

Wednesday, August 4

WORKSHOPS 8:45-10:15

Mathematical Fluency: Strategies that Build Efficiency, Accuracy, and Flexibility
(repeats Thursday from 2-3:30)

Room 121

LE, MS

Barbara Doggett, Flint Schools

This workshop will provide a hands-on approach to providing students with alternative strategies that help make sense of mathematics. Participants will learn these strategies and invent their own as they understand that when students are only taught algorithms, they lack the foundation needed to learn algebra. Many of the strategies are based on the writings of John Van De Walle.

“Nspring” your Students to Understand (repeats Thursday from 2-3:30)

Room 130

MS, HS, C

Deb Nutt, Celina (OH)High School

Learn how the TI-Nspire calculator can make concepts easier for students to understand and remember. Get and use classroom ready activities that are appropriate for middle grades, Algebra 1 and II, Geometry and PreCalculus. Nspire use or experience is necessary.

Promoting Algebraic Thinking in the Elementary Years

Room 128

EE, LE

James Burnett, ORIGO Education, Inc

In elementary school, algebra should be developed as a way of thinking that provides the foundation for more formal work later. This workshop will show how the two big algebraic ideas of equivalence and equations and patterns and functions can be developed right across the elementary grades.

EXTENDED WORKSHOP 9:00-11:00

Thinking Algebraically in Elementary Grades: Conceptualizing It, Developing It,
Assessing It

Room 125

EE, LE, MS, HS

Valerie Mills, Oakland Schools

Dana Gosen, Oakland Schools

Carrie Zielinski, Oakland Schools

Geraldine Devine, Oakland Schools

Participants will have the opportunity to explore representations of early algebraic patterns and relationships that are typically found in elementary mathematics programs such as Frames and Arrows, In and Out Boxes, What's my Rule?, and Graphs. They will also have the opportunity to consider the language and tasks that might be used to assess these.

Multiple Representations in Algebra One

Room 120

HS

Houssa Hamka, West Bloomfield HS

Jennifer Newman, West Bloomfield HS

Participants will engage in activities designed to develop a rich understanding of the connections between a table, graph, rule and context. After solving challenging problems and exploring ways connections can be used to enrich learning, teachers will analyze how emphasizing multiple representations can help to develop students into powerful problem solvers.

SESSIONS 9:00-10:00

Closing the Math Achievement Gap with Technology and Data-Driven Instruction in I Can Learn Classrooms (repeats Thursday 9:00-10:00)

Room 117

LE, MS, HS, C

Jeff Hildebrant, I Can Learn

I Can Learn is a self-paced mastery based fully instructional mathematics system.

Build it, Draw it, Write it, Talk it, Own it! (repeats Thursday 2:00-3:00)

Room 111

LE, MS

Perry Gelakis, Neufeld Learning Systems

Engage students with a wide range of ability levels and learning styles with technology. Build student confidence and understanding using interactive software along with high-yield instructional strategies in a variety of instructional settings. Participants will examine how to apply this student-centered, interactive approach to a variety of concepts including whole numbers and integers, fractions, geometry and measurement, graphing and algebraic thinking. CD included.

MathLand: Using an Alternative Method for Grading and Curriculum Delivery (repeats Thursday 2:00-3:00)

Room 116

MS, HS, C

Kate Faneli, Beacon Day Treatment

MathLand addresses problems of absenteeism, inconsistent effort, and heterogeneous classrooms in a special education setting using leveled assignments, mastery learning, peer coaching, clear cut grading and state standards to lead students through the curriculum. See how the MathLand method works, the positive effect it has on students, and how easy it is to adapt to the style of any teacher.

FREE Technology Tools for the 21st Century Classroom (repeats Thursday 12:45-1:45)
Room 101
MS, HS
Alden J. Edson, WMU
James L. Kratky, WMU

“What's new in technology tools for today's classroom?” This session presents FREE readily-accessible technology tools for your secondary school classroom. Ranging from mathematics software to online web-based collaborative tools, featured examples will highlight various uses for supporting student learning. Participants will leave with a toolbox of resources for their classroom.

Data Modeling and Analysis with Technology: An Interactive Technology Session (repeats Thursday 12:45-1:45)
Room 137
MS, HS, C
Dr. Vicki-Lynn Holmes, Hope College

Enthuse your students with this courtroom approach to interpreting and evaluating real-world data displays. Coupled with technology (data modeling), students gain a more conceptual understanding of area under a curve, means, standard deviations, and probability while enhancing their problem solving and reasoning skills. Various web-based statistical applets, Fathom, and DyKnow will be used.

Financial Algebra: A Perfect Third or Fourth Year Math Course (repeats Wednesday 10:30-11:30)
Room 131
HS
Dr. Robert Gerver, Cengage Learning

Financial Algebra is an algebra-based, technology-dependent program that reviews Algebra 1 and introduces selected topics from Algebra 2, Precalculus, Statistics, and Calculus. The mathematical content is motivated by and integrated with units on banking, credit, insurance, budgeting, taxes, employment, investing and retirement planning. Research projects and field work are incorporated into the program. Free *Financial Algebra* textbook to all participants.

SESSIONS 10:30-11:30

**No Middle School Sessions- teachers are encouraged to visit the exhibit hall

Conceptual Development in Area Measurement
Room 112
EE, LE
Funda Gonulates, MSU
Lorraine Males, MSU
Jack Smith, MSU

What is the conceptual base necessary for students to acquire a solid understanding of area measurement? We will address this question and explore and

discuss tasks from different elementary curricula that can support the development of conceptual development. Discussion will focus on how tasks as written can be enriched to better support students' conceptual understanding of area measurement.

Manipulatives for Number Sense

Room 117

EE, LE

Kevin Dykema, Mattawan Middle School

Do you have students who struggle with number sense concepts? Come and see how using manipulatives can benefit your students' development of number sense concepts. Also, discover some ways that a wide range of manipulatives can be used.

Fun with Functions and Conics (repeats Thursday 12:45-1:45)

Room 111

HS

Shawn J Pollman, Kensington Woods HS

This session will highlight some creative ways to study functions by exploring lessons that incorporate dance moves and speed walking. We will also examine how the use of a graphing design project can promote a deeper understanding of functions and conic sections. The TI-Nspire will be used in this presentation, but the activities can be completed with any graphing calculator.

Using Literature in Advanced Math? Yes You can!

Room 101

HS

Christine Kincaid Dewey, Warren Consolidated Schools

Think that math-related literature is reserved for Elementary/ Middle School curriculums only? Think again! Use literature to teach/review math concepts in Algebra II, Pre-calculus and even Calculus! Project and lesson samples shown. Books include: The Number Devil, The King's Chessboard, Calculus & Pizza and more!

It wasn't in the Book (repeats Thursday 12:45-1:45)

Room 116

HS, C

Ken Sullins, retired

Sometimes math happens! Take the opportunity when a math moment happens. A few discoveries are made because of classroom questions and needs; some ideas from students will be shared.

What is the Best Predictor for Wins? A Baseball and Statistics Activity. (repeats Thursday 3:15-4:15)

Room 121

HS, C

Jonathan Engelman, WMU

Ben Freeburn, WMU

During this session, attendees will engage in a statistics activity centered around baseball and how to best predict wins. The activity is designed as a capstone project that combines bivariate data analysis with the excitement of the World Series. This activity aligns with both state and national standards.

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I Wish I had known that my First Year of Teaching! (repeats Thursday 2:00-3:00)

Room 125

HS

Casey Schaub, Bendle High School

Melissa Olsen, Bendle High School

Over the past four years, we have been compiling a list of things we wish we would have known before starting our first year of teaching. So, we have finally decided to take this opportunity to share with you our list of essential teaching tips and strategies that will help reduce the stress of your first couple of years!

SESSIONS 12:45-1:45

** No High School Sessions- teachers are encouraged to visit the exhibit hall

RtI and Math: Completing Your Assessment Plan! (repeats Thursday 12:45-1:45)

Room 101

EE, LE, MS

Robyn Lucas, Ottawa Area ISD

The Ottawa Area ISD has piloted a program to identify and support students who likely will score below benchmarks in targeted Number and operations expectations for grades 1 through 6. The program was developed by the OAISD and applies RtI principles to mathematics. Grades 7 and 8 will also be available for the

2010-2011 school year. The program toolset includes: web-based screeners, customized data reports, guided practices, and progress monitoring. Please join to discover how 52 schools through West Michigan have already begun to use this program to apply RtI principles into their math learning communities.

Finding the Place in Place Value (repeats Thursday 10:30-11:30)

Room 120

EE

Winifred Findley, retired from Monroe Public

This presentation will provide ideas and techniques to help students better understand place value and its importance in our number system.

Shapes, Solids, and More

Room 112

EE

Monica Hartman, St Clair County RESA

Come and experience some of the activities from the AIMS publication, Shapes, Solids, and More that align to 2nd and 3rd grade GLCEs.

Math FOU (repeats Thursday 10:30-11:30)

Room 125

LE

Andrea McVicar, Chippewa Valley Public

Dr. Jerry Evanski, Chippewa Valley Public

Math FOU is a program designed to help students become fluent with their multiplication facts. The program is research based and includes activities to reach various learners.

Fractions Don't Need to be Frustrating!

Room 117

LE, MS

Kevin Dykema, Mattawan Middle School

Fractions can be a very frustrating concept for many students. Come see how using manipulatives can help your students better understand fraction concepts, including equivalence, ordering, addition and subtraction.

A Tool for Building the Instructional Capacity for Mathematics (repeats Thursday 10:30-11:30)

Room 111

EE, LE, MS

Perry Gelakis, Neufeld Learning Systems

It's a challenge to lead students with different abilities to deeper levels of understanding in mathematics. Teachers need a variety of teaching strategies that integrate an assortment of resources; virtual and concrete manipulatives and off-computer activities. This session will examine an integrated instructional approach for

all students. CD included.

Michigan Mathematics Adventures Books

Room 121

MS

Laurie Shappee

Activities students can do at home to increase their proficiency in middle school concepts will be shared.

Fostering Algebraic Reasoning

Room 127

MS

Jane Porath, Traverse City Schools

Algebra is not just a course in high school or 8th grade. There are opportunities to support and connect to students' algebraic thinking throughout elementary and middle school. This session will examine ways in which we can foster this thinking to make mathematics about learning and understanding, not just doing.

Common Core State Standards- Middle School Round Table

Room 135

MS

Kathy Berry, Monroe ISD

Participants will examine the 6-8 CCSS and compare these to the MI-GLCE. Plan to actively discuss and share with others. We will identify needs for implementing the CCSS. These will be supplied to MDE and MCTM leadership to inform their upcoming work and resource development.

WORKSHOPS 1:55-3:25

Pizza Proportions: Examining Student Work

Room 121

MS

Judith Falk, Gaylord Community

Participants will engage in ratio problems and examine student work to determine student thinking and understanding of ratios and proportions. From the information gathered, teachers plan a course of action to follow next based on student evidence. (This session stems from work done with the MMSTLC project)

Using Economics in the Math Classroom

Room 131

MS, HS

Ellen Hechler, retired from Detroit Public Schools

Use the newspaper to find a job. Figure out a budget, pay taxes, buy a car, rent, etc- all using a newspaper. Put the fun back into the classroom.

Using Math Talks Moves to Promote Rich mathematical Discussions

Room 125

MS, HS

Lorraine M. Males, MSU

Samuel Otten, MSU

Shannon Sweeny, MSU

Please join us in a discussion of discourse-focused professional development materials being developed at Michigan State University. We highlight five productive talk moves that engage students in rich mathematical discussions marked by reasoning and collaborative sense-making. Participants will explore a mathematical task while facilitators model the talk moves. Discussion of the functions these moves can serve in classrooms will follow.

Excelling with MathXL (repeats at Thursday 2:00-3:30)

Room 103

HS

Kelly Sprague, Detroit Country Day School

Math XL engages students with a personalized interactive homework assignment where they are given unlimited opportunity to practice and master mathematical concepts with guided tutorial assistance. Come join this hands-on workshop where you can learn to create assignments and incorporate MathXL into your mathematics courses.

Using Alternative Energy to Teach Math / Science concepts (repeats on Thursday 8:45-10:15)

Room 112

MS

Jim Licht, St Clair RESA

There is a great effort in Michigan to promote the use and understanding of alternative energy. Learn how it is being used, along with traditional tools such as the graphing calculator, in St. Clair County to provide Middle School students with hands-on activities to learn math and science topics. Leave with many ideas and resources that you can bring into your classroom.

SESSIONS 2:00-3:00

** No Elementary School Sessions- teachers are encouraged to visit the exhibit hall

Navigating the Mathematics Classroom

Room 128

MS, HS, C

Deb Nutt, Celina (OH) HS

See and experience the newest TI technology that will enhance your classroom- the Ti-Nspire Navigator. Learn about the advantages of the Navigator while participating with classroom activities that will keep your students engaged in

the lesson and make record keeping easier for you.

There's More than One Way to Skin a Cat: Solving Systems of Equations (repeats Thursday 10:30-11:30)

Room 137

MS, HS

Dr. Vicki-Lynn Holmes, Hope College

Because mathematical concepts can be expressed verbally, numerically, symbolically, and graphically, all mediums are incorporated into solving systems of equations. Students are taught using various models and become conversant in the language of mathematics through writing and oral descriptions. Technology is used to enhance the conceptual understanding of these mediums. Web-based applets and DyKnow will be used.

Improving 6th-12th Grade Mathematics via Modular-based Distance-Learning (repeats Thursday 9:00-10:00)

Room 101

MS, HS

Connie Doorlag, WMU

Joshua Goss, WMU

This session will provide a hands-on look at the innovative professional development program to improve the teaching and learning of mathematics at the 6th-12th grade levels developed by the Western Michigan University faculty and grant staff. The modular-based distance-learning approach is designed to fit any teacher's needs on any school's schedule. Participants will explore sample activities and relevant web sites.

High School Textbooks' Intended Uses of Technology (repeats Thursday 10:30-11:30)

Room 117

MS, HS

James L. Kratky, WMU

Alden J. Edson, WMU

This interactive session examines how high school textbooks prompt the use of technology in the classroom. Included are types of technologies, intended purposes, and ways in which teachers and students are prompted to use technology. Participants are invited to discuss challenges and strategies when integrating technology tools in their classroom.

Reaching All Students with the Common Core (repeats Thursday 9:00-10:00)

Room 120

HS

Tim Pope, Key Curriculum Press

Find out how the new Common Core standards provide an opportunity for teachers to more easily prepare all learners for success in higher mathematics. Ready-made lessons for Algebra 1, Geometry, and Algebra 2, along with classroom

video examples, will be provided.

Common Core State Standards- High School STEM Round Table

Room 135

HS

Kathy Berry, Monroe ISD

Participants will examine the STEM CCSS and their implications for all high school mathematics courses. Plan to actively discuss and share with others. We will identify ideas and needs for implementing the STEM CCSS. These will be supplied to MDE and MCTM leadership to inform their upcoming work and resource development.

KEYNOTE ADDRESS FOR ALL TO ATTEND (or visit Exhibit Hall) 3:30-4:30

Jere Confrey

THURSDAY, AUGUST 5

WORKSHOPS 8:45-10:15

The Art of Music in Math

Room 131

EE, LE, MS

Robert E. Lee, Miami University

Music has been described as “Mathematics in sound.” The mathematical structures of music will be explored using Cuisenaire Rods and the transition to the mathematical concepts will be presented. The commonalities and distinctions between the two disciplines will be demonstrated and discussed by participants in this hands-on presentation.

Writing in Mathematics- Easy, Attainable, and Effective

Room 121

LE, MS, HS

Ann Enyart, Hastings Middle School

Writing is a very effective tool for learning mathematics, but it is underused for a number of reasons. This session will focus on fast and easy ways to incorporate writing into your classroom without adding the frustration of not knowing how to grade the results. Participants will experience many of the writing strategies presented.

Barbie Bungee Jumping: A Linear Exploration

Room 125

MS

Judith Falk, Gaylord Community Schools

Participants will engage in a motivational hands-on activity that demonstrates and reinforces linear relationships. After collecting data, attendees will run through the actual student work to become familiar with the classroom activity. This includes collecting and displaying data, and determining mathematical relationships. This activity utilizes the NCTM Illumination series.

Probability Games for Grades 3-8

Room 120

LE, MS

Jan Koop, Calvin College

Playing games is one way to develop children's understanding of probability, fairness, and likely events. Using games as a springboard, we will make predictions, test our guesses, adjust the rules to make a fairer game, and practice vocabulary.

Using Alternative Energy to Teach Math / Science concepts (repeated from Wednesday 2:00-3:30)

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alternative energy. Learn how it is being used, along with traditional tools such as the graphing calculator, in St. Clair County to provide Middle School students with hands-on activities to learn math and science topics. Leave with many ideas and resources that you can bring into your classroom.

EXTENDED WORKSHOPS 9:00-11:00

Place Value In-Depth

Room 127

EE, LE

Matt Wyneken, UM-Flint

Place value is more than knowing the names of the places (ones, tens, hundreds, etc) and that ten ones make one ten, that ten tens make one hundred, etc. Place value is actually a “code” that teachers need to understand deeply. This workshop will engage participants in a variety of activities designed for this purpose.

SESSIONS 9:00-10:00

Successful Hands-on Math Investigations

Room 117

LE, MS

Kevin Dykema, Mattawan Middle School

Do your students need some hands-on activities to help develop their mathematical concepts and to help actively engage them? 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.

Closing the Math Achievement Gap with Technology and Data-Driven Instruction in I Can Learn Classrooms (repeated from Wednesday 9:00-10:00)

Room 116

LE, MS, HS, C

Jeff Hildebrant, I can Learn

I Can Learn is a self-paced mastery based fully instructional mathematics system.

How can I use Accessible Division Algorithms to Divide Decimals?

Room 130

MS

Becky Steele, Jenison Public Schools

Pamela Wells, Grand Valley State University

Using accessible division algorithms for division of whole numbers is becoming more and more common in elementary school. This means that some students entering your middle school classroom may have little to no experience with the traditional long division algorithm. In this workshop, we will explore several different accessible division algorithms using whole numbers and how these algorithms can be used to divide decimals as well.

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Common Core State Standards in Mathematics: Transitioning Our Instruction- Middle School

Room 134

MS

Ruth Anne Hodges, MDE

The Common Core State Standards (CCSS) confirms that Michigan has been on the right path for six years. Information on how Michigan will transition from content expectations to the CCSS will be shared. Breakout groups will allow participants to delve more deeply into grade span transitioning issues.

Data Collection and the TI-Nspire Navigator System (repeats Thursday 3:15-4:15)

Room 128

MS, HS

Marian Prince, Hull Middle School

Is your budget too tight to get enough sensors for a whole class? Then come see how collecting data using two Vernier EasyTemps, a CBR2, and a light sensor can turn into an algebra lesson for the whole class with the TI-Nspire Navigator system. Beginners and hands-on learners welcome.

SESSIONS 10:30-11:30

Elementary Keynote Address: Developing the Essential Strategies for Computation

Auditorium

EE, LE

James Burnett, ORIGO Education

Simple visual aids and models should be used to help students form a mind picture that links to the thinking strategy. This session will demonstrate the use of these aids and show how the thinking strategies can be generalized and extended beyond the number fact range.

Finding the Place in Place Value (repeated from Wednesday 12:45-1:45)

Room 120

EE

Winifred Findley, retired from Monroe Public

This presentation will provide ideas and techniques to help students better understand place value and its importance in our number system.

The Seven Numbers Every Student Should Know

Room 131

EE, LE

Laurie Shappee

Come see why the "number sense" of these 7 numbers is so important. The critical attributes of the numbers 0, 1, $\frac{1}{2}$, $\frac{1}{10}$, 10, 12, and 100 can be used as models of all other numbers. They illustrate vital, interrelated basic mathematical ideas that teach required basic mathematical knowledge.

Math FOU (repeated from Wednesday 12:45-1:45)

Room 117

LE

Andrea McVicar, Chippewa Valley Public

Dr. Jerry Evanski, Chippewa Valley Public

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The Internet has Changed the Way I Teach Geometry

Room 103

HS

Richard Strausz, Shrine Catholic HS

Now that I am back in the classroom, I am finding that the internet is changing- and I think improving- the way I teach geometry. I will share some of my "discoveries" in my session and hopefully learn some from you too!

Common Core State Standards in Mathematics: Transitioning Our Instruction-High School (repeats Thursday at 12:45-1:45)

Room 134

HS

Dan LaDue, MDE

The Common Core State Standards (CCSS) confirms that Michigan has been on the right path for six years. Information on how Michigan will transition from content expectations to the CCSS will be shared. Breakout groups will allow participants to delve more deeply into grade span transitioning issues.

Navigating the Mathematics Classroom

Room 128

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See and experience the newest TI technology that will enhance your classroom, the TI-Nspire Navigator. Learn about the advantages of the Navigator while participating with classroom activities that will keep your students engaged in

the lesson and make record keeping easier for you.

A High School Math Department Works to Differentiate their Classrooms (repeats Thursday 3:15-4:15)

Room 125

HS

Josh Males, Mason High

Amy Kelly, Mason High

Carrie Bell, Mason High

Members of Mason High School's math department have been working on differentiating their classrooms. We will lead a discussion about what has worked, what hasn't worked, and where we hope to be in the near future. Participants will leave with ideas to get started in their own classrooms.

Common Core State Standards- Grades 3-5 Round Table

Room 135

LE

Kathy Berry, Monroe ISD

Participants will examine the 3-5 CCSS and compare these to the MI-GLCE. Plan to actively discuss and share with others. We will identify needs for implementing the CCSS. These will be supplied to MDE and MCTM leadership to inform their upcoming work and resource development.

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It's About Time and Money

Room 112

EE

Monica Hartman, St Clair County RESA

Experience some activities from AIMS time and coin books that align to the GLCEs. Help your students learn these concepts with engaging hands-on activities.

Data Modeling and Analysis with Technology: An Interactive Technology Session
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Let's not Forget Geometry- Reflections on Teaching Pre-Service Teachers

Room 117

C

Darlene Kohrman, KVCC

Sheila Eisenhauer, KVCC

Preparing future teachers to be effective facilitators of geometry is a challenging task. Effective teachers must possess a strong understanding of geometric content that goes far beyond the memorizations of definitions, formulas, and application of such to textbook problems. The presenters will share reflections and findings from five years of course development for pre-service teachers in the content area of geometry at Kalamazoo Valley Community College. The goal of the

course has been to engage the pre-service teachers in activities that foster growth in van Hiele levels of acquisition while developing an appreciation for the usefulness of geometry and its connection to other aspects of mathematics.

Common Core State Standards in Mathematics: Transitioning Our Instruction- High School (repeated from Thursday at 10:30-11:30)

Room 134

HS

Dan LaDue, MDE

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A Familiar Activity that's been TI-NSpired

Room 128

MS

Marian Prince, Hull Middle School

The bottle activity to teach rate of change is a hands-on activity in several textbooks. See how TI-Nspire Navigator can "technologize" a great lesson for a "techno" generation of students. Beginners welcome.

WORKSHOPS 2:00-3:30

Mathematical Fluency: Strategies that Build Efficiency, Accuracy, and Flexibility (repeated from Wednesday 9:00-10:00)

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Kelly Sprague, Detroit Country Day School

Math XL engages students with a personalized interactive homework assignment where they are given unlimited opportunity to practice and master mathematical concepts with guided tutorial assistance. Come join this hands-on workshop where you can learn to create assignments and incorporate MathXL into your mathematics courses.

Differentiated Instruction in the Middle School Math Classroom- Practical Tips and Techniques

Room 125

MS

Jennifer Allan, Birmingham Public Schools

This workshop will explore some of the different ways to differentiate math instruction. We'll look at actual lessons from some of the commonly-used curricula in Michigan, and discuss ways to "tweak" those lessons to meet the needs of a wide range of students. We'll also spend some time discussing the logistics of classroom management and lesson planning in the differentiated classroom.

SESSIONS 2:00-3:00

Analyzing Elementary Pre-Service Teachers' Math Autobiographies

Room 101

EE, LE, C

Shannon P Sweeny, MSU

In this presentation, I will share the results of a research study in which I analyzed the mathematics autobiographies of prospective elementary teachers. The purpose of the study was to learn about the significant mathematical experiences that prospective elementary teachers have throughout their lives, and how those experiences may affect the way they view themselves as learners and teachers of mathematics.

Build it, Draw it, Write it, Talk it, Own it! (repeated from Wednesday 9:00-10:00)

Room 111

LE, MS

Perry Gelakis, Neufeld Learning Systems

Engage students with a wide range of ability levels and learning styles with technology. Build student confidence and understanding using interactive software

along with high-yield instructional strategies in a variety of instructional settings. Participants will examine how to apply this student-centered, interactive approach to a variety of concepts including whole numbers and integers, fractions, geometry and measurement, graphing and algebraic thinking. CD included.

MathLand: Using an Alternative Method for Grading and Curriculum Delivery
(repeated from Wednesday 8:00-9:00)

Room 116

MS, HS, C

Kate Faneli, Beacon Day Treatment

MathLand addresses problems of absenteeism, inconsistent effort, and heterogeneous classrooms in a special education setting using leveled assignments, mastery learning, peer coaching, clear cut grading and state standards to lead students through the curriculum. See how the MathLand method works, the positive effect it has on students, and how easy it is to adapt to the style of any teacher.

I Wish I had known that my First Year of Teaching! (repeated from Wednesday 10:30-11:30)

Room 130

HS

Casey Schaub, Bendle High School

Melissa Olsen, Bendle High School

Over the past four years, we have been compiling a list of things we wish we would have known before starting our first year of teaching. So, we have finally decided to take this opportunity to share with you our list of essential teaching tips and strategies that will help reduce the stress of your first couple of years!

Common Core State Standards in Mathematics: Transitioning Our Instruction-Elementary School

Room 134

EE, LE

Ruth Anne Hodges, MDE

The Common Core State Standards (CCSS) confirms that Michigan has been on the right path for six years. Information on how Michigan will transition from content expectations to the CCSS will be shared. Breakout groups will allow participants to delve more deeply into grade span transitioning issues.

Manipulatives for Geometry and Graphing

Room 117

MS, HS

Kevin Dykema, Mattawan Middle School

Do your students struggle with geometry and graphing concepts? Come discover how manipulatives can be very helpful for developing the concepts and see

some ways to use manipulatives for geometry and coordinate graphing.

Common Core State Standards- High School Round Table

Room 135

HS

Kathy Berry, Monroe ISD

Participants will examine the High School Core Mathematics CCSS and compare these to the MI-HSCE. Plan to actively discuss and share with others. We will identify needs for implementing the CCSS. These will be supplied to MDE and MCTM leadership to inform their upcoming work and resource development

From Learned Helplessness to Independence: Helping Students take responsibility for their learning

Room 120

EE, LE, MS, HS, C

David Coffey, GVSU

John Golden, GVSU

Research suggests that our brains are hardwired to learn language. Certain conditions support our language acquisition and have been successfully applied in other learning environments. Our session explores ways to apply this model to math classrooms. Participants will explore lessons and assignments that implement this approach and then reflect on how to transfer the conditions to their instructional practice.

SESSIONS 3:15-4:15

GENERAL KEYNOTE: motivational speaker

Auditorium

Let's Explore Area and Perimeter

Room 112

EE, LE

Monica Hartman, St Clair County RESA

Perimeter and area are two concepts that are difficult for students to understand. Participate in activities that will help your 2nd, 3rd, and 4th grade students develop these concepts.

What is the Best Predictor for Wins? A Baseball and Statistics Activity. (repeated from Wednesday 10:30-11:30)

Room 130

HS, C

Jonathan Engelman, WMU

Ben Freeburn, WMU

During this session, attendees will engage in a statistics activity centered around baseball and how to best predict wins. The activity is designed as a capstone

project that combines bivariate data analysis with the excitement of the World Series. This activity aligns with both state and national standards.

A High School Math Department Works to Differentiate their Classrooms (repeated from Thursday 10:30-11:30)

Room 111

HS

Josh Males, Mason High

Amy Kelly, Mason High

Carrie Bell, Mason High

Members of Mason High School's math department have been working on differentiating their classrooms. We will lead a discussion about what has worked, what hasn't worked, and where we hope to be in the near future. Participants will leave with ideas to get started in their own classrooms.

Using Mathematics Teaching in the Middle School (MTMS) in your Classroom

Room 127

MS

Jane Porath, Traverse City Schools

Are you a member of NCTM? Do you receive a journal? Do you need ideas on how to more effectively utilize this resource? The MTMS journal provides opportunities for educators to reach students of all abilities while teaching for understanding. This session will provide concrete examples of how to use the journal to challenge all students while building conceptual knowledge.

Data Collection and the TI-Nspire Navigator System (repeated from Thursday 9:00-10:00)

Room 128

MS, HS

Marian Prince, Hull Middle School

Is your budget too tight to get enough sensors for a whole class? Then come see how collecting data using two Vernier EasyTemps, a CBR2, and a light sensor can turn into an algebra lesson for the whole class with the TI-Nspire Navigator system. Beginners and hands-on learners welcome.

Common Core State Standards- Grades K-2 Round Table

Room 135

EE

Kathy Berry, Monroe ISD

Participants will examine the K-2 CCSS and compare these to the MI-GLCE. Plan to actively discuss and share with others. We will identify needs for implementing the CCSS. These will be supplied to MDE and MCTM leadership to inform their upcoming work and resource development.

MCTM 2011 Conference Planning

Room 117

EE, LE, MS, HS, C

Kevin Dykema, Mattawan Middle School

Are you interested in helping to plan for the 2011 conference? Do you have ideas on how to make next year's conference even better? Come share your ideas and discuss how you can be a part, whether big or small, in planning for next year's conference.