

MOMATYC

Missouri Mathematical Association of Two-Year Colleges

2017 Spring Conference



Three Rivers College

Poplar Bluff, MO

Keynote Guest: [Barry Monk](#)

Statistics – Insights for Teaching

Statistics can be an exciting subject to teach, but can also be a daunting one. How much probability should be included? Which topics are essential? How can one make it more interactive? What's the appropriate role of technology? In this presentation, Statistics author Barry Monk addresses these questions and discusses varied approaches to teaching the subject, the main takeaways, and strategies for spicing up the class.

Barry Monk is a Professor of Mathematics at Middle Georgia State University in Macon, Georgia. He is one of the authors of the Elementary and Essential Statistics textbooks published by McGraw-Hill. Barry received a Bachelor of Science in Mathematical Statistics, a Master of Arts in Mathematics specializing in Optimization and Statistics, and a Ph.D. in Applied Mathematics, all from the University of Alabama. Barry has been teaching Introductory Statistics since 1992 in the classroom and online environments.

Notes:

Conference at a Glance

Thursday, March 30 th 2017		
When	What	Where
6:00 – 10:00pm	Registration and Reception	Salon D at Holiday Inn Poplar Bluff
Friday, March 31 st 2017		
6:00 – 8:15am	Breakfast (Sign up for IHG rewards program at Holiday Inn) Coffee, pastries, and fruit tray available at the conference.	Holiday Inn Poplar Bluff
8:15 – 9:30am	Opening Session: <i>Barry Monk: Statistics – Insights for Teaching</i>	Plaster Free Enterprise Building; Room 108
9:45 – 10:35am	Breakout Session 1	See Schedule Below
10:45am – 12:05pm	Traveling AMATYC Workshop: Rachel Bates	Plaster Free Enterprise Building; Room 108
12:10 - 12:35pm	Pearson Platinum Sponsor Presentation	Plaster Free Enterprise Building; Room 108
12:35 – 1:30pm	Lunch: <i>Pranzo</i> (Ticket Required)	Plaster Free Enterprise Building; Room 108
1:30 – 2pm	Visit with Vendors	Hallway outside of Room 108
2 – 2:50pm	General Session: <i>Missouri State Pathways Taskforce Update</i>	Plaster Free Enterprise Building; Room 108
3 – 3:50pm	Breakout Session 2	See Schedule Below
4 – 4:50pm	Breakout Session 3	See Schedule Below
5 – 5:45pm	General Session and Business Meeting Attendance Prizes	Plaster Free Enterprise Building; Room 108
6:00 – 10:00pm	Dinner: <i>Cena</i>	Tio's Bar and Grill :1135 Herschel Bess Blvd 63901
Saturday, April 1 st 2017		
8:00 – 9:00am	Breakfast at the Hotel (included with hotel registration)	Holiday Inn Poplar Bluff
8:00 – 9:00am	Coffee, vegetable, and pastry spread available at the conference.	Plaster Free Enterprise Building; Room 108
9:00 – 9:50am	General Session: Accurately Place Students	Plaster Free Enterprise Building; Room 108
10:00 – 10:50am	Breakout Session 4	See Schedule Below
11:00 – 11:50am	Closing Session Attendance Prizes	Plaster Free Enterprise Building; Room 108



Pearson

Get the Most Out of
MyMathLab® and
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MyMathLab™ and MyStatLab® with Integrated Review

How prepared are the students entering your course? Some may arrive ready to dive in, while others struggle with prerequisite concepts. Integrated Review courses can help with student preparedness, which in turn can impact retention and help more students succeed.

Miller Math Ideas IR
Section 5.R

Chapter 5 Integrated Review

Skills Check
Start by taking the Chapter 5 Skills Check Quiz. If you master the Skills Check, move on to the next section. If not, proceed to the Learning Objectives listed below.

Learning Objectives
Work through each objective for the integrated review section. You can access additional review materials, including worksheets and videos, available in many Integrated Review courses.

Objective 5.R.1: Use exponents	Video Review	Integrated Review Worksheet
Objective 5.R.2: Use the power rules for exponents	Video Review	Integrated Review Worksheet
Objective 5.R.3: Know the meaning of relational operators	Video Review	Integrated Review Worksheet

Skills Review
Finish by completing the Chapter 5 Skills Review Homework.

Students begin each chapter by completing a Skills Check assignment to pinpoint which topics, if any, they need to review.

Additional review materials, including worksheets and videos, are available in many Integrated Review courses.

A personalized review homework assignment will provide extra support for the students who need it.

MyMathLab and MyStatLab Integrated Review courses address gaps in preparedness through a personalized learning experience.



Breakout Session Speaker Contact Information

Dr. Barry Monk Barry.monk@mga.edu	Author & Professor of Mathematics Middle Georgia State University
Dr. Rachel Bates rachel.bates@redlandsc.edu	Chairperson and Professor of Mathematics Redlands Community College
Patti Jones jonespatti@more.net	Technical Trainer www.more.net
Dr. Mike Lueke hblueke@stlcc.edu	Associate Professor of Mathematics St. Louis Community College - FP
James Adair adair@dsc.edu	Associate Professor of Mathematics Dyersburg State Community College
Dave Sobecki davesobecki@gmail.com	Associate Professor, Author and All-Around Good Guy Miami University Hamilton
Kevin Wheeler kwheeler@trcc.edu	Mathematics Instructor Three Rivers College
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Breakout Session Schedule & Descriptions

Breakout Session 1

9:45 – 10:35am

MyMathLab - Using new features to address new state standards

Speaker: Tim Wilson	Presider: Lisa Harden	Topics: Issues, Instructional	Room: 108
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We will discuss new features in MyMathLab and how they can be used to address the new state standards. We will discuss how the flexibility and customization can be used to address the many needs and challenges facing the coming changes. See how our new features can help address learning gaps and help create an engaging interactive classroom.

DSCC Success Rate in Online Statistics

Speaker: James Adair	Presider: Jim Frost	Topics: Learning, Statistics	Room: 103
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This presentation will provide information on best practices that were used to move the success rate of MATH 1530 online from 50% to over 75%.

Flipping your Class...Without Flipping Out

Speaker: Kim Granger	Presider: Pat Suess	Topics: Developmental Mathematics, General Interest, Instructional Strategies	Room: 109
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Kim has been flipping her classes (Intermediate Algebra through Calculus) for several years now. Not only has it improved student learning, but it has been a very enjoyable way to teach, too! In this session, Kim will provide a brief overview of the rationale behind flipping classes and what it means, and she will share some of the mistakes she has made and successes she has had with flipping. She will also share some of the specific activities and resources she has used to make flipping easy to accomplish and enjoy.

General Session

10:45am-12:05pm

Statistics Pathways

Speaker: Rachel Bates		Topics: Statistics, Pathways	Room: 108
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Many universities and colleges across the United States are currently implementing mathematics pathways. This faculty workshop will focus specifically on the Statistics Pathways. Additionally, the workshop will explore the need for statistical reasoning and skills required by academic majors outside the science-technology-engineering-mathematics (STEM) disciplines. The presenter will provide up-to-date research and will share implementation dialogue regarding the adoption of beginning statistics as an alternative to College Algebra.

General Session

2-2:50pm

Missouri State Pathways Taskforce Update

Speaker: Tamela Randolph, Kim Granger, and Donna Kessler		Topics: Pathways	Room: 108
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1. A brief overview of what the Movement in Missouri has been and where it came from.
2. Share the recommendations of the Task Force; items that have been completed, are currently underway, and have not been tackled yet.
3. Share the SLOs from the four pathway courses

Breakout Session 2

3-3:50pm

Missouri State Pathways Taskforce Update: A continued Discussion

Speaker: Tamela Randolph, Kim Granger, and Donna Kessler	Presider: Sarah Sexton	Topics: Pathways	Room: 108
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This will be a continued discussion from the previous general session.

The (Maddeningly Slow) Growth of a non-STEM Pathway

Speaker: Dave Sobecki	Presider: Pat Suess	Topics: Mathematics for General Education	Room: 109
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The most prominent movement in college math over the last several years involves pathways to completion for non-STEM students. From a math literacy course designed to replace beginning and intermediate algebra for developmental students, to corequisite models and quantitative reasoning courses at the college level, it's an exciting time for curriculum development. I've spent the last two years championing a complete overhaul of the lower-level math offerings at Miami University Hamilton and Middletown, and would like to share the ups and downs that go into a challenging, but important and rewarding pursuit.

I'll provide an overview of our courses and the materials we're using, as well as share some ideas from across the nation. I'll also talk about navigating the administrative and logistical twists and turns that go into significant curricular changes.

It's a Google World

Speaker: Patti Jones	Presider: Mike Lueke	Topics: Instructional Strategies, Teacher Preparation	Room: 103
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Many student entering your classroom are coming from a Google world. From Drive to Apps students now have access to a tremendous amount of learning activities. Come see how you can use this to transform your learning environment.

Breakout Session 3

4-4:50pm

Pathways and Co-Requisites: A Happy Relationship

Speaker: Tamela Randolph	Presenter: Pat Suess	Topics: Developmental Mathematics, Mathematics for General Education	Room: 108
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Participants will learn about the pathways and co-requisite work at Southeast Missouri State University from an administrator's perspective as well as a faculty member's perspective.

Desmos 2.0

Speaker: Kevin Wheeler	Presenter: Mike Lueke	Topics: Distance Learning, Instructional Strategies, Instructional Technology	Room: 109
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Are you familiar with the basics of Desmos but have not gone above just the graphing? This presentation will show you what else Desmos can do besides just graphing. You will see how students can get actively engaged with each other. Have an itv class? These activities work really well in this environment. If you are not familiar with Desmos, we can spend a few minutes showing you what it does.

Is combining College Algebra and Intermediate Algebra possible? MA 129 – College Algebra with Integrated Review at Southeast Missouri State University

Speaker: Laurie Wern Overmann	Presenter: Jim Frost	Topics: Curriculum, General Interest	Room: 103
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In Spring 2016, Southeast Missouri State University began to devote serious thought to the possibility of creating a co-requisite course combining College Algebra and Intermediate Algebra. We built a five-credit hour course centered on the idea of developing student proficiency with broad families of functions. Students can enter this course with the prerequisites required for a Developmental or Intermediate Algebra course, but, if successful, leave with a course satisfying their College Algebra requirement. Highly-motivated students with a strong work ethic were encouraged to enroll in a pilot version of this course for Spring 2017 which is a mixture of lecture and group activities. The environment is designed to encourage questions and develop mathematical reasoning. Thus far, the results have been promising.

General Session

9-9:50am

Multiple Measures of Assessment: Accurately Placing Students

Speaker: Various Faculty Members from Across the State	Topics: Developmental Mathematics, Placement and Assessment	Room: 108
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This will be a roundtable discussion of how multiple measures are used or are planning to be used across the state. Many schools have already implemented a form of multiple measures and many schools are planning to implement soon. This discussion will allow representatives from various schools to share what they are doing or planning to do.

Breakout Session 4

10-10:50am

Writing in the Mathematics Classroom to Improve Student Learning and Student Success

Speaker: Kim Granger	Presenter: Lisa Harden	Topics: General Interest, Mathematics for General Education, Instructional Strategies	Room: 108
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Kim double-majored in Mathematics and English, and she taught a variety of subjects at the junior high level before becoming a college mathematics professor. This background has directed her to pay attention over the years to the research that suggests a strong connection to writing across the curriculum and student learning. In this presentation, Kim will share some of the various writing activities she has used at the college level. There are two branches of activities Kim will share: (1) writing activities that are intended to deepen student understanding of mathematical concepts and (2) writing activities that are intended to increase student success.

Virtual Hands-On Activities: Using Desmos Activity Builder to Strengthen Understanding

Speaker: Mike Lueke	Presenter: Pat Suess	Topics: General Interest, Instructional Strategies, Instructional Technology	Room: 301 Westover Academic Building
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Understanding graphical representations of algebraic relationships is a major focus of many developmental and college-level math courses. Desmos offers an opportunity for teachers to build free, interactive activities that engage students in big ideas such as rates of change, transformations, or formulas in a new way. The presentation will include demonstration of already-built activities as well as a tutorial for teachers wanting to create original activities.

