Southern Illinois University Carbondale

is Proud to Present

The 36th Annual Illinois Council of Teachers of Mathematics Conference - Southern Section

Common Core State Standards for Mathematics Standards, Processes, and Topics

Thursday, February 17, 2022

JOHN A. LOGAN COLLEGE, HANCOCK CONFERENCE CENTER

Conference and Program Chairpersons
Jerry P. Becker, Southern Illinois University Carbondale.
Kuan Chun Chen, Southern Illinois University Carbondale
Jie Shi Liew, Southern Illinois University Carbondale
Ho-Feng Chueh, Southern Illinois University Carbondale

Conference Coordinator
Rebecca Dycus, Southern Illinois University Carbondale
All conference activities will take place in the Hancock Conference Center located in F-wing of the main facility.

**8 - 9m**  
**Check-In and Continental Breakfast**  
Starting at 8am, staff will be available to check in participants who registered prior to the conference. On-site registration will be available for educators who were unable to register prior to the event.

**CONTINENTAL BREAKFAST**
- Bagels (Asiago, Blueberry, Chocolate Chip, Cinnamon Crunch), Brownies, Mix Berry Yogurt Parfaits
- Soufflés (Cheese, Spinach Artichoke, Spinach Bacon)
- Whole Fruit
- Orange Juice
- Coffee, Decaf, Hot Tea, Water

**8:20 – 8:50am**  
**Welcome Social**  
Get reacquainted with your colleagues and find out what has happened since the last in-person conference in 2020. Be sure to sign in and out of the session to earn .5 Professional Development units, a sign in sheet will be available near the Check-in table. Participants who attend all sessions will earn a total of 5.0 Professional Development (PD) units.

**9 – 10am**  
**Session I**  
Multiple sessions available

**10:10 – 11:10am**  
**Session II**  
Multiple sessions available

**11:20am – 12:20pm**  
**Session III**  
Multiple sessions available

**12:30 – 2pm**  
**Luncheon & Guest Speaker Adam Poetzel**  
Banquet Room
SESSION I
(9:00 – 10:00am)

1. Building Math Thinking Classroom
Room F119
Grades K-12
GREG GIERHART, Murray State University, Murray, KY
Does your classroom need some engaging math experiences? Do you need group work where each member is engaged in the mathematics? This session will focus on math puzzles, game and more to help build math stamina in a classroom.

2. Discovering our World with Mathematics
Room F109
Grades K-12
JIE-SHI LIEW, Southern Illinois University
Cultivate children’s spatial thinking amidst the ongoing pandemic and introduce maps in a fun mathematical way to regain a sense of the outdoor learning environment.

3. Mathematics Materials for Tomorrow’s Teachers (M2T2)
Room F118
Grades 3-8
JUDY ROCKE, University of Illinois
Participants will explore a small portion of the many free activities available through MSTE. Highlighted are activities that explore Algebra, Measurement, and Number Sense.

4. What’s All This Talk About “Thinking Classrooms” in Mathematics?
Room F103
Grades 3-12
GEORGE REESE, University of Illinois, Urbana-Champaign
The book by Peter Liljedahl is causing a stir. This session will present some of the ideas from the book and then have a discussion on what it would mean to implement them.

5. STEAMing up Algebra with Activities that Utilize Technology
Room Terrace Dining Room (south end of hallway with glass block walls)
Grades 8-12
KELLY WAMSER REMIJAN, IMSA PD/Curriculum Specialist & ICTM Director-at-large, Illinois Math & Science Academy – Center for Teaching & Learning, Belleville, IL
1. Response to Intervention Can Be Easy
Room F119
Grades K-12
GREG GIERHART, Murray State University, Murray, KY
Are you struggling with what to do with Response to Intervention? Do you need ideas for Tier 2 and Tier 3 instruction? What about a free program that might help you in designing a robust RTI program? This session will focus on using a free RTI Math Program grades K-12. Bring a device to see, plan and learn!

2. How Understanding Fractions Connects to Early Childhood Geometry Standards
Room F103
Grades K-5
CHERYL ANN LUBINSKI, Illinois State University
Using problems from classrooms, I will share ideas on how understanding fractions connects to the geometry standards from early childhood.

3. Tangrams and Area
Room F109
Grades 4-8
MIRAN BYUN, John A Logan College
This session will provide hands-on geometry activities through making tangram puzzle and online games to gain understanding of how the areas of polygons are related.

4. Perseverance and Mistakes in K-5 Math
Room F118
Grades K-5
ANNIE FOREST, Metro Chicago Mathematics Initiative at UIC
“Mistakes grow your brain!” is a common classroom mantra. Let’s explore ways to productively use mistakes in our math lessons!

5. How does an Airplane Fly? Answering with Mathematics!
Room F106
Grades 2-8
KUAN-CHUN CHEN, Southern Illinois University
What is the magic of flight? Let’s explore the relationship between mathematics and aircraft!

6. Ancient Geometry: Masterpieces with Insights for Today
Room Terrace Dining Room (south end of hallway with glass block walls)
Grades 6-12
CRAIG ROBERTS, Southeast Missouri State University
Ideas from ancient geometry will be discussed that have insights to help today’s student’s master geometric and related concepts.
SESSION III  
(11:20am – 12:20pm)

1. A Potpourri of Mathematics to Help You and Students  
Room F119  
Grades K-12  
GREG GIERHART, Murray State University, Murray, KY  
This session will offer a potpourri of math ideas for the math teacher to immediately take to a classroom to implement. Find out about math partner games, ModTown, Sierpinski Triangle and many other topics to discuss and show. Bring a device to access these marvelous math ideas for you and your classroom.

2. Understanding Place Value Using Grouping and Partitioning Problems  
Room F103  
Grades K-5  
CHERYL ANN LUBINSKI, Illinois State University  
Using problems from classrooms, I will share ideas on how to improve place-value understandings up to and including decimals. Handouts included.

3. Promote a Culture of Understanding  
Room F118  
Grades 3-9  
ANNIE FOREST, Metro Chicago Mathematics Initiative at UIC  
If you want to ignite thinking, you need interesting problems worth solving. Come find a few new favorites in this session.

4. An Analysis of Thinking-Aloud Method in Mathematical Problem-Solving Processes and Strategies of Asian textbooks – Take Division of the Fraction as an Example  
Room F109  
Grades 5-8  
HO-FENG CHUEH, Southern Illinois University  
This study investigates how textbooks from Asian countries integrating the Thinking-Aloud Method to the teaching of Division of the Fraction stead of using traditional ways.

5. Card Tricks Using Mathematics, not Magic or Card Manipulation  
Room Terrace Dining Room (south end of hallway with glass block walls)  
Grades -12  
ALBERT OTTO, Illinois State University  
I will present card tricks using ideas from mathematics rather than sleight of hand. Please bring a deck of playing cards.

6. Get Ready to Let Go of the “Too Little Time” with Decomposing Standards  
Room F106  
Grades K-12  
SHELLY MURPHY, Mascoutah School District  
ERICA LARSEN, Mascoutah School District  
There’s so much to do in so little time. Never have these words been truer. How do students gain transfer knowledge to make them lifelong mathematicians within a single school year? The answer is in the standards! This session will focus on determining essential learning standard, creating high rigor learning targets and developing action based success criteria. Get ready to let go of the “too little time.”
Luncheon
12:30 – 2:00pm
Conference Center Banquet Room

Presiding…………………………………………………………Jerry P. Becker

LUNCH MENU

Soup
(Broccoli Cheddar, Creamy Tomato, Chicken Noodle)

Sandwiches
(Mediterranean Veggie, Smoked Barbeque Chicken, Bacon Turkey Bravo, Turkey, Tuna, Steak & Arugula)

Salads
(Greek, Caesar, Greens)

Chips

Chocolate Chipper Cookies
Ice Tea /Lemonade/Soda
Coffee/Decaf/ Water

Greetings from ICTM .........................................................Annie Forest, Past President, ICTM
Metro Chicago Mathematics Initiative at UIC

Introduction of Speaker.......................................................Jie-Shi Liew
Southern Illinois University

Luncheon Speaker .............................................................Adam Poetzel
ICTM President, College of Education,
University of Illinois at Urbana-Champaign

Promoting Curiosity in the Classroom
Curiosity is a key ingredient in meaningful learning experiences. As math educators, are we being intentional about promoting this in our classrooms? “The biggest quest to learn anything is curiosity. If you are curious about something, you will go and dig.” (Rakesh Jhunjhunwala)

Thank you for attending today, we hope you enjoyed the sessions and learned new techniques you can implement in your classroom.

Continuing Professional Development Unit documentation is available at the check-in table.
Save the Date

The 37th Annual ICTM Conference will be

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