

MOMATYC

Missouri Mathematical Association of Two-Year Colleges

2013 Spring Conference



St. Louis Community College Wildwood Campus

2645 Generations Drive

Wildwood, MO 63040

(636) 422 – 2000



FLORISSANT VALLEY FOREST PARK MERAMEC WILDWOOD

Dear Conference Attendees,

On behalf of the Wildwood campus of St. Louis Community College, I am pleased to welcome you to the Missouri Mathematical Association of Two Year Colleges' annual conference. We are happy to host a conference that brings together instructors who are passionate about improving student learning in math. Student success, especially in the areas of math, science, and technology, is a pivotal factor in the role that the United States plays in global prosperity and the prosperity of future generations of Americans. The conference is an opportunity for you to learn and share from experts and colleagues about this critical endeavor. I hope that you are able to take away strategies that will help raise the level of your students' success, and share your own successes in the classroom with your colleagues.

I also hope you have some time to explore the city of Wildwood and to learn more about our campus. The city of Wildwood is one of the newest cities in west St. Louis County, founded just 18 years ago by residents of what was then unincorporated St. Louis County. Since then the city has developed a vibrant town center which boasts the Wildwood Hotel, a theater, many restaurants and shopping.

The Wildwood campus is the newest campus of St. Louis Community College, and was built in 2007 to serve the expanding population of west St. Louis County. The campus has an active student body, with a variety of clubs and service organizations and a chapter of Phi Theta Kappa that has recently been recognized for the third consecutive year as a 5-Star chapter.

Wildwood is a "green" campus, built with environmentally-friendly materials and architecture and was the first community college to receive the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) gold level certification. I hope that you will learn about the special features of our building during the conference by taking a tour on Friday with one of our student ambassadors.

If you have any questions or concerns during your time here on the Wildwood campus, please feel free to contact any of our staff members. They will be more than happy to help you.

Sincerely,

Pam McIntyre
President
St. Louis Community College at Wildwood



WILDWOOD

Let me take a moment to welcome you to the [City of Wildwood, Missouri](#) and provide some introduction to some of the amenities that will be available to you during your stay here April 4th through 6th.

Wildwood is a relatively young city of seventeen years and in that time we have accomplished quite a bit. The city ranks third in geographic size in the state of Missouri. There are approximately sixty-eight square miles contained within the city's borders. We also rank seventeenth in terms of population and have more than doubled in population since our incorporation in 1995.

Wildwood has been on Money magazines list of "Best Places to Live" and continues to rank high in quality of life as demonstrated by our recent "Best City" recognition in an annual West Newsmagazine reader's poll which includes the communities in western St. Louis County. This is the third time that the City has been recognized by those that live, work, and play here, and for that I cannot be more proud.

While you are here, you may want to get out of the conference room and get outside. It's spring and early April can be wonderful here. Right outside the door of the Wildwood Hotel are [paved trails](#) which will lead you through the Town Center area and to points east, west, north and south if you desire. You may even notice that the Wildwood Farms Community Garden has begun to grow new fruits, vegetables, and flowers for the growing season.

Wildwood is unique in the St. Louis area with it's Town Center development, taking the best of the past and using current building practices to create a very walkable environment that will provide you access to restaurants, movies, and other services that you may want or need during your stay. Having a Town Center area also helps to preserve large amounts of green space that results in more than a quarter of the city having parks operated by city, county or state. If the weather cooperates and you have transportation, take some time to get outside. I think you will appreciate the diversity of the environment here.

Finally, our brand new City Hall is just around the corner from your conference at the Wildwood Hotel and should need any services of our staff, we are here to assist and make your visit here memorable.

Timothy Woerther
Mayor, City of Wildwood

Conference at a Glance

Thursday, April 4, 2013

When	What	Where
2:00 – 5:00 pm	Pre-conference My Math Lab Event (Free for those who are registered for the conference; if you would like to attend, you must register for this pre-conference event).	Wildwood Campus (Room TBA)
6:00 – 10:00 pm	Reception and Conference Check-In <i>Join us for refreshments and conversation.</i>	Lindenwood University Wildwood Satellite Campus <i>(Located next to the Wildwood Hotel)</i>

Friday, April 5, 2013

When	What	Where
8:00 – 8:30am	Conference Check-In	Multipurpose Room (<i>first floor</i>)
8:00 – 8:15am	Speaker Orientation	Room 206 (<i>second floor</i>)
8:30 – 10:15am	Breakfast (ticket required); Opening Session <i>Models for Managing the Mean Math Blues</i>	Multipurpose Room (<i>first floor</i>)
10:30 – 11:20am	Breakout Session 1	Rooms 201- 209 (<i>second floor</i>)
11:30 – 12:20pm	Breakout Session 2	Rooms 201- 209 (<i>second floor</i>)
12:20 – 12:45pm	Vendor Displays	Multipurpose Room (<i>first floor</i>)
12:45 – 1:45pm	Lunch (ticket required)	Multipurpose Room (<i>first floor</i>)
2:00 – 3:50pm	Workshop Session	Rooms 201- 209 (<i>second floor</i>)
4:00 – 5:00pm	Business Meeting; please join us!	Multipurpose Room (<i>first floor</i>)
5:00 – 5:30pm	Vendor Displays	Multipurpose Room (<i>first floor</i>)
5:30 – 8:00pm	Optional Dinner Event (Additional Cost)	Wildwood Town Center <i>Meet in the hotel lobby to carpool.</i>

Saturday, April 6, 2013

When	What	Where
8:15 – 9:00 am	Continental Breakfast & Vendor Displays	Multipurpose Room (<i>first floor</i>)
9:00 – 9:50 am	Breakout Session 3	Rooms 201- 209 (<i>second floor</i>)
10:00 – 10:50	Breakout Session 4	Rooms 201- 209 (<i>second floor</i>)
11:00 – 12:30pm	Closing Session <i>(Light lunch and attendance prizes!)</i>	Multipurpose Room (<i>first floor</i>)

Conference Keynote:

Models for Managing the Mean Math Blues

The barriers to success in math are often rooted in student attitudes and negative thinking. This presentation gives simple models and tools that facilitate safe, productive math classrooms. Participants will learn how to help students reframe their “Mean Math Blues” into proactive expectations.

Cheryl Ooten

After 35 years of teaching mathematics from basic math through calculus (22 years at Santa Ana College) and five years working as a California licensed psychotherapist, Cheryl Ooten has retired to explore math education and spend time with family.

She is currently a Ph.D. student at Claremont Graduate University, a grades 3-4 volunteer grandmother at Mount Baldy School, and a frequent speaker at community colleges and math conferences.

She has had a lifelong (continuing) interest in lowering math anxiety and raising math excellence in the classroom which lead to authoring the book Managing the Mean Math Blues: Math Study Skills for Student Success (Pearson Education). In her spare time, Cheryl plays jazz piano, writes mathematics stories for children, and sings with her grandchildren and their friends.

Friday Breakout Session 1

Developmental Education in Missouri's Postsecondary Institutions: A State Perspective

Dr. Heather L. Mosley Linhardt , Missouri Department of Higher Education

Presider: Dr. Laurie McManus

Part of Missouri HB 1042 involved a directive to ensure all public higher education institutions "replicate best practices in remediation". This session will provide attendees with the results of a statewide institutional survey on current developmental education practices as well as a discussion of state plans for meeting this charge.

Developmental Education
General Interest

Excite, Engage, and Enrich Students in any Environment

Andrea Hendricks , Georgia Perimeter College

Presider: Becky Schantz

The presenter will share her experience with course redesign using ALEKS, an adaptive and personalized learning tool. Strategies to excite, engage, and enrich students in any type of learning environment, including traditional, lab-based, and online classes, will be discussed. The activities will be focused on Prealgebra to College Algebra courses.

Andrea Hendricks, Georgia Perimeter College

Commercial Presentation

Personalized Remediation in MyMathLab: Getting the Most out of the New Study Plan and Knewton

Irene Doo, Pearson Education

Presider: Lola Swint

Come to this session to discover the enhancements to the MyMathLab Study Plan, including a streamlined student interface, robust scoring, and the new Quiz Me option. Come also to learn Knewton and how this adaptive learning engine offers personalized recommendations based on sophisticated data analysis algorithms.

Commercial Presentation

Refocusing College Algebra at an open-enrollment HBCU

Dr. Ann Podleski, Harris-Stowe State University

Dr. Jon Corbett, Harris-Stowe State University

Presider: Chris Mahan

Refocusing College Algebra by modeling real-life examples can help both student attitudes and ability to use math in practical contexts. Examples of classroom activities and projects that show application of math content and thinking will be shared. Successes and challenges will be discussed, along with future direction for the course.

College Level
Instructional Strategies
General Interest

Revolutionizing Your Redesign

Jerraca Brown, Hawkes Learning System

Presider: Jason Boehm

Technology continues to play a vital role in course redesigns. It's important to keep the student experience in mind when selecting a technology system for your redesign that will help students succeed. What makes Hawkes stand apart from the rest? Come learn how our low-cost, mastery-based software can be the key to revolutionizing your math course redesign.

Commercial Presentation

Friday Breakout Session 2

Math Boot Camp at St Louis Community College

John Elliott, St. Louis Community College Meramec

Dr. Pat Suess, St. Louis Community College, Florissant Valley

Presider: Eric Lawrence

Thousands of students place into Pre-Algebra each year at STLCC, but many of them have taken algebra II or beyond. A quick, intense, review class was designed for these students and run for 2 summers. The presenters will share the design of the class, materials used, and results.

Developmental Education

Now--A Statewide Placement Policy from DHE: What Does It Mean?

Dr. Wanda Long, St. Charles Community College

Presider: Linda Tansil

This session will provide information that math faculty can use regarding the new effort from the Department of Higher Education to develop a statewide placement policy.

Developmental & College Level

General Interest

Piecing Together the Puzzle of Engaged Learning

Randy Gallaher, Lewis & Clark Community College

Kevin Bodden, Lewis & Clark Community College

Presider: Donna Kessler

For effective learning, students must be engaged. Facing an abundance of online resources, they often do not know where to begin. Guidance through these resources helps to engage students more fully, leading to better comprehension and retention of concepts. Because significant learning occurs outside of the classroom, it is vital that these resources be available when the students are "learning ready"™. The presenters will share techniques for solving this puzzle.

Developmental Education

Instructional Strategies

Distance Learning

Sabbatical Research: Developmental Math Course Redesign

Jennifer LeGrand, St. Charles Community College

Presider: Bev Meyers

Sabbatical research on best practices for developmental math course redesign will be shared in a three-part power point presentation. Part one is an overview of course redesign, part two centers on implementation & obstacles, and part three is about evidence-based decision making.

Developmental Education

Instructional Strategies

General Interest

Take Five!

Debbie Char, St. Louis Community College Forest Park

Presider: Efrem Negash

Do your pearls of wisdom ricochet off the slumped bodies of dozing students? Experience a variety of easy, low-stress, five-minute activities to reset their attention clock, energize your class, reinforce learning, assess comprehension, address misconceptions, and engage your students at every level!

Developmental & College Level

Instructional Strategies

Friday Afternoon Workshop Sessions

Basic Mathematics Activities that Remediate and Motivate

Nancy Crisler, Washington University-St. Louis

Presider: Kim Granger, St. Louis Community College Wildwood

For some students, even the lowest level mathematics course a college offers may present challenges. Our neediest basic mathematics learners can often benefit from specially-targeted activities that are aimed at overcoming blocks to conceptual understanding. Participants in this workshop will explore a variety of hands-on activities that help students finally understand the meaning of important such as perimeter, area, proportions, and integer addition.

Developmental Education

Teacher Preparation

The Chinese Abacus & Number Sense

Cheryl Ooten, Emerita Santa Ana College

Presider: Linda Tansil

Be introduced to fascinating Chinese mathematical symbols and systems. Through world history of abacus development, learn how and why the Chinese used the abacus. Practice basic operations (addition, subtraction, and multiplication) on a Chinese abacus to discover its advantages and use for developing student number sense.

General Interest

Developmental & College Level

The Emporium Model. We got it. We are using it. Come see how

Kevin Wheeler, Three Rivers Community College

Presider: Jennifer LeGrand

During the Spring of 2012, Three Rivers College embarked on the goal to improve their developmental mathematics program. They chose the emporium model. Come see why they did, how they prepared to implement, how the first semester went and how it is going now. We hope this will lead to a discussion on what other community colleges are doing within the state

Developmental Education

Instructional Strategies

Best Practices Roundtable for Emporium-Style Courses

Chris Mahan, St. Louis Community College Wildwood

Presider: Jennifer LeGrand

Do you have an amazing Emporium Course best practice? Have you taught an Emporium Course and would like to share your thoughts with your peers? Or are you curious to know what these courses are all about? Then this is the session for YOU!

Developmental Education

Instructional Strategies

Growing Down with Pascal's Triangle

Chip Day, St. Louis Community College Florissant Valley

Presider: Dr. Mike Lueke

Some mathematical models deserve a place throughout the curriculum. Discover all of the ways Pascal's triangle can be used to enhance making mathematical connections.

College Level Courses

General Interest

Saturday Breakout Session 4

Animating Transformations of Basic Function Using Power Point

John W. Coburn, St. Louis Community College, Florissant Valley

Presider: Mike Young

This presentation will offer convenient and classroom-ready tools for increased success in teaching transformations. A symbolic presentation with static graphs has always met with moderate success, but when these are complemented by numerical demonstrations and animated graphs, students can *experience* the transformation, with understanding running deeper and connections retained longer.

College Level Courses

General Interest

Instructional Strategies

Are Your Students Trapped by Factoring? Set them Free by Boxing them In!

Donna Kessler, Moberly Area Community College

Presider: Kathy Ramsey

Participants will discover a way to eliminate the trial-and-error from teaching factoring by teaching students how to organize their work. Connections will be made between multiplication of polynomials, factoring, and completing the square. Bring a laptop and graphing calculator if available.

Developmental & College Level

Instructional Strategies

Constant vs. coefficient? Changing the question to change assessment

Dr. Laurie McManus, St. Louis Community College Meramec

Presider: Lola Swint

This interactive presentation will explore how we can change the questions that we ask our students, in order to assess a deeper level of understanding. Participants will be introduced to a model for critical reflection on choices for assessing mathematical learning and understanding.

College Level Courses

General Interest

Instructional Strategies

Rethinking Business Calculus in the Era of Spreadsheets

Dr. Mike May, SJ, St. Louis University

Presider: Bruce Washington

Since the primary computational tool used in the business world is a spreadsheet rather than a graphing calculator, this report looks at efforts to rethink brief calculus as business calculus with systematic use of Excel. This follows the recommendations of the MAA CRAFTY report. Student and business faculty reaction discussed.

College Level

Instructional Strategies

General Interest

A Review of Developmental Mathematics Initiatives at Achieving the Dream Colleges

Dr. Pat Suess, St. Louis Community College, Florissant Valley

Presider: Lisa Whetstone

What are Achieving the Dream (ATD) Colleges doing to increase student success in Developmental Mathematics? This session will provide a summary review of ATD programs and their reported success to date. Participants are invited to share their experiences with these and other initiatives.

College Level

Instructional Strategies

Saturday Breakout Session 5

Help Students Turn Mistakes into Deeper Mathematical Learning

Dr. H Michael Lueke, St. Louis Community College, Forest Park

Presider: Seth Daugherty

Ranging from number and operation through algebra, statistics, and calculus, this presentation will highlight examples of student work and offer constructive approaches for using it and the errors that frequently arise to help students learn mathematics in a deeper, more connected way.

**Developmental & College Level
Instructional Strategies**

St. Louis STEM Scholars Share Calculus Honors Projects

Dr. Pat Suess, St. Louis Community College, Florissant Valley

Student Presenters from St. Louis Community College, Florissant Valley

Presider: Chip Day

Student recipients of scholarships funded by the National Science Foundation will share their work on honors projects for their mathematics courses. The process of topic selection, project definition, completion of tasks, and final reporting will be discussed. Students will also explain the role of the St. Louis STEM (Science, Technology, Engineering and Mathematics) Scholars Academy in their personal academic pursuits.

**College Level
Instructional Strategies**

Teaching College Algebra: Putting Students in the Driver's Seat

Teri Graville, St. Louis Community College, Wildwood

Presider: Mike Young

Getting students to take responsibility for their own learning is a challenge for all instructors. This will be a sharing of strategies used in a college algebra class designed to get students involved in both the material and in the learning process.

**College Level
Distance Learning**

Using GeoGebra for Design Projects in Elementary & Intermediate Algebra

Rita Pernik, St. Louis Community College, Florissant Valley

Dr. Rokhaya Ndao, St. Louis Community College, Florissant Valley

Presider: John Coburn

This will be a hands-on session, where participants will be shown design projects and classroom activities used in Elementary and Intermediate Algebra courses. They will have an opportunity to see samples of students work and create their own designs.

**Developmental Education
Instructional Strategies**

My Conference Notes:

My "To-Do" List:

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My "Great Idea" List:

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My Conference Notes:

Session Title & Presenter: _____

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