

**TO Take Charge
Make Change**



**WISCONSIN MATHEMATICS COUNCIL
42ND ANNUAL CONFERENCE**

PRELIMINARY SCHEDULE

Friday, May 7, 2010

**Keynotes,
Sectionals & Workshops**



Preliminary Schedule • Friday, May 7, 2010

8:00-9:30 AM

Friday, May 7, 2010
8:00-9:30 AM • 90 Minute Workshops

301	Kern - Brayton-Case A (64)	Grades PK-6
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"Wisconsin PBS Kids: 21st Century Media to Enrich Your Classroom & Inspire Your Students"

Preparing our learners with engaging media that supplements preK-8 mathematics education is critical to our success with 21st Century learners. Many educators are bringing PBS Kids into their classrooms to broaden their students' understanding of mathematics in the world around them. This lively session presents innovative uses of media for the classroom.

Kristina Stadler, *Wisconsin Public Television, Madison, WI*
Michael Maguire, *Wisconsin Public Television, Madison, WI*

302	Kern - Stansbury (32)	Grades PK-12
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Disruptive Students

Some students make us wonder, "What would my classroom be like without him/her?" Ever notice that these children NEVER miss school? (They are rarely ever late!) Learn to recognize their needs and reduce problem behavior. Gain 4 to 9 teaching hours EVERY WEEK by converting time wasted on interruptions into valuable instructional time.

Kenneth Croft, *Lee County Schools, Marianna, AR*

303	Kern - Cary (32)	Grades 2-6 Vendor
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Diversifying Your Classroom to Meet the Needs of All Learners

In this session we will explore proven methods to help teachers differentiate their classroom. Participants will leave with practical, efficient ideas they can implement in their classroom immediately.

Jay Dudley, *Lakeshore Learning, Carson, CA*

304	Kern - Johnson (50)	Grades 2-8
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What Does 5/3 Mean?

Everyone knows that 5 divided 3 equals $1 \frac{2}{3}$, but what does that *mean*? Participants in this hands-on workshop will use paper ribbons to experience two meanings of division: parsing a segment into like units, or "division by subtraction," which is finding the number of ribbons of a given length that can be cut from a given ribbon (along with a left-over piece). We will use this literal understanding, and our ribbons, to explore division with fractions and discover common sense answers for questions like, why is the quotient always larger when we divide by fractions, and why can we "invert and multiply"? This workshop is very interactive and participants will come away with a new understanding of fraction division.

Alan J. Hackbarth, *UW-Madison, Madison, WI*

305	RWI - Veranda C (48)	Grades 4-6
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Jibber Jabber or High Quality Conversation

Classroom conversations are a critical component of math instruction, yet most teachers have not experienced or been trained to facilitate productive mathematics conversations. Join me for a talk about talk and gain some strategies for moving your students from sharing their answers to justifying their solution paths.

Lori Williams, *Manitowoc Public Schools, Manitowoc, WI*

306	RWI - Crystal (64)	Grades 9-12
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It's All Connected: Similarity as a Geometric Building Block

Participants will see a progression of lessons centered around similarity. We will begin by showcasing similarity with rubber band drawings and continue looking at similarity until we come to a special case where the ratio factor is 1:1, known as congruence.

Cyndie Pahlow, *Oshkosh West High School, Oshkosh, WI*

307	Morehouse A (100)	Grades 9-12
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First Year of Standards-Based Grading

We will share district grading policies and rubrics used to assess student learning. Come see a live demonstration of how to use a web-based standards-based grade book, along with samples of student work.

Kim Suchowski, *Adams-Friendship High School, Friendship, WI*

Katherine Heinz, *Adams-Friendship High School, Friendship, WI*

308	Bauer - Boddie (24)	Grades 9-12
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Computational Thinking with Visual Python

Computational Thinking - the ability to approach problem solving from an algorithmic perspective - is a skill of growing importance in many areas of science and technology. Visual Python is a free tool designed to help teachers bring computational science into their physics classrooms, but it is widely applicable to many other fields. Come and see how Visual Python can help you construct basic simulations, visualizations and demonstrations for a variety of high school mathematics and science courses. Python should also be of interest to high school CS and IT teachers as more colleges switch to Python-like languages in their courses. Prior programming experience is not required for this session.

Dennis Brylow, *Marquette University, Milwaukee, WI*

For more information about the conference, to download a registration form or register online, for directions to the Green Lake Conference Center and a schedule of events and meetings, go to www.wismath.org.

Preliminary Schedule • Friday, May 7, 2010

8:00-9:30 AM • 8:00-9:00 AM

Friday, 8:00-9:00 AM
Keynote

309	Bauer - Morehouse B/ C (200)	Grades PK-16
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The Fundamental State of Teaching: Erasing Inequities to Student Learning!

This session will examine essential design elements to classroom planning, provide insight into the learning community perspective of lesson and assessment design and discuss practical strategies for maximizing student performance during classroom time. We will also discuss how to prevent the natural drift into the normal and "burnt out" state of teaching.
Timothy Kanold, Author, Chicago, IL

Friday, May 7, 2010
8:00-9:00 AM • 60 Minute Sectionals

310	RWI-Mahaney (40)	Grades PK-3 Vendor
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Understanding from the Very Start

We now know children can perform mathematical tasks without counting. But a principle of early mathematics requires children to memorize 100 counting words—before they can make sense of their meaning. Learn about an alternate research-based way to teach math to our younger learners that makes sense right from the start.

Joan Cotter, Activities for Learning, Hutchinson, MN

311	Bauer - Beaty (50)	Grades PK-8
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Team-Teaching in a Regular Ed. Classroom with a Special Ed. Teacher

Come and learn about the differences between team-teaching and special education support in a regular education classroom. Learn how one team of a regular and special education teacher team-teach. Division of responsibilities, setting up the classroom, a typical lesson, and data that we have collected to support our project will be shared. We will also share tips and support to get you started team-teaching in your own classroom.

Michelle Koenig, Forest Park Middle School, Franklin, WI

Kim Trendel, Forest Park Middle School, Franklin, WI

312	Kern - Brown (50)	Grades PK-16
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Mathematics Education Graduate Opportunities at UW-Madison

In this session, we will provide an overview of the opportunities for masters and PhD studies in mathematics education at the University of Wisconsin-Madison.

Anita Wager, UW-Madison, Madison, WI

Eric Knuth, UW-Madison, Madison, WI

Amy Ellis, UW-Madison, Madison, WI

313	Kern - Boehr (50)	Grades 2-6
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Building on Children's Thinking: Alternative Algorithms to Addition, Subtraction, Multiplication and Division

This session will focus on multiple strategies for multi-digit addition, subtraction, multiplication and division that build on children's invented strategies and number sense. Teaching strategies of how to support these algorithms in the classroom (and at home) will also be discussed.

Courtney Koestler, UW-Madison, Madison, WI

314	RWI-Mahaney (40)	Grades 6-12
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Need Math Help? Set Up a Math Lab!

Do you have students who are really struggling in math? We do too, so we set up an in-house math tutoring lab staffed with certified math teachers from 7:30 a.m.-3:15 p.m. daily. Learn how we got started and how it is working so far. Hand-outs and attendance prizes will be awarded.

Christine Scheffel, East Alton-Wood River High School, Wood River, IL

315	RWI-Veranda A (48)	Grades 9-12
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"Stupid" Teacher Tricks

Come do math aerobics and learn about the Lemonhead Man. For new teachers or old dogs who need new tricks.

Mary Ann Radek-Carreon, J.S. Morton High School, Berwyn, IL

316	RWI-Mahaney (40)	Grades 9-12
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An Orientation to the Wisconsin Early Mathematics Placement Tool (EMPT) Program

In this session presenters will discuss the Early Mathematics Placement Tool, a free program designed to provide math teachers and their students with information about student readiness for college level mathematics. An overview of the program will highlight its uses and a brief discussion from current high school teachers using the program will offer ideas for classroom use.

Michael Fish, UW-Madison, Madison, WI

Jim Wollack, UW-Madison, Madison, WI, WI

Cassie Chen, UW-Madison, Madison, WI, WI

Janet Zintel, La Follette High School, Madison, WI, WI

Debby Weyer, Greendale High School, Greendale, WI

317	Lawson - MLK, Jr. (24)	Grades 9-16
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Making Sense of Calculus: The Role of Dynamic Interactive Technology

Calculus is difficult for many students: notation, limit, continuity or mean value theorem. Even some of our best merely memorize enough to get by. Technology can help students make sense of central calculus concepts and see how the ideas work together to make a complete and powerful whole

Gail Burrill, Michigan State University, East Lansing, MI

Preliminary Schedule • Friday, May 7, 2010

8:00-9:00 AM • 9:30-10:30 AM

318	Kern - Brayton-Case B (64)	Grades 9-16
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Building Digital Learning Objects to Enhance Student Learning in Algebra and Statistics

In this session, participants will explore a collection of over 200 digital learning objects that can be used for teaching Algebra and statistics. Each learning object is focused on a mathematical question and includes a video podcast of the solution, supplementary self-check problems, and tutorials for students to examine. Participants will also learn how to use free technologies to create their own mathematical learning objects.

Jon Hasenbank, *UW-La Crosse, La Crosse, WI*
Jennifer Kosiak, *UW-La Crosse, La Crosse, WI*
Bob Hoar, *UW-La Crosse, La Crosse, WI*

319	Bauer - La Due (24)	Grades 9-16
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Understanding Calculus through Geometer's Sketchpad

Learn ways to make topics from Calculus AB, BC and beyond come alive through interactive software.

Dominic Johann-Berkel, *Madison West High School, Madison, WI*

320	Kern - Hanson (50)	Grades 9-16
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Preparing High School Students for College Level Mathematics

This presentation will focus on the design and results of a year-long project with 16 teachers to address the readiness of high school students to enroll in credit-bearing mathematics courses. Details of the workshop and lesson study components of the program will be shared.

Sherrie Serros, *UW-Eau Claire, Eau Claire, WI*
Kathryn Ernie, *UW-River Falls, River Falls, WI*
Erick Hofacker, *UW-River Falls, River Falls, WI*

Friday, 9:30-10:30 AM

Keynote

321	Bauer - Morehouse B/ C (200)	Grades PK-12
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Reasoning and Sense Making is Required for All Wisconsin Students in a Common Core

Participants will receive an update on NCTM and Wisconsin initiatives and activities with emphasis on teacher support from the professional organizations' involvement in standards, assessment, and instruction.

Henry Kepner, *President, NCTM and UW-Milwaukee, Milwaukee, WI*

Friday, May 7, 2010 9:30-10:30 AM • 60 Minute Sectionals

322	Kern - Hanson (50)	Grades PK-1
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Integrating Technology into Mathematics Using the Promethan Board

We will be using a Promethan Board to show how daily routines can be taught using technology as well as hand-held devices.

Wanda Richardson, *Kettle Moraine School District, Wales, WI*

Lisa Welch, *Kettle Moraine School District, Wales, WI*

323	Kern - Brown (50)	Grades PK-6
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Connecting School Mathematics to Children's Lives

"I'm good at playing dominoes but bad at math." Substitute any game or activity for dominoes and you know why it is critical to support students in making connections between in- and out-of-school mathematics. Based on research with elementary teachers, a framework for incorporating cultural and out-of-school experiences has been developed. The session will explore:

- The four components of the framework
- Examples of each component
- How examples were identified and developed
- The differing motivational elements for student learning of mathematics and relationship to out-of-school practices.

After discussing the framework, session attendees will work in groups to brainstorm ways to incorporate these strategies in their own classrooms.

Anita Wager, *UW-Madison, Madison, WI*

324	Bauer - La Due (24)	Grades PK-12
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Financial Literacy: TEACH IT!

Students today face more financial choices than any previous generation. Mastering the skills needed to design a budget, remain creditworthy and make quality financial choices will impact students for life. Educators can help children build good financial habits from an early age.

In this workshop, participants will learn exciting ways to effectively teach personal financial literacy. We will view Financial Literacy: TEACH IT!, a professional development video series from ECB, featuring authentic Wisconsin classrooms. We will look at the lesson plans, teaching tips and downloads available on the Financial Literacy: TEACH IT! Website and discuss ways to implement these resources into classrooms and professional learning communities.

Kristin Leglar, *Educational Communications Board, Madison, WI*

Check out www.wismath.org for updates & complete conference information.

Preliminary Schedule • Friday, May 7, 2010 10:00-11:30 AM

**Friday, May 7, 2010
10:00-11:30 AM • 90 Minute Workshops**

325	RWI-Mahaney (40)	Grades 6-8 Vendor
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Going Deeper with Middle School Math Games and Activities

In this session teachers will experience how to go deeper in the middle school math classroom using engaging games and activities.

Larry Dorf, *Big Ideas Learning LLC, Erie, PA*

326	Lawson - MLK, Jr. (24)	Grades 6-12
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Classroom Robotics for Grades 6-12

This session provides an introduction to designing, constructing and building robots in the classroom. Discussion of a variety of connections to the math curriculum will also be included.

Rick Anderson, *Eastern Illinois University, Charleston, IL*

327	Bauer - Beaty (50)	Grades 6-12
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Now We're Really Clicking!

How are clickers used to assess students' prior knowledge, check for understanding and assess their attitudes? How can the use of clickers make instruction data driven instead of opinion driven? What do students think about the use of clickers? What do you think? Try out using clickers at this session.

Sue Popelka, *River Falls High School, River Falls, WI*

328	RWI-MaGarvey (40)	Grades 9-12
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Rigor Without Rigormortis

A hopeful look at how to maintain high expectations and high academic level in three areas of math instruction that involve challenging concepts for students and teachers. We will look at how to try to maintain the fundamentals of proof in Geometry, with some activities and humor, to make that teaching enterprise more palatable. Second, we will investigate methods of teaching slope and lines in Algebra through Calculus by looking at real life applications with particular emphasis on regression techniques. Also included will be a discussion of recognition and manipulation of specific shapes of curves to produce linearity for a quantitative analysis of experimental data. Third, as time allows, we will share some thoughts on how to maintain student and teacher motivation, enthusiasm and morale.

Curt Dumermuth, *Ellsworth High School, Ellsworth, WI*

329	RWI - Mahaney (40)	Grades 9-12
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Calculus Activities on a Budget

Come experience Calculus activities that can be done with limited resources. You will be given at least three activities to better engage your students in Calculus.

Anne Barber, *Lincoln High School, Wisconsin Rapids, WI*
Karen Scarseth, *Lincoln High School, Wisconsin Rapids, WI*

330	Kern - Boehr (50)	Grades 13-16
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Integrating Issues of Equity and Social Justice in Elementary Mathematics Methods Courses

This session will discuss ways in which equity and social justice can be integrated into a methods course and how this is connected to a Standards-based reform approach to teaching mathematics. There will also be time for participants to discuss how they think about these issues and the ways in which they have attempted to do this work at their own institution.

Courtney Koestler, *UW-Madison, Madison, WI*

331	Kern - Johnson (50)	Grades 4-8
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Collaborative Practices of General & Special Education Teachers: Making a Difference in Students' Mathematics Learning

Take charge to make change to develop a stronger alliance between special education teachers and general education teachers. What collaborative practices are showing promise in reaching the needs of students struggling to learn mathematics? Engage in conversations and activities used in the Math Alliance Project, a grant given to MPS and UWM to strengthen math instruction for special education students and struggling learners.

DeAnn Huinker, *UW-Milwaukee, Milwaukee, WI*

Judy Winn, *UW-Milwaukee, Milwaukee, WI*

Chris Guthrie, *Elmbrook Schools, Brookfield, WI*

Mary Spidell, *Milwaukee Public Schools, Milwaukee, WI*

332	Bauer - Lightbody (32)	Grades PK-1 Vendor
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Early Intervention in Mathematics

How can you begin an early intervention program in a classroom, school, or district? What questions should be asked as you think about intervention? How can you identify students for intervention? Learn how the process worked in an individual school and in a school district. Learn about how Number Worlds, a research-based intervention program, was used in these settings and the results shown. This session is appropriate for principals, curriculum coordinators, and curriculum directors.

Cheryl Wozniak, *Exponential Learning, Grafton, WI*

333	Kern - Brayton-Case B (64)	Grades 2-6
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Implementing RtI in Mathematics (3-5)

This presentation deals with examining your core math program to determine possible methods of implementing a 3-tiered model for interventions with students. We will discuss assessments and instructional strategies useful for addressing their individual learning needs.

Jennie Winters, *Lake County Regional Office of Education, Grayslake, IL*

Check out www.wismath.org for updates & complete conference information.

Preliminary Schedule • Friday, May 7, 2010

10:00-11:30 AM • 11:00 AM-12:00 PM

334	Kern - Cary (32)	Grades 2-6
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Meeting the Needs of Special Education Students

"Learning for All," these 3 little words have incredible accountability and meaning. This session will focus on how Clement J. Zablocki Elementary School in Milwaukee, WI, strives to meet the needs of all learners. We will also look at how one classroom has established "Learning for All", as its foundation utilizing team teaching along with full inclusion to provide successful opportunities for all children to learn. We invite educators to come and learn about some of our strategies, best practices, and ideas that have helped our classroom be successful.

Pandora Bedford, *Milwaukee Public Schools, Milwaukee, WI*
Astrid Wagner, *Zablocki Elementary School, Milwaukee, WI*

335	RWI-Veranda A (48)	Grades 6-12
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The Role of Questioning in Building Understanding

Asking the right questions is the key to student learning, but what do good questions look like? Do you need rich tasks to ask good questions? Can interactive technology help? What can we as teachers do to make sure we are using questions that promote learning?

Gail Burrill, *Michigan State University, East Lansing, MI*

336	RWI - Crystal (64)	Grades 9-12 Vendor
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Transformational Geometry on the TI-Nspire Calculator

Come see how "to do" transformational Geometry with the TI-Nspire calculator and then how "to use" transformational Geometry to enhance student learning of Geometry.

Ray Klein, *T3 National Distributor, Glen Ellyn, IL*

337	RWI - Veranda C (48)	Grades 9-12
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Hands-on Data Analysis and Statistics Activities

Using Barbie dolls and M&Ms, we will use a variety of hands-on exploratory activities to illustrate and develop core concepts in data analysis and statistical inference. This workshop will provide classroom-ready investigations using real data and a TI-83/84. Bring your calculator and get ready to participate in activities that are appropriate for courses in Precalculus, one-semester Statistics classes, and AP Statistics. Some of the activities may be modified for use in Algebra classes as well.

Janet Fortney, *Whitefish Bay High School, Whitefish Bay, WI*

338	Bauer - Boddie (24)	Grades 9-12
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Winplot: From Beginner to Advanced

Winplot is a FREE high-powered graphing utility with incredible potential for use within the classroom. Winplot can graph functions and parametric equations (rectangular and polar), implicit relations, and/or slope fields — and all without having to switch modes. Winplot's use of variable parameters makes it a wonderful modeling tool to quickly create learning objects to enhance classroom instruction and conceptual understanding.

Mike Zittlow, *Southern Door High School, Brussels, WI*

Friday, 11:00 AM - 12:00 PM

Keynote

339	Bauer - Morehouse B/ C (200)	Grades PK-6
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Painting with More Detail: A Look at Intervention for Struggling Elementary Students

Identifying conceptual (and not just procedural) misconceptions in students' thinking enables us to implement more effective intervention techniques by helping us to paint more complete pictures of our students' mathematical understandings. In this session, we will examine techniques for identifying the sense or nonsense that students make of important mathematical concepts, along with pivotally related intervention activities.

Sandy Atkins, *ORIGO Education, St. Charles, IL*

Friday, May 7, 2010

11:00 AM – 12:00 PM • 60 Minute Sectionals

340	Kern - Brown (50)	Grades PK-6
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Wisconsin State Standards - Elementary

The Revised *Wisconsin Model Academic Standards for Mathematics PK-12* were introduced last year and have been in draft form posted on the DPI website. During this session participants will be provided an update on the status of the revised standards for PK-5 and how they fit into the vision of the K-12 Common Core State Standards.

Wisconsin Standards Design Team Members

341	Kern - Stansbury (32)	Grades PK-3
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Active Galaxies and Models and Mathematics

Pop-up books, stories, bagels and ice cream cones all come together to help lower elementary students become excited and informed about active galaxies. We will look at the GLAST observatory, the electromagnetic spectrum, gamma rays, geometric models, and active galaxies and do activities that can help younger children become familiar with the exciting concepts of space exploration and active galaxies.

Mary Garrett, *Madison, WI*

342	Kern - Boehr (50)	Grades 2-6
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D3 = Data, Descriptive Feedback and Differentiated

This session will provide ideas, strategies and research based information to effectively increase student learning.

Danielle Hassforth, *Fairview Charter School, Milwaukee, WI*

Laura Yale, *Fairview Charter School, Milwaukee, WI*

343	Bauer - Boddie (24)	Grades 2-6
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Spatial Temporal Animation Reasoning (STAR) - Research-Based Computer Games Improve Performance!

Lodi Elementary School has implemented MIND Institute's ST (spatial temporal) approach into their math curriculum. Spatial temporal means visualizing problems and manipulating

Preliminary Schedule • Friday, May 7, 2010

11:00 AM-12:00 PM • 12:30-2:00 PM

ing images over space and time to solve problems. This unique approach is non-language based. Using intuitive computer exercises in game format, it visually presents math concepts in an interactive, engaging manner. The MIND Institute designed this unique software to cover state standards for grades K-5. This presentation will share data and research that shows significant improvements in test performance of students at all proficiency levels. Participants will have the opportunity to experience this innovative program.

Brenda Autz, *Lodi Elementary School, Lodi, WI*
Mary Jane Nolan, *Lodi Elementary School, Lodi, WI*
Nadalie Kratcha, *Lodi Elementary School, Lodi, WI*

344	Morehouse A (100)	Grades 2-6
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Understanding Math Vocabulary Through "Motion Monday" to Improve Overall Performance

Do vocabulary issues create problems for your students?? Sixth grade Cornell Elementary students and their teacher will share how they dramatically improved their math vocabulary which resulted in raising overall math comprehension and test scores. Cornell Elementary was one of eight schools selected for the National Blue Ribbon Award in 2010.

Mary Ann Modrak, *Cornell Elementary School, Cornell, WI*

345	Lawson - MLK, Jr. (24)	Grades 4-8
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Connecting Literacy Strategies and Mathematics

Using best practice reading, writing, and vocabulary strategies in the math classroom has been shown to enhance student understanding of math concepts and improve constructed response writing. From GIST to a Frayer Model, this session will provide teachers with a variety of classroom activities and graphic organizers that link literacy and mathematics.

Jennifer Kosiak, *UW-La Crosse, La Crosse, WI*
Jon Hasenbank, *UW-La Crosse, La Crosse, WI*

346	RWI-Mahaney (40)	Grades 6-8
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Engage Students in Meaningful Math Activities and Application Projects

Classroom-tested math learning activities and problems will be shared. Creative application math projects will include data collection, algebra and more. Math assessments and rubrics will be included!

Edna Bazik, *National-Louis University, Lisle, IL*

347	Kern - Brayton Case A (64)	Grades 9-12
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Quick Classroom Activities for Algebra and Algebra 2

This session involves activities applicable for both Algebra and Advanced Algebra classes. Though we will be using the SMART board in this session to enhance and facilitate learning, your students may enjoy the activities with or without this use of technology.

Elizabeth Masslich, *Eisenhower High School, New Berlin, WI*
Christy Morgan, *Eisenhower High School, New Berlin, WI*

348	Kern - Hanson (50)	Grades 9-12
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See How Tablet Computers Become Mathematics Teachers' Teaching Tool Kits

View useful teaching tool features of a tablet computer. See how to model problems on a computer using color and highlighters in your own handwriting. See how graphing calculator emulators fit right in. No need to turn your back to your students ever again. Digitally save a copy of everything you cover in class.

Mary Staniger, *Cedar Falls High School, Cedar Falls, IA*

349	Bauer - Beaty (50)	Grades 9-16
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Time, Money and Uncertainty: Actuarial Application of Mathematical Concepts

This presentation explores the application of mathematics in solving business problems recognizing the uncertainty of future results. Using probability and Calculus, we can quantify the uncertain future in terms of an expected value and a range of likely results, ultimately using that information to help make good business decisions. Examples will be presented that use the concepts of time value of money, conditional probability, and expectation and variance. The concepts presented can help provide students another perspective on how their math skills can be used in practice.

Kirk Peter, *UW-Madison, Madison, WI*

350	RWI-McGarvey (40)	Grades 9-16
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Avoid Blue Box Strategies in Calculus

Too often, Calculus students plug numbers into formulas with little or no understanding. This presentation will include conceptual motivations, visual representations, and some easily understood "proofs" that will help students understand why Calculus methods work rather than simply knowing how methods work.

Robert Cappetta, *College of DuPage, Glen Ellyn, IL*

Friday, May 7, 2010

12:30-2:00 PM • 90 Minute Workshops

401	Kern - Brayton-Case B (64)	Grades PK-3
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Implementing RtI in Mathematics (K-2)

This presentation deals with examining your core math program to determine possible methods of implementing a 3-tiered model for interventions with students. We will discuss assessments and instructional strategies useful for addressing their individual learning needs.

Jennie Winters, *Lake County Regional Office of Education, Grayslake, IL*

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Preliminary Schedule • Friday, May 7, 2010

12:30-2:00 PM

402	Bauer - Lightbody (32)	Grades PK-6
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Beyond CGI: Creating Differentiated Performance Tasks that Extend Math Concepts

Participants will learn how to create performance-based math problems that can be extended to challenge higher level thinking skills as well as attend to struggling learners. Teachers in this session will learn about writing parallel problems and extensions for challenged-based learning. The key concepts of this session include addressing the diverse learning needs within a classroom, enhancing critical thinking, building student collaboration, and creating more streamlined performance problems that attend to a variety of learning needs. Further, this session will offer suggestions for organizing instructional settings that support a differentiated model.

Glenn Schilling, *Hartland/Lakeside School, Hartland, WI*

403	Lawson - MLK, Jr. (24)	Grades PK-6
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An Introduction to Math Recovery

Learn about the framework on which Math Recovery assessments and instruction is based. Instructional strategies used to advance children's understanding will be shared, as well as the structure of the various Math Recovery programs.

Lori Loehr, *School District of Lomira, Lomira, WI*

404	Kern - Cary (32)	Grades PK-8
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Using Marzano's Vocabulary Strategies in Your Math Classroom

Learn how to embed math vocabulary in your math lessons through demonstration games and modeling.

Timothy Meyer, *Bethune Academy, Milwaukee, WI*

Tara Raymond, *Bethune Academy, Milwaukee, WI*

405	RWI-Mahaney (40)	Grades 2-6 Vendor
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Engaging Enrichment - Level 3-8 Special Education

Come learn some flexible, engaging, hands-on activities that actively involve students in learning. These small group activities are great ideas for after school math programs, math clubs, family math nights, or classroom math centers.

Barbara Jo Evans, *ETA/Cuisenaire, Vernon Hills, IL*

Sharon Rak, *ETA/Cuisenaire, Vernon Hills, IL*

406	Bauer - Beaty (50)	Grades 2-6
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This Little Piggy Cried Earn, Spend, Save!

Learn how financial literacy can be integrated into your classroom by implementing a classroom-currency system. Discover ways students can earn, spend and save classroom money without adding more units and lessons to your already busy load! Not only will you investigate a model system, but you will have time to reflect on how a classroom-currency system could work in the your room. Come with questions – leave with ideas!

Jennifer R. Guenther, *Rubicon Jt. 6 School District, Rubicon, WI*

407	Kern - Hanson (50)	Grades 4-12
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Struggling Learners and Mathematics

Come learn about the characteristics of struggling students in mathematics. Leave with practical ideas and strategies to help them succeed.

Cynthia Knight, *Iowa Department of Education, Des Moines, IA*

408	Bauer - Boddie (24)	Grades 4-16
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Collaborate, Communicate, Solve Problems Using Web 2.0 Apps

The session will investigate a variety of "Web 2.0 Apps" to see how they can be used to advantage in collaboration problem solving along with collecting and analyzing data. Web Apps are platform independent and thus can be used virtually on any computers.

Jim Kasum, *Thiensville, WI*

409	RWI - Crystal (64)	Grades 6-12
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The Challenge: Linking Research-Based Instructional Strategies with Standards-Based Mathematics

Do you know how to integrate reading, writing, vocabulary, cooperative learning, and diverse learning styles without losing critical content? Engage in a lesson that uses strategies to support a deep understanding of mathematics! Teachers from Milwaukee Public Schools are seeing increased engagement and achievement from using these strategies. It's time to take charge of our teaching habits to change the results!

Rosann Hollinger, *Milwaukee Public Schools, Milwaukee, WI*

Laura Maly, *Milwaukee Public Schools, Milwaukee, WI*

410	Bauer-LaDue (24)	Grades 9-12
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Come See How Geometer's Sketchpad Can Improve Mathematical Learning and Teaching in Any Math Class

Geometer's Sketchpad is a software program that can be used in all math classes for presentations or hands-on discovery learning. Come see how to use this awesome tool. It is very effective with a SMART Board. *Note: Both version 4 and 5 will be discussed.*

Mike Tamblin, *Whitewater High School, Whitewater, WI*

Friday, 1:00-2:00 PM

Keynote

411	Bauer - Morehouse B/ C (200)	Grades PK-12
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Common Core Standards: NCTM & National Perspectives

The Common Core State Standards Initiative is having a profound impact on the direction of K-12 mathematics across the United States. NCTM President and UW-Milwaukee mathematics professor, Hank Kepner, and UW-Madison mathematics professor emeritus, Richard Askey, have been involved in the review of the Common Core Standards for Mathematics. Dr. Kepner and Dr. Askey will discuss their

Preliminary Schedule • Friday, May 7, 2010

12:30-2:00 PM • 1:00-2:00 PM

roles in reviewing the Common Core Standards for Mathematics and share their insights into next steps for Wisconsin educators.

Henry Kepner, President, NCTM & *UW-Milwaukee, Milwaukee, WI*

Richard Askey, *UW-Madison, Madison, WI*

Friday, May 7, 2010
1:00-2:00 PM • 60 Minute Sectionals

412	Kern - Brown (50)	Grades 9-12
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Wisconsin State Standards - High School

The Revised *Wisconsin Model Academic Standards for Mathematics PK-12* were introduced last year and have been in draft form posted on the DPI website. During this session participants will be updated on the status of the standards written for high school and the connection they have to the K-12 Common Core State Standards and the College and Career Readiness Standards.

Wisconsin Standards Design Team Members

413	RWI-Mahaney (40)	Grades 4-6
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Using Counting Activities to Develop Number Sense

This session will focus on developing number sense in relation to large numbers, fractions, and negative numbers through counting activities. We will count together and discuss the patterns that develop from counting sequences and how this activity can support development of upper-elementary mathematical concepts.

Patricia Jaberg, *UW-Stevens Point, Stevens Point, WI*

414	RWI - Veranda C (48)	Grades 4-8
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Honey, I've Shrunk the Math!

Ever wonder how to incorporate video clips into your classroom? Come learn how to use Disney's Toy Story in your middle school classroom to teach proportions.

Judith Andrus, *UW-Madison, Madison, WI*

Torrey Kulow, *UW-Madison, Madison, WI*

415	Kern - Johnson (50)	Grades 6-12
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Teaching Untethered: Tablet PCs, Wireless Projectors and the Internet

Our presentation will show how to engage students and improve student learning by incorporating technology into the classroom on a daily basis. The presentation will also include a demonstration on how Tablet PCs and wireless projectors can be paired with the Internet to create a dynamic learning environment that meets the needs of all students.

Chris Geocaris, *Warren Township High School, Gurnee, IL*

Chris Longo, *Warren Township High School, Gurnee, IL*

416	Kern - Stansbury (32)	Grades 9-12
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Making Changes to Improve Teaching and Learning Exploring Algebra Standards

This session will look at the transformation of a traditional Algebra curriculum and assessments to a standards based system focused on improving student learning and awareness of the standards. Traditional and standards based assessments will be reviewed and discussed along with the rubrics created to help both the teacher and student clearly see their strengths and weaknesses in each standard and guide future instruction.

Lexi Ballweg, *Sun Prairie High School, Sun Prairie, WI*

417	Kern - Brayton-Case A (64)	Grades 9-12
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Standards-Based Math Lessons Within a Traditional Curriculum

Units on Average Rate of Change and Exponential Growth and Decay will be examined to demonstrate how you can engage students in problem solving and encourage them to think and communicate mathematically. Even if you don't teach those topics, the concepts explored can be applied to any topic. The lessons will be demonstrated using a SMART Board, so come if you are interested in how that technology (or similar) can be utilized to enhance the development of mathematical ideas.

Douglas Guyette, *Manitowoc Lincoln High School, Manitowoc, WI*

418	Kern - Boehr (50)	Grades 9-12
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Math Quizzes in Moodle Using Math Type, Hot Potatoes 6

I would like to demonstrate how to put math quizzes into Moodle. I will demonstrate using math type and Hot Potatoes 6 to import quizzes into Moodle.

Eric Watson, *Wausau East High School, Wausau, WI*

419	Bauer - Morehouse A (100)	Grades 9-12
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Math Placement in UW-System: Understanding the Test and Processes

This session will provide a brief overview of the UW Mathematics Placement Exam, which is used by all UW campuses to determine the appropriate course(s) for students to take to begin their mathematics education at the university. Presenters will describe the purpose and content of the test, the test validation process, and the placement process. There will also be time for questions.

James Wollack, *UW-Madison, Madison, WI*

Julie Letellier, *UW-Whitewater, Whitewater, WI*

420	RWI-Mahaney (40)	Grades 9-12
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Why D Stands for "Do Not Advance"

The standard grading scale for schools is a A, B, C, D and F. Most schools do not allow students who earn an F to advance to the next course, but what about those Ds? What happens to those students? Come see and discuss data from

Preliminary Schedule • Friday, May 7, 2010

1:00-2:00 PM • 2:30-4:00 PM

a longitudinal study, and determine for yourself what the best course of action is for our D students.

Mark Schommer, *South High School, Sheboygan, WI*

421	RWI-Veranda A (48)	Grades 9-16
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Telescoping Sequences: The Mathematics of Recursively Imbedded Expressions

In high school mathematics, students will encounter simple imbedded expressions like a fraction where the numerator and denominator contain fractions or nested radicals. We will explore these expressions more deeply relating them to sequences/recursion through both algebra's reasoning and nationally-accurate calculation technology.

Mike Reiners, *Christ's Household of Faith School, St. Paul, MN*

Friday, May 7, 2010
2:30-4:00 PM • 90 Minute Workshops

422	Kern - Cary (32)	Grades PK-3
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Books to Bucks: Linking Literature and Money to Young Earners

This session will demonstrate ways you can use children's literature, which contains a finance theme, to launch into activities that students will truly enjoy. The connections from "books to bucks" will help you integrate math and financial literacy standards into other curricular benchmarks. Explore the literature and take ideas for activities back to your classrooms.

Jennifer R. Guenther, *Rubicon Jt. 6 School District, Rubicon, WI*

423	Kern - Stansbury (32)	Grades PK-16
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An Introduction to Lesson Study

In Japanese Lesson Study, teachers come together to collaborate on lesson planning. In the discussion, teachers focus on student learning. During this planning stage, teachers question their beliefs, reflect on why they teach as they do, learn from their colleagues and build a stronger collegial network. We will begin to plan lessons using this model.

Mary McMahon, *North Central College, Naperville, IL*
Ellen Hines, *Northern Illinois University, DeKalb, IL*

424	Lawson - MLK, Jr. (24)	Grades 4-8
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Sharing and Comparing: Developing Understanding of Fractions

Activities that broaden and deepen conceptual understanding of fractions. Explore sharing and ordering activities and representations.

Rick Anderson, *Eastern Illinois University, Charleston, IL*

425	Bauer - Boddie (24)	Grades 6-12
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GeoGebra: Seeking a Dynamic Understanding of Mathematics through Interactive Technology

GeoGebra (www.geogebra.org) is an open-source mathematics learning environment that integrates multiple domains of mathematics, dynamic multiple representations, and interactive technology. I will present an overview of GeoGebra using realistic scenarios and discuss its potential in bringing a modeling approach to school mathematics.

Lingguo Bu, *Southern Illinois University, Carbondale, IL*

426	Kern - Johnson (50)	Grades 6-16
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SMARTer Lessons

This presentation is geared towards teachers who are using (or will be using) a SMART Board in their classrooms. We will cover the basic to intermediate use of the Board and software and then show the capabilities of the new Math Toolkit from SMART.

Paige Prichard, *Rufus King High School, Milwaukee, WI*

427	Bauer - Beaty (50)	Grades 9-12
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The Fun Side of Proof

Come explore Silly Proofs, Puzzle Proofs, Video Game Proofs, Dynamic Proofs, Movie Proofs, Relay Proofs, Monty Python Proofs, Limerick Proofs, Calculator Proofs and maybe a few more.

George Marino, *Aurora Central Catholic School, Aurora, IL*

428	Kern - Brayton-Case B (64)	Grades 9-12
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Factoring in All the Angles for Success in College Mathematics

In this workshop we will discuss the major difficulties in the mathematical background of students entering college that affect their success in their first year of mathematics courses. We will discuss the topics from the high school curriculum that are key factors to help college students become more efficient in Calculus and other college math courses and address the common math misconceptions that students carry with them throughout college. We will collaborate to determine how these misconceptions can be demolished.

Kseniya Fuhrman, *Milwaukee School of Engineering, Milwaukee, WI*

Gina Moran, *Milwaukee School of Engineering, Milwaukee, WI*

Friday, 2:30-3:30 PM

Keynote

429	Bauer - Morehouse B/ C (200)	Grades PK-6
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An Ounce of Prevention: The Importance of Building Strong Conceptual Understandings in the Early Grades

Do misconceptions happen by accident? Can they be prevented? Join us as we examine strategies to prevent con-

Preliminary Schedule • Friday, May 7, 2010

2:30-4:00 PM • 2:30-3:30 PM

ceptual holes and build a strong foundation.
Sandy Atkins, *ORIGO Education, St. Charles, IL*

Friday, May 7, 2010
2:30-3:30 PM • 60 Minute Sectionals

430	Bauer - Lightbody (32)	Grades PK-8
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Scaling the Universe with Mathematics

How big is big? How small is small? What is meant by scale? How do common things "line up" when compared to each other? In this presentation we will look at activities that can help students internalize size and scale and help older children understand the powers of 10.

Mary Garrett, *Madison, WI*

431	Bauer - La Due (24)	Grades PK-12
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Change the Way You Communicate – Use a Classroom Website

Come and explore the features of TeacherWeb - a site that allow teachers to post daily announcements, homework, lunch menus, calendars, and other classroom information. This site also allows teachers to create practice assessment, which the students can access from home. Feel free to attend this session whether you are a beginning or an advanced computer user. You will be able to have your own website started by the end of the session.

Michelle Butturini, *Reedsville Elementary/Middle School, Reedsville, WI*

432	RWI - Veranda C (48)	Grades 2-6
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Rtl: CGI in the Inclusion Classroom

Teachers participating in an MSP grant titled Closing the Math Achievement Gap of Native American Students identified as Learning Disabled will discuss how they implement CGI in an inclusion classroom.

Judith Hankes, *UW-Oshkosh, Oshkosh, WI*

433	RWI-Mahaney (40)	Grades 2-8
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Lessons that Make Meaning...Interventions Can Be Fun!

Do your students need some hands-on activities to help develop their mathematical concepts? Do you need some ideas of how to make interventions fun? Discover the benefits of using manipulatives in your class to help students better understand math as well as some ways to use a variety of manipulatives.

Kevin Dykema, *Mattawan Middle School, Mattawan, MI*

434	RWI-Veranda A (48)	Grades 4-8
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Paper Folding - A Tool To Teach Geometry

Participants will complete a variety of paper folding activities and discuss the geometry concepts involved.

Jane Howell, *Platteville, WI*

435	RWI-Mahaney (40)	Grades 6-12
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Numeracy Across the Curriculum

Come learn about various lessons we have used across all curriculums and pick up some key resources you can use to find numeracy-type lessons. Handout and attendance prizes will be awarded!

Christine Scheffel, *East Alton-Wood River High School, Wood River, IL*

436	Bauer - Morehouse A (100)	Grades 6-12
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Math is...Beautiful!

Looking for a meaningful way to show students how math is everywhere? Are the walls of your classroom bare and drab? This session will focus on how to plan a collaborative math mural project that incorporates math concepts. Based on a mural project completed by Pre-calculus students, the session will show how the SMART Board can be used to enhance the planning process. Examples of student research will highlight the math concepts behind the images in the mural. This project will make meaningful connections for students involved as well as all students who view the mural. What an exciting way to showcase the world of math!

Molly Olson, *Prairie Farm High School, Prairie Farm, WI*

437	Kern - Boehr (50)	Grades 6-12
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I Love Teaching; I Hate Grading

Do you love planning and implementing engaging, hands-on lessons but hate grading tests? Do you sing the quadratic formula to your students but can't decide if forgetting over 2A is worth 1/2 or 1 point off? Come learn what we've done to get away from these annoying questions. We'll discuss a little of our grading for learning background and how we've implemented these ideas. You'll hear about our first steps toward standards-based grading.

Kent Wedemeyer, *Sun Prairie High School, Sun Prairie, WI*

438	RWI-Mahaney (40)	Grades 9-12
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The Futility of the Lottery

Using combinations, permutations and dimensional analysis, the chances of winning the lottery are put into a realistic frame of reference. The unlikelihood of winning is given in a way that any non-mathematician can understand. Bring your TI-83/84 calculators.

Joe Ordinans, *Homestead High School, Mequon, WI*

For more information about the conference, to download a registration form or register online, for directions to the Green Lake Conference Center and a schedule of events and meetings, go to www.wismath.org.

Preliminary Schedule • Friday, May 7, 2010 2:30-3:30 PM

439	Kern - Brown (50)	Grades 9-12
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Traversing Parallel Lines: High School Partners Write About Geometry

In 2008-2009, Keota Iowa high school Geometry students were pen pals with Geometry students at Revere High School in Revere Massachusetts. Students wrote about Geometry in their lives. They also solved the same problems at both schools and wrote about what they were thinking and how they solved the problems. As the year progressed, students learned quite a bit about each others' lives, "10 minute universes" and how to write about problem solving. We had the students skype and we had the teachers visit each others' classrooms. We will present information about what the students learned, what the teachers learned, and why this project was a wonderful way to use writing in a mathematics classroom.

Deidra Baker, *Keota High School, Keota, IA*
Bonnie Sunstein, *University of Iowa, Iowa City, IA*

440	Kern - Hanson (50)	Grades 2-6
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Fun With Decimals

Come and have some fun with decimal activities. Discover a manipulative that can be used when teaching decimals, and make a set to take back to your classroom. Enjoy some games and activities that help promote understanding of what a decimal is and how it is used.

Barbara Borgwardt, *Galesville Elementary, Galesville, WI*

441	Kern - Brayton-Case A (64)	Grades 9-12
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Multiple Intelligences and Technology = Success in Math

This session will focus on teaching strategies rooted in MI theory and bolstered with basic technology applications that help students engage in, enjoy and successfully understand math content. Algebra concepts will be the primary focus. Participants will have access to materials for classroom use.

Mike Dillon, *Postville Schools, Postville, IA*

442	RWI - Crystal (64)	Grades 9-16
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An Exploration of Trapezoidal Numbers

Students are often introduced to square numbers, cubic numbers, triangular numbers but not trapezoidal numbers. What is a trapezoidal number? We will define this concept and then explore some of the properties of trapezoidal numbers. Our explorations will lead to some interesting questions, answers, and problem solving.

Norbert J. Kuenzi, *UW-Oshkosh, Oshkosh, WI*

For more information about the conference, to download a registration form or register online, for directions to the Green Lake Conference Center and a schedule of events and meetings, go to www.wismath.org.