



Mathematical Proficiency for Every Student Conference

Access and Equity: Going Deep in Mathematics

Wednesday, October 17, 2018

Chula Vista Resort & Conference Center, WI Dells

TIME	DESCRIPTION	ROOM
8:45	Welcome & Overview – Wendy Meyer & Amy Traynor, MPES Planning Committee	Ballroom
9:00	<p>Keynote Presentation: Access & Equity: Going Deep with Mathematics – <i>Victoria Bill, Institute for Learning, University of Pittsburg</i></p> <p>This keynote presentation will focus on what is needed for instruction to be equitable and to give students access to key mathematical concepts. Participants will also connect these needs to the Effective Teaching Practices outlined by NCTM.</p>	
10:30	BREAK	
B r e a k o u t S e s s i o n s	<p>PK-2 Students as Doers of Mathematics (Grades PK-2) – <i>Jennifer Kosiak, UW-La Crosse</i></p> <p>In order to advance access and equity in mathematics, teachers must implement high leverage tasks that empower all students. This session will focus on practices that provide PK-2 students with opportunities to engage with mathematics in rich and meaningful ways that emphasize problem solving and mathematical reasoning so that students see themselves as doers of mathematics.</p>	Room E
	<p>Equity in a 3-5 Math Class, Through Mathematical Proficiency (Grades 3-5) – <i>Lynn Schaal, New London School District</i></p> <p>This session will focus on what is equitable math instruction and how we can become equitable in our instructional practices. We will look at what mathematically proficient students look and sound like, and look at ways we can revamp our instruction to better support all students through discourse, high cognitive tasks with multiple entry points, and building deep conceptual understanding of mathematical processes to justify the how and the why of mathematics.</p>	Room F
	<p>Making Connections and Digging Deeper While Strengthening Your Students' Math Identities Every Lesson, Every Day (Grades 6-8) – <i>Melissa Thomley, Instructional Math Coach</i></p> <p>This session will offer you practical options for making rigorous problems that build students' conceptual understanding and procedural skills a part of your classroom. While increasing the depth of learning, we will simultaneously look at strategies that build and support the growth of positive math identities for all of your students. We will look at the development of one math topic over time and the depth, rigor and connections students will make while helping students see their competence in the subject of math and not their deficits.</p>	Room G
	<p>Equity in the Mathematics Classroom (Grades 9-12) – <i>Dave Ebert, Oregon School District</i></p> <p>Mathematical identity is defined as a student's view of her/himself in a math classroom influenced by their experience, personal history, and other events. In order for all of our students to experience success in mathematics, they must feel a connection to the mathematics they are learning. In this session, we will discuss and learn about ways to bring the mathematics of many different cultures into our classrooms to build the mathematical identity of all our students.</p>	Room H
	<p>Going Deep with Mathematics: Look-Fors and Ask-Mes (Administrator Strand) – <i>Mike Steele, UW-Milwaukee</i></p> <p>What does going deep with mathematics look like in a brief classroom walkthrough? What should administrators ask their teachers to better understand their math teaching practices? I'll link the notion of going deep with mathematics for equitable instruction to ideas to reshape the ways in which you observe and support teachers of mathematics.</p>	Ballroom

12:00 LUNCH

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All Means All: Understanding the Facts for PreK-2 (Grades PK-2) – *Lisa Borowski, Hortonville Area School District* Room E

All of our students need basic fact fluency. IF we build fluency on conceptual understanding and progressions of strategies, ALL students gain fluency - accuracy, flexibility and efficiency. In this session, we will not only review a developmental progression of teaching the basic facts, but we will also have hands-on experiences, that teachers can put to use with All students as soon as they return to school.

Learning for All-Let's Take a New Look at Universal Instruction (Grades 3-5) – *Cathy Burge, School District of Holmen* Room F

For the last five years I have practiced a different classroom management approach for teaching math. Capitalizing on what I have learned from Jo Boaler, the children work in teams to formulate strategies, take risks, and correct misconceptions. We truly believe in learning for all!

Access and Equity through Clarity (Grade 6-8) – *Molly Rozga and Andrea Velazquez, School District of South Milwaukee* Room G

One of the biggest influences in student achievement is teacher clarity. One focus of our work with clarity is number talks. Experience how we expose our students to operational fluency, while being able to clearly explain ideas to each other. We will also look into lesson planning (learning targets, lessons and assessments) through the lens of clarity.

Going Deep with High School Mathematics (Grades 9-12) – *Tammy Moynihan, CESA 8* Room H

During this session time will be taken to look at conceptual understanding of high school content that is traditionally taught at the procedural level or through memorization. Teachers will analyze traditional practices and be exposed to alternative practices in order to increase all students' mathematical dispositions.

2:15 BREAK

2:20 **Wrap Up Session: Summing It Up** – *Jennifer Lawler, Kenosha Unified School District* Ballroom

Taking time out to reflect, both individually and collaboratively, on our experiences is an essential part of learning. Join us to "sum up" our learning from the day and commit to putting that learning into action.

3:00 ADJOURNMENT

Please make sure to visit the conference bookstore for resources to support today's learning.

Wisconsin Mathematics Council

Providing Leadership and Service to Mathematics Educators of Wisconsin



Mathematical Proficiency for Every Student Conference Access and Equity: Affirming Students' Identities

Thursday, October 18, 2018

Chula Vista Resort & Conference Center, WI Dells

TIME	DESCRIPTION	ROOM
8:45	Welcome & Overview – Wendy Meyer, MPES Planning Committee	Ballroom
B r e a k o u t s e s s i o n s	9:00 Going Deeper with Geometric Shapes and their Attributes (Grades PK-2) – <i>Eric Kanters, Mathematics Institute of Wisconsin</i> The foundations for understanding geometric shapes and their properties are developed in Grades K-2. By Grade 5, students are expected to understand and classify two-dimensional figures into categories based on their properties. Yet, many students enter middle school still identifying and reasoning with shapes based upon visual appearance alone. This session will focus on going deeper with geometric shapes and the instructional experiences students need in Grades K-2 to expand their understanding of geometric properties and their relationships.	Room E
	Identity & Equity in a 3-5 Math Class (Grades 3-5) – <i>Victoria Bill, Institute for Learning, University of Pittsburg</i> With a focus on Grades 3-5, this session will further the discussion on what is needed for instruction to be equitable and to give students access to key mathematical concepts. Participants will also connect these needs to the Effective Teaching Practices outlined by NCTM.	Room F
	Access and Equity through Mathematical Modeling (Grades 6-8) – <i>Erick Hofacker, UW-River Falls</i> Engaging middle school students in mathematical modeling provides them an opportunity to engage in meaningful mathematics which allows them to answer questions about real-world situations. Mathematical modeling involves students as doers of mathematics and asks them to make choices within the problem-solving process. This session will explore various mathematical modeling problems and discuss how you can introduce students to the modeling cycle. The problems and activities we will work on in this session will provide middle school students with positive mathematical experiences and help them to develop a sense that it takes time to solve mathematical problems. They will learn that their input and assumptions made within the process is valuable to the learning that takes place and how they arrive at a solution to their question.	Room G
	Using and Building Learning Partnerships in Math Classes as an Equity Strategy (Grades 9-12) – <i>Ken Davis, Madison Metropolitan School District</i> How can we as teachers build a learning partnership with our students as means of building equity within our classrooms? In this workshop, participants will develop an understanding of our role as learner in order to develop learning partnerships and build students' independence. Participants will determine how building students' independence is a strong equity tool. Participants use the Critical Incidents Protocol as a means of reflecting upon their own practice as they develop a deeper understanding of the routines, rituals, and lesson planning to deepen our learning partnerships.	Room H
	Building Positive Math Identities in Students, Teachers, and Selves (Administrator Strand) – <i>Mary Mooney, WI Department of Public Instruction, & Angela Ford, Milwaukee Public Schools</i> How does our personal mathematical identity impact how mathematics is supported in our schools? In this session we will explore how reflecting on our own experiences offer insight into understanding student experiences in classrooms as well as teacher practices. Participants will have opportunities to think about how to support mathematics classes. Collectively, we will explore how to take action to strengthen student learning and build positive math identities in classrooms and schools.	Ballroom

10:15 BREAK

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Developing a Mathematical Identity: Helping Our Students See Themselves as Emerging Mathematicians (Grades PK-2) – *Danielle Robinson, Milwaukee Public Schools* Room E

The development of a mathematical identity is vital for our young students as they begin their journey in mathematics. Zaretta Hammond provides the Ready for Rigor Framework that can be used to help students see themselves as mathematicians. Come and learn how strategies were used to not only provide access for all students in math but also help all students see themselves capable of mathematics.

Developing Mathematics Identity in Grades 3-5 (Grades 3-5) – *Cynthia Rodriguez, Milwaukee Public Schools* Room F

“I’m not good at math.” “This is too hard and I’m not smart.” “I’m not a math person.” Have you heard those comments before? What can we do to help change the narrative to develop mathematics identity in all students? Come join us in professional conversations as we discuss strategies to encourage students to see themselves as confident problem solvers.

Building Positive Middle School Math Experiences (Grade 6-8) – *Tracy Frank, Instructional Math Coach* Room G

In this session we will look at ways to help ensure that the launch of a new lesson and the start of a new problem is a positive math experience. We will experience and discuss strategies that address status in the classroom, that make thinking valued and that help build a positive math identity. Walk away with ideas for orchestrating your upcoming lessons to be positive for all math learners.

More Restore Than Before (Grades 9-12) – *Cori Moran, South Milwaukee School District* Room H

Looking for ways to engage all learners? Using Restorative Content circles, community and trust are built as a way to foster deeper conversations and understanding. A great tool for fostering a stronger math identity, self-assessment, and equity! Come experience for yourself! Research also discussed.

12:00 LUNCH

1:00 **Keynote Presentation: Building Mathematical Identities** – *Erika Bullock, UW Madison* Ballroom

Providing positive mathematical experiences affirms students’ identities as doers of mathematics and problem solvers. How do we build positive experiences for students in math class? In turn, students will be determined and persistent mathematical thinkers. What other characteristics will these students gain from these experiences? How does confidence in mathematics support learning in other content areas?

2:30 ADJOURNMENT

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