Printed copies of the new CSA labs will be provided along with time to work through them with other teachers.

Lori Hunt, Middleton High School

Friday, 11:30-12:30
Staughton
General Interest

Guided Math In Action
Guided math is a great instructional strategy. Everybody wants to do it, but how? In this engaging educational and resource-filled session participants will learn how to do it! This workshop is a general overview. Participants will learn to create standards-based small group lessons that rock, workshop management strategies that work, and assessment tools that inform instruction.

Dr. Nicki Newton, Newton Education Solutions
Friday, May 8, 2020
1:00 – 2:00 pm

Friday, 1:00-2:00
Bauer Beaty
*General Interest*

**A Reflective Journey on Feedback**
Are you tired of having your students' first reaction to a test be "what's my grade?" Through the practice of focused feedback, I will share my story of how I worked to shift students' mindset from grade-based to learning based. I used three different styles of feedback including teacher led and student led. In this session I will share what worked and what didn’t and how to make it work for your classroom (without taking a lot of time!).

Kathryn Hayes, Oconomowoc High School

Friday, 1:00-2:00
Bauer Boddie/La Due
*Grades 6-8*

**Let Your Students Be Transformed Through Collaboration**
Join us as we are in our second year implementing the Illustrative Mathematics (IM) Curriculum. In this session, participants will engage with tasks from the curriculum and will analyze tasks for rigor and equity.

Mary Zastrow, Reedsville Middle School
*Michelle Butturini*

Friday, 1:00-2:00
Bauer Lightbody
*General Interest*

**Using Andragogy to Build Our Pedagogy**
Coaches play an important role in education and their greatest role is in transforming adult behavior. Most coaches are former teachers, who have studied pedagogy their entire lives, but have received little to no training on adult learning theory. If we want to transform adult behavior, we have to know about how adults learn. Come explore strategies to increase our effectiveness to make learning stick for our adult learners we support!

Dina Mendola, US Math Recovery Council

---

Friday, 1:00-2:00
Bauer Morehouse A
*Grades 9-12*

**Eliciting student thinking through questioning techniques**
In this presentation, participants will work to better understand student thinking and reasoning by improving their questioning techniques. Participants will be presented with scenarios and will reflect on their own questioning strategies while engaging in discussion to improve conceptualization of student thinking.

Crystal Marie Vesperman, Saint Paul Conservatory for Performing Artists

Friday, 1:00-2:00
Bauer Morehouse B/C
*Grades 9-12*

**Implementing Visible Learning for Mathematics Strategies**
This session will highlight the main concepts discussed in Visible Learning for Mathematics by Hattie, Fisher, and Frey. Discussion will include the phases of learning, expanding learning targets to include vocabulary and socials goals, the use of manipulatives, tiered vocabulary, and questioning. Research effect size, impact on equitable instruction, and classroom examples will be shared.

Nate Leu, Poynette School District
*Dr. Leah Hover-Preiss & Stephanie Thompson*
Friday, May 8, 2020
1:00 – 2:00 pm

Friday, 1:00-2:00
Kern Boehr/Cary
**Grades 3-5**

Eco-Math: Calculations for People and the Planet
Engage in memorable, hands-on activities that integrate math with age-appropriate geography and ecology to learn more about our human footprint on the Earth and its resources. Build students’ skills in working with fractions, ratios, large numbers, growth patterns, measurement, and graphing representing using real-world data. Receive electronic lesson plans matched to state standards.
Howard Aprill, Milwaukee County Parks

Friday, 1:00-2:00
Kern Brayton Case A
**Grades PK-2**

A Reken-what?! Using Rekenreks to Build Number Sense
While sliding wooden beads on metal racks, students build their understanding of counting, cardinality, number relationships, and computational fluency. By talking through the moves, children grow their abilities to explain their mathematical reasoning. In this session you will use rekenreks in several interactive instructional activities so that you are ready to use them with your students.
Sarah Burzynski, Oak Creek-Franklin

Friday, 1:00-2:00
Kern Brayton Case B
**General Interest**

Understanding how to implement GAISE recommendations into K-12 mathematics
The focus of this session is to show how to implement the Guidelines for Assessment and Instruction in Statistics Education report recommendations into K-12 mathematics classrooms. The session will provide a brief history of statistical education in the United States. The majority of the session will be to showcase the same conceptual topic across the three levels as described by GAISE.
Angela Walmsley, Concordia University Wisconsin

Friday, 1:00-2:00
Kern Brown
**Grades 9-12**

Creating Tiered Assessments for Standards-based Grading
Are you wondering how you can create different levels of assessment in math? This session will focus on our high school math teachers’ journey of creating tiered assessments for Algebra - Algebra 2 for standards-based assessments. We will explain how we came to the decision to create different levels of questions and share the successes and challenges of the process.
Nicole Esterling, Little Chute Area School District

Renae Joten

Friday, 1:00-2:00
Kern Johnson
**Grades 3-5**

Numeracy Routines: Increasing Access to Increase Engagement
As math educators embrace the constructivist approach to teaching, the focus moves from procedures to the deep conceptual understanding our students have for mathematics. Numeracy routines are a powerful tool to help lift this by increasing engagement, encouraging learner voice, and making thinking visible. This session will focus on different numeracy routines used to support mathematical thinking for all students.
Chris Polowy, School District of Waukesha
Friday, May 8, 2020
1:00 – 2:00 pm

Friday, 1:00-2:00
Kern Stansbury/Hanson

**Grades PK-2**

**Concrete Scaffolding for Problem Solving**
Participants will explore using rectangular rod manipulatives (Cuisenaire Rods) in order to create a concrete base for early mathematicians that will connect to using tape diagrams in problem solving. Participants will receive specific scaffolded activities directly linked to classroom application.

Julie Jordan, School District of Waukesha
Rachel Elliott

Friday, 1:00-2:00
RWI Crystal

**Grades 9-12**

**Provide Strategies, Activities and Conceptual Understanding to Better Prepare Students for the ACT**
We will provide interactive activities that align to the types of problems that are on the newly revised ACT that can be integrated into your daily lessons. Creatively use technology as a learning, teaching and discovery tool! Topics include Pythagorean triples, functions, systems, percents, matrices, stats, trig. Get access to problems from recent exams and all activities. Warning: students may learn and retain the math better in the process!

Tom Reardon, Fitch High School / Youngstown State University

Friday, 1:00-2:00
RWI McGarvey

**General Interest**

**Increasing the Number of Girls and Minorities who Experience Computer Science Information Technology**
There are huge opportunities for today’s students to move toward careers involving computer science - that includes just about any area! But these careers will go unfilled by our students if we don’t make an effort to include CS and IT in our curricula and in particular ignore 70% of our population. Let’s really and crowdsource the beginnings of some solutions that we can use in our classrooms and beyond.

Joe Kmoch, CSTA Wisconsin Dairyland

Friday, 1:00-2:00
Staughton

**7-12**

**Viable Arguments for a Viable Future**
Math class has the opportunity to be a place where big topics are raised, social implications can be explained, and “real world” becomes, well, real. With content pulled straight from the headlines, we will discuss how math allows us to elaborate on the happenings of the things around us, from birthday party companies, the housing crisis, minimum wage, and much more.

John Stevens, Chaffey Joint Union High School District, Ontario, California
Friday, 2:30-3:30
Bauer Beaty
*General Interest*

Making Memeing out of Math
Social media is rife with memes and puzzles. Ever find yourself wanting to take a red pen to the comments about an online post involving math? This session is for you! We'll look at various posts, which mathematical practices and CCSS we'd use to analyze them, and mathematical norms that might be overlooked/violated. Topics include order of operations, sets, logic, algebra, and "magic" math. Grammar is a whole other matter.

Linda Uselmann, Marian University

Friday, 2:30-3:30
Bauer Boddie/La Due
*Grades 9-12*

Facilitating Discourse for Flexible Thinking
Participants will experience the 5 Practices for Orchestrating Productive Mathematics Discussion while they solve a complex problem using knowledge from Algebra 1. The presenter will showcase student work and examples from when this problem was used as an Algebra 1 team test. The presenter will be modeling the use of the five practices throughout the session.

Samantha Falkner, Great Minds

Friday, 2:30-3:30
Bauer Lightbody
*Grades 9-12*

Using Argument to Increase Cognitive Demand
This session will be a hands-on workshop that explores the connections with argumentative writing and mathematics. We are linking topics generally found in ELA and bringing them to the math classroom to increase cognitive demand of tasks and address Math Practice Standard 3: Construct Viable arguments and critique the reasoning of others.

Erin McReynolds, Milwaukee Public Schools

Friday, 2:30-3:30
Bauer Morehouse A
*General Interest*

Wisconsin Vision for Equity
Learn about the vision for every Wisconsin student to be mathematically proficient. The Wisconsin Standards for Mathematics demonstrate a commitment to high expectations for what students should know, understand, and be able to do. This year the standards are undergoing a review process. Learn more about this and other projects at the department to support mathematics teaching and learning so that Wisconsin achieves together!

Mary Mooney, Wisconsin Department of Public Instruction
*Julie Bormett*

Friday, 2:30-3:30
Bauer Morehouse A
*General Interest*

LGBTQ + YOU: An Expression of Equity
The statistics for students identifying as LGBTQ are increasing every year. The mission of the Wisconsin Mathematics Council is to lead in the development and promotion of quality mathematics education that enhances learning for ALL students. ALL includes our LGBTQ students. This session will focus on fostering an inclusive climate and counteracting unconscious bias. Learn how you as a math educator can save lives of this vulnerable population.

Lisa Koenecke MS, NCC, Lakeland University
Friday, May 8, 2020
2:30 – 3:30 pm

Friday, 2:30-3:30
Kern Boehr/Cary
**Grades 3-5**

**Using Tools Appropriately to Visualize and Teach Elementary Mathematical Concepts**
This session will focus on using snap cubes and bar models to represent concepts involving number & operations and algebraic thinking at the elementary level. Participants will have the opportunity to interact with the tools and use them to model various mathematical concepts.

Erick Hofacker, University of Wisconsin - River Falls

Friday, 2:30-3:30
Kern Brayton Case A
**Grades PK-2**

**Integrating Mathematics and Arts for Young Children**
In this hands-on workshop you will learn about and experience 3 fun and engaging activities to use with young learners to integrate mathematics and the arts. Enjoy learning about Turkey Shapes, Walking Patterns, and Ducks Away. This workshop will also describe a project provided to teacher candidates at the University of Wisconsin Oshkosh to learn about and experience curriculum design by integrating creative arts with math as noted by the Kennedy Center’s definition of Arts integration. Bring your imagination and creativity!

Stephanie Bernander, UW-Oshkosh

Friday, 2:30-3:30
Kern Brayton Case B
**Grades 6-8**

**Super Simple Skill Assessment**
We will explore online tools that make it very easy to assess student understanding in a formative or summative way. Increase your responsiveness to specific student needs in your classroom. Save time, save energy, save copying costs, and save your sanity if you are currently using and grading worksheets and quizzes. Computers or mobile devices are suggested. Same session as last year.

John Marzion, Oak Creek Franklin Joint School District
*Cara Flach*

Friday, 2:30-3:30
RWI Crystal
**Grades 6-8**

**Reducing Barriers in the Mathematics Classroom**
Universal Design for Learning (UDL) is a framework that develops expert learners by proactively removing barriers to student learning. Learn about the foundations of UDL and how to use the framework to design lessons to increase student access to mathematics content.

Tina Lemmens, CESA 7

Friday, 2:30-3:30
Staughton
**General Interest**

**How to Help Students Become Problem Solvers, Not Math Robots**
If you’re frustrated because students seem like they understand what you teach them… until you see their test scores, then you’ll love using problems with open middles. Come learn how to implement problems that will clearly show what your kids know, help them become problem solvers, and have them begging for more.

Kristopher Childs, KChilds Solutions, Orlando