



Alabama Council of
Teachers of Mathematics
presents their annual



FALL FORUM

November 3-4, 2016
McWane Science Center • Birmingham, Alabama

www.actm.education

<http://acotom.wildapricot.org>



McWane Science Center

200 19TH STREET NORTH • BIRMINGHAM, AL 35203 • (205) 714-8300

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2016 ACTM Fall Forum Committees

Conference Chair	Jeremy Zelkowski
Program Chair	Cathy Jones
Conference Membership Chair	Rebecca Brown
Finance Chair	Michele Matin
ACTM Materials	ACTM Volunteers
Signs and Printing	Jeremy Zelkowski
Registration	Sandy McCarthy
Vendor Exhibits	Jennifer Gilbert
	Beverly Kimes
McWane Science Center	Lyndsie Garrett
Equipment	McWane IT Support
Speaker Support	McWane IT Support
Volunteer Organizers	Joel White
	Ethan Richardson
Reception	ACTM Board Members

ACTM expresses sincere appreciation to the McWane Science Center Events Staff and Leadership for assisting with the 2016 Fall Forum!

Conference Highlights

Thursday, November 3, 2016

- 9:00a **Registration Opens** – Events Center Entrance Area
Level 3 – McWane Science Center – Level C Parking
Use Elevator from first floor lobby or in parking garage to Level 3
- 10:00a—11:15a **Regular** - 50-minute morning sessions begin
Extended - 75-minute morning workshops begin
- 11:15a-12:50-p **Lunch on Your Own**
- 10:00p—4:30p **Exhibits Open** – Events Center Vendor & Exhibit Area, Level 3
- 1:00p—2:15p **Keynote Speaker—Diane Briars** – Lower Level (LL), Lunch Hall B
NCTM Past President (2014-2016)
- 2:30p—3:45p **Regular** – 50-minute afternoon sessions begin
Extended Sessions – 75-minute afternoon workshops begin
- 4:00p—4:45p ACTM Annual Business Meeting

Friday, November 4, 2016

- 7:30a **Registration Opens** – Events Center Entrance (Level C- Parking)
- 7:45a—2:30p *Exhibits open – Events Center*
- 9:00a **Regular** - 50-minute morning sessions begin
Extended - 75-minute morning workshops begin
- 12:00p—1:00p **Lunch served in Lunch Hall B – Lower Level (LL)**
Scholarship winners will be announced.
- 1:10p **Extended** -75-minute afternoon workshops begin
Regular - 50-minute afternoon sessions begin
- 2:15p **Vendors & Exhibits Close**
- 2:30—2:45p **Closing Session in Lower Level Lunch Hall B (LL)**
****Door Prizes*** (must be present to win)*

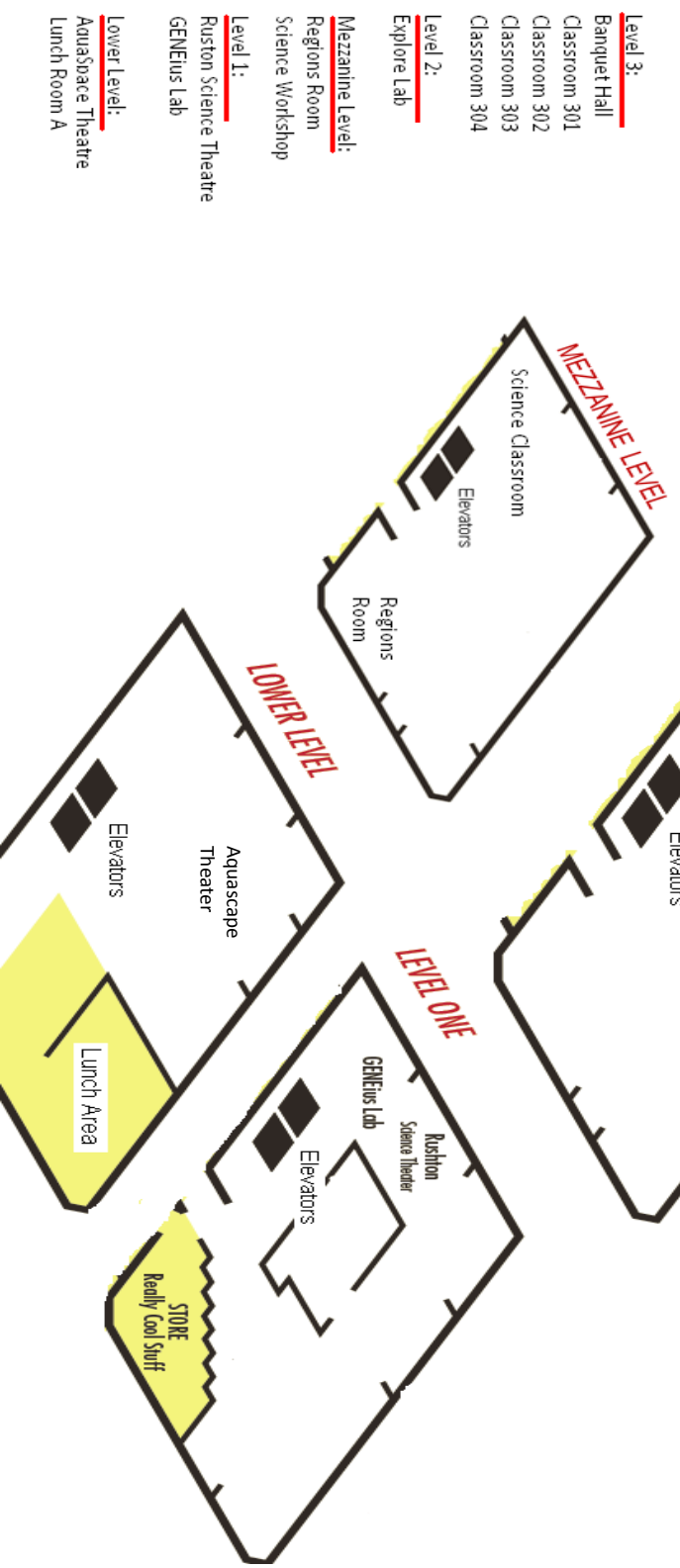
**ACTM Welcomes
District and School Administrators!**

McWane Science Center Map

FINDING YOUR WAY AROUND

ACTM attendees should park on Level C and higher in the McWane Center Parking Garage.

On level C in the parking garage, the EVENTS CENTER entrance is located about 20 yards from the elevator bank. Look for signs on level C in the parking garage for guidance!



- Level 3:
 - Banquet Hall
 - Classroom 301
 - Classroom 302
 - Classroom 303
 - Classroom 304
- Level 2:
 - Explore Lab
- Mezzanine Level:
 - Regions Room
 - Science Workshop
- Level 1:
 - Ruston Science Theatre
 - GENIUS Lab
- Lower Level:
 - AquaSpace Theatre
 - Lunch Room A

McWane Science Center Information and Announcements

Registration—Enter through glass doors on parking garage level C. *Registration & Check-in WILL BE through the “Events Center” entrance in the parking garage located on Level C.*

Vendors & Exhibits—Level 3, by registration

Workshops & Sessions on Thursday and Friday:

Classrooms 301, 302, 303, 304 (Level 3)
Explore Lab (Level 2)
Regions Room (Mezzanine-by stairs)
Science Classroom (Mezzanine-by stairs)
Rushton Theater (Level 1)
GENEius Lab (Level 1)
Lunchroom Area Room A (Lower Level - LL)
Lunch Hall B (Lower Level - LL)

**All attendees are invited to the *ACTM Business Meeting*
At 4:00 pm, November 3^d
*In the Classroom 301, Level 3***

Friday Lunch

Lunch Hall B (Lower Level - LL)

McWane Science Center

All facilities are smoke free.

Registration Dates of Interest

Information is located on the ACTM website. Extended sessions, which require tickets, will be assigned on a first come, first served basis as registrations are received. All registrations will be conducted online at <http://ACTM.education> or on-site at the McWane Science Center.

Parking Locations

Parking will be free in the McWane Science Center lot on Levels C and higher. Tokens will be available to ACTM conference attendees at the registration/check-in desk when you leave.

Registration

Registration and check-in for will be at the end of the entrance hallway to the Events Center on Level 3 in the parking garage.

Meal Functions

Lunch Thursday is not provided. There are a number of restaurants within walking distance of the McWane Center.

Each participant will receive a lunch ticket for Friday in their conference materials.

Lunch will be served Friday, November 4th, in the **Lunch Hall B (Lower Level)** from 12-1pm.

Vendor Exhibits

Vendor exhibits will be in Events Center Exhibit Area near the registration desks on Level 3.

Ticketed and Non-Ticketed Sessions

Extended Sessions – Ticketed Workshops: The workshops last 75 minutes and usually consist of some type of hands-on experience. Enrollment is limited. Spaces in workshops are reserved on a first come, first serve basis during registration. Those who register on site will participate in workshops on a space available basis only and may select tickets for such sessions in the registration area.

Regular Sessions: The sessions last 50 minutes and do not require a ticket. Space availability is based on room occupancy size and available computers (for computer labs).

Color-Coded Grade Bands (for online program only)

Early Childhood Sessions **K-2 are highlighted in ORANGE**

Elementary Sessions **3-6 are highlighted RED**

Middle Grades Sessions **6-8 are highlighted GREEN**

High School Sessions **9-12 are highlighted BLUE**

Cross-over grade band and/or General interest sessions are in **Bold BLACK**

Special Needs

It is the policy of McWane Science Center to provide reasonable accommodations for environmental and program accessibility for persons with disabilities. Individuals in need of other services should contact McWane Science Center two weeks prior to the conference. Elevators are onsite for navigating floor to floor.

Certificate of Attendance

All conference attendees may pick up a certificate of attendance at the registration/check-in location. It is the responsibility of each attendee to register his or her own professional development hours with their school system.

*****ACTM does not provide CEU credits*****

Vendors and Exhibitors

Vendors and exhibitors will be located in Events Center Exhibit Area.
The exhibit area will be open Thursday after 10:00 a.m. and
Friday from 7:45 a.m. until 2:15 p.m.

ACTM Exhibitors 2016
Alabama Education Association
Alabama Learning Exchange (ALEX) at UAB
Apple Seed
Carnegie Learning, Inc.
Curriculum Associates
ExploreLearning
Houghton Mifflin Harcourt Publishing
It's About Time (IAT)
McWane Science Center
Origo Education
Pearson Publishing
Students for the Improvement of Mathematics Education An NCTM Student Affiliate
National Council of Teachers of Mathematics--NCTM

Program by Time Slots on Thursday, November 3rd

Lead Speaker	ID#	TITLE OF PROPOSED SESSION THURSDAY, NOV 3	Grade Band Focus						Start Time	Session length (mins)	Room & Level
			K-2	3-5	6-8	9-10	11-12	13+			
Stefanie Livers	R1	Association of Mathematics Teacher Educators (AMTEA)	X	X	X	X	X	X	10am	50	Regions Room Mezzanine Level
Jane Owen	R2	Help Prepare Students for Testing with Online Simulations		X	X	X			10am	50	302 Level 3
Denise Peppers	E1	Dividing Decimals Conceptually Using Cuisenaire Rods		X	X				10am	75	301 Level 3
Derrick Ward	R3	Numerology For Teachers (differentiating Instruction Through Numbers)	X	X	X	X	X		10am	50	303 Level 3
Amanda Haskins	E2	Number Sense Routines – How Does Data Drive Instruction?	X						10am	75	GENEius Lab Level 1
Tanya Barnes	R4	ACT Aspire Math Data Interpretation		X	X	X			10am	50	Rushton Theater Level 1
Patricia Glaze	E3	Algebra Tiles				X	X		10am	75	304 Level 3
Melissa Campbell	R5	Making it Stick: Strategies for ELL Students in the Math Classroom	X	X					10am	50	Explore Lab Level 2
Lunch on Your Own—11:15-1:00											
Keynote with Diane Briars 1:00-2:15 Lunch Room B – Lower Level LL											
John Abby Khalilian	E4	Drinking and Driving...What's Math Got to Do with It?				X	X	X	230pm	75	301 Level 3
Deedee Hendrix	R7	Explore Increasing Number Sense Through Small Group Instruction	X						230pm	50	GENEius Lab Level 1
Janet T. Jenkins	R8	Using computer programming activities to teach mathematical reasoning		X	X	X	X	X	230pm	50	Rushton Theater Level 1
Dr. Tina Rye Sloan	E5	Fostering Collaboration, Communication, and Connections with Math Games		X					230pm	75	303 Level 3

Lead Speaker	ID#	TITLE OF PROPOSED SESSION THURSDAY, NOV 3	Grade Band Focus						Start Time	Session length (mins)	Room & Level
			K-2	3-5	6-8	9-10	11-12	13+			
Nicolette Nalu	R9	Improving mathematics for all students through co-teaching collaborations		X					230pm	50	Science Classroom Mezzanine Level
Peggy Franks	R10	What Can Be Done Mathematically with a Deck of Cards? (This is an extended session)		X	X				230pm	75	Explore Lab Level 2
Jeremy Zelkowski	E6	Teaching the data, statistics, & probability standards in high school math			X	X	X	X	230pm	75	304 Level 3
Kyoko Johns	E7	Teaching Math with Literature Across the Curriculum: If the World Were a Village		X					230pm	75	Regions Room Mezzanine Level
Shelia McGee Ingram	E8	Assessment in the Mathematics Classroom: Measurement of Student Learning		X	X	X	X	X	230 pm	75	302 Level 3
Kelli Holland	R11	The Journey to Standards-Based Teaching and Learning	X						230pm	50	Lunch Area Room A Lower Level LL
Jeremy Zelkowski	R12	ACTM Annual Business Meeting	X	X	X	X	X	X	400pm	45	301 Level 3

Thursday Registration is from 9:00 AM - 4:30 PM
Event Center Entrance (Level C from Parking Garage)

***** All Forum Attendees Must Register*****

Thursday Featured Keynote Session

1:00—2:15 PM

Featured Session

Session K1 **Collaborate, Communicate, Connect:** **Lunch Hall B**
1:00p-2:15p **High-Leverage Practices to Turn** **Lower Level**
 Standards into Learning
 Grades K-12

Diane Briars

National Council of Teachers of Mathematics Past President (2014-2016)

NCTM's *Principles to Actions: Ensuring Mathematical Success for All* presents a set of strongly recommended, research-informed effective teaching practices, along with the supportive conditions, structures, and policies required to implement these practices successfully and support each and every student's learning mathematics at a high level. Implementing these practices is collaborative, rather than individual, teacher work. But where to start? In this session, we'll examine high-leverage actions—those that will produce the greatest impact for your effort—in enacting the effective teaching practices and guiding principles in your classroom, school, and district.

All attendees are invited to the
ACTM Business Meeting
At 4:00 pm, November 3rd
In the 301 Level 3

The ACTM Executive Board will hold its business meeting.
Candidates for offices will be presented and voted upon.
Nominations for positions will be accepted from the floor.

*****Executive Committee Members Required*****

Election of officers for 2016-2018
Announcement of Scholarship Winners
Announcement of Teacher Grant Winners

Find out how YOU can be involved in ACTM

Thursday, November 3, 2016

Major Grade Band Focus, General Interest Sessions

Session R1 **Association of Mathematics Teacher Educators of** **Regions Room**
10a-10:50a **Alabama (AMTEA)** **Mezzanine Level**
 Grades K-16, Teacher Education

Join us as we work together to improve the teacher education and professional development in Alabama. This is a diverse group of individuals including master teachers, professional development leaders, college and university math faculty, and education faculty. We encourage all those who help educate future K-12 mathematics teachers and improve existing teachers' knowledge and practices to join AMTEA and participate.

This will be an official gathering for AMTEA for which folks can collaborate and discuss future meetings across the state.

Stefanie Livers
Out-Going President, AMTEA
The University of Alabama

Megan Burton
In-Coming President, AMTEA
Auburn University

Topics worthy of discussion

1. EdTPA and scheduling
2. AMSTI certification for preservice secondary (6-12) mathematics teachers
3. *Mathematics Education Teacher – Partnership*, update
4. Mathematics Praxis Tests (Secondary & Elementary)

Session R2 **Help Prepare Students for Testing with Online** **302**
10:00a-10:50p **Simulations** **Level 3**
 Grades 3-10

Learn how online simulations help teachers take advantage of research-proven instructional strategies and help students of all ability levels develop conceptual understanding in math while preparing them for testing. Teachers can supplement and enhance instruction with powerful interactive visualizations of concepts. Students can manipulate key variables, generate and test hypotheses, and engage in extensive "what-if" experimentation.

Jane Owen
Explore Learning

**Twenty-First Annual Conference of the
Association of Mathematics Teacher Educators**
Thursday - Saturday, Feb 9-11, 2017, Orlando, Florida
Visit <https://www.amte.net/conferences/conf2017> for more information

Session R3 **Numerology For Teachers: Differentiating Instruction** **303**
10:00a-10:50a **Through Numbers** **Level 3**
 Grades K-12

Numerology is the science of numbers, and it is used to understand human behavior, learning styles and personality types. Using my latest book *Numerology for Teachers* (available on amazon.com), this fun-filled session will show educators how to evaluate strengths, weaknesses, learning styles, and personality types, in order to develop relevant differentiation strategies. By understanding our students better, educators will build strong relationships, as well as identify the specific needs of each child. I have taken this ancient number system, developed by Pythagoras, and I have modified it to meet today's challenges. Not only can educators use this system for students, they can also use these strategies for positive team building, and an overall positive school climate.

Derrick Ward
Conyers Middle School

Session R4 **ACT Aspire Math Data Interpretation**
10:00a-10:50a **Grades K-10 and Administrator**

Rushton Theater
Level 1

This session will assist the participant in understanding ASPIRE mathematical reporting categories, justification and explanation skills progressions. Participants will also acquire knowledge of how to pull data from their school's Aspire spreadsheet to inform classroom and improve classroom instruction. Participants will learn how to better focus their instruction utilizing the mathematical practices so as to directly affect student performance as measured by ASPIRE.

Tanya Barnes
AMSTI UM

Does your work involve supervising or coaching teachers?
Go to www.mathleadership.org to learn about the National Council of Supervisors of Mathematics (NCSM)

NCSM Fall Leadership Conference
It's TIME—Themes and Imperatives in Mathematics Education
St. Louis, MO
November 16, 2016

Perennial Math Competitions Announcement

Registration and Flyers available at
<http://perennialmath.com/onsite-tournament>
Birmingham Southern College- Nov 12
University of Tennessee Chattanooga- Dec 17
University of Mobile- Feb 18
Tupelo- March 4

Thursday Featured Session

1:00—2:15 PM

Session K1 **Collaborate, Communicate, Connect:** **Lunch Hall B**
1:00p-2:15p **High-Leverage Practices to Turn** **Lower Level LL**
 Standards into Learning
 Grades K-12

Diane Briars

National Council of Teachers of Mathematics Past President (2014-2016)

NCTM's *Principles to Actions: Ensuring Mathematical Success for All* presents a set of strongly recommended, research-informed effective teaching practices, along with the supportive conditions, structures, and policies required to implement these practices successfully and support each and every student's learning mathematics at a high level. Implementing these practices is collaborative, rather than individual, teacher work. But where to start? In this session, we'll examine high-leverage actions—those that will produce the greatest impact for your effort—in enacting the effective teaching practices and guiding principles in your classroom, school, and district.

Session E8 **Assessment in the Mathematics Classroom:** **302**
Ticketed **Measurement of Student Learning** **Level 3**
2:30p-3:45p **Grades 3-13+**

Assessment is an essential part of teaching and learning. Many teachers find that changing the way they assess their students' learning significantly improves their teaching effectiveness. This session will begin with a brief presentation designed to provide a framework for assessment, measurement, and evaluation. Participants will acquire a better understanding of how to develop effective classroom test. This session will be practical in that participants will develop a "table of specification" using the Common Core Mathematics Standards and become more knowledgeable regarding how to use a variety of measurement techniques. Participants will also be able to communicate more effectively why they used particular assessment methods, and why those methods are better than the alternatives.

Shelia McGee Ingram
Birmingham-Southern College

Troy Adams, Ashley Pace, Alexis Parks,
Rylee Segrest
Birmingham-Southern College

Session R8
2:30p-3:20p

**Using Computer Programming Activities to Teach
Mathematical Reasoning**
Grades 5-13+

Rushton Theater
Level 1

As colleagues in computer science and mathematics departments, we developed a teaching strategy that uses computer programming to push students to build mental frameworks for reasoning about mathematical concepts. We will share an overview of select lessons and then demonstrate a new lesson that builds proportional reasoning. In this lesson, students are given a Mars Rover Transversibility Grid and asked to plot an optimal path through the terrain. This pencil and paper activity includes scaling to the actual distances the robot will transverse on the “Martian landscape”. After calculating the actual distances, students program the Parallax S2 robot to navigate through a test site in preparation for the actual Martian mission. The final activity is a robot deployment on “Mars”.

Janet Jenkins
University of North Alabama

Cynthia Stenger, Jessica Stovall, James Jerkins
University of North Alabama

Session R12 **ACTM Annual Business Meeting**
4:00p-4:45p **All Attendees**

301
Level 3

Join the ACTM Business Meeting to vote for officers and to amend bylaws. We welcome you to take a greater role in your professional organization.

HIGH SCHOOL TEACHERS, Do you have a Math Team?

Participate in the Alabama Statewide High School Mathematics Contest!

Deadline for registration for next contest is February 8, 2017.

First round competition will be held on February 25, 2017.

Second round (at UNA) on April 8, 2017.

Check out the website: <https://una.edu/math/mathcontest/>

For information contact

Dr. Ashley Johnson or Dr. Miranda Bowie, University of North Alabama,
ajohnson18@una.edu or mbowie@una.edu

Thursday, November 3, 2016

Early Childhood K-2 Focused Sessions

Session E2
Ticketed
10a-11:15a

Number Sense Routines - How does Data Drive Instruction?
Grades K-2

GENEius Lab
Level 1

Participants will get a glimpse inside a K-2 classroom and observe routines being used to develop number sense and mathematical reasoning. This will include walking through a typical day in math (number talk, whole group, small group, and debriefing). The BIG question to answer is how does student data drive classroom instruction?

Amanda Haskins
Priceville Elementary

Deedee Hendrix
Priceville Elementary

Session R7
2:30p-3:20p

Explore Increasing Number Sense Through Small Group Instruction
Grades K-2

GENEius Lab
Level 1

This session will deepen the foundational building block for number sense routines that will empower students to be more critical thinkers. Come experience how we can use strategies, games, and formative assessments in meaningful ways to develop number sense through small group instruction. Participants can email presenter for a packet of materials to be used in stations.

Deedee Hendrix
Priceville Elementary

Amanda Haskins
Priceville Elementary

Session R11
2:30p-3:20p

The Journey to Standards-Based Teaching and Learning
Grades K-2

Lunch Area, Room A
Lower Level

This session will show the transition from instruction driven by a textbook to instruction driven by standards and student work. A standards-based approach to mathematics involves using story problems, manipulatives, and math conversations to allow students to investigate a solution. This approach gives the opportunities needed for students to gain a deeper knowledge in mathematics.

Kelli Holland
Nelson Elementary

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Thursday, November 3, 2016

Elementary K-5 Focused Sessions

Session R9
2:30p-3:20p

**Improving Mathematics for all Students through
Co-teaching Collaborations
Grades K-5**

**Science Classroom
Mezzanine Level**

With purposeful planning and implementation, co-teaching is a powerful and collaborative approach in meeting the unique needs of all learners in inclusive mathematics classrooms. We describe the professional development model and lessons, learned from our collaborative project, by connecting general and special educators with a focus on co-teaching, differentiation, and high quality mathematics tasks.

Nicolette Nalu
The University of Alabama

Dr. Stefanie Livers, Dr. Kristin Harbour
The University of Alabama

Session R5
10:00a-10:50a

**Making it Stick: Strategies for ELL Students in the
Math Classroom
Grades K-5**

**Explore Lab
Level 2**

This session will give the attendee working knowledge of strategies to use with the ELL student in the math classroom. Student mastery and productive communication will be emphasized. Journaling, vocabulary, manipulatives, and partner talk methods will be discussed.

Melissa Campbell
Williams Avenue Elementary School

Does your work involve supervising or coaching teachers?
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Thursday, November 3, 2016

Elementary 3-6 Focused Sessions

Session E5 **Fostering Collaboration, Communication, and** **303**
Ticketed **Connections with Math Games** **Level 3**
2:30p-3:45p **Grades 3-5**

This hands-on session will address myriad math games to reinforce number sense concepts for grades 3-5.

Dr. Tina Rye Sloan
Athens State University

Session E7 **Teaching Math with Literature Across the Curriculum:** **Regions Room**
Ticketed **If the World Were a Village** **Mezzanine Level**
2:30p-3:45p **Grades 3-5**

Looking for ways to collaborate with colleagues and connecting subjects across the curriculum? In this hands-on activity based presentation, participants will rotate through stations to engage in activities using the book, *If the World Were a Village*, to integrate math, social studies, science, and language arts.

Kyoko Johns
Jacksonville State University

Melinda Staubs, Michael Alvidrez, Deidre Foote,
Keitha Segrest
Jacksonville State University

NCTM Innov8 Conference
Engaging the Struggling Learner
St. Louis, MO
November 16-18, 2016

Vendor exhibits open from 10:00 am until 4:00 pm.

Thursday, November 3, 2016

Upper Elementary & Middle School 3-8 Focused Session

Session E1 Ticketed 10a-11:15a	Dividing Decimals Conceptually using Cuisenaire Rods Grades 4-8	301 Level 3
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Join us as we explore the two models of division: partitive and measurement. Caution: we aren't going to focus on the algorithm! Instead, we will use Cuisenaire rods to enhance our conceptual understanding of decimal division and make connections to proportional reasoning.

Denise Peppers
Columbus Regional Mathematics Collaborative

Session R10 2:30p-3:45p Extended Session	What Can Be Done Mathematically with a Deck of Cards? Grades 4-8	Explore Lab Level 2
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Teachers attending this session will learn some unique ways to use a deck of cards for teaching combining integers, multiplying integers, comparing fractions, and working with others collaborating to find the correct answers. This session is appropriate for intermediate and middle school children. Special education students can also connect to the skills in the hands on activities. Teachers will have no problem communicating these mathematical skills associated with fun activities to their students.

Peggy Franks
Retired Mathematics Educator

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November 16, 2016

Secondary 6-12 Focused Sessions

Session E6	Teaching the data, statistics, & probability	304
Ticketed	standards in high school math	Level 3
2:30p-3:45p	Grades 8-13+	

This session will investigate the mathematics of the challenging statistics and probability standards. Recently, many high school teachers have requested PD for the content of these standards since much of the content was never part of preparation programs or graduate programs for advanced certification. We will explore these concepts with and without technology (provided on site).

Jeremy Zelkowski
The University of Alabama



All attendees are invited to the
ACTM Business Meeting
At 4:00 pm, November 3rd
In the 301 Classroom Level 3

The ACTM Executive Board will hold its business meeting.
Candidates for offices will be presented and voted upon.
Nominations for positions will be accepted from the floor.

*****Executive Committee Members Required*****

Election of officers for 2016-2018
Announcement of Scholarship Winners
Announcement of Teacher Grant Winners

Find out how YOU can be involved in ACTM

Thursday, November 3, 2016

High School 9-12 Focused Sessions

Session E3
Ticketed
10a-11:15a

Algebra Tiles
Grades 9-12

304
Level 3

Algebra Tiles are a great way to incorporate multiple representations in the secondary math classroom. If you have ever wondered how they work, as we did, please join us.

Patricia Glaze
Athens State University

Robin Blair
University of Montevallo AMSTI

Session E4
Ticketed
2:30p-3:45p

Drinking and Driving...What's Math Got to Do with It?
Grades 9-12+

301
Level 3

Participants will have the opportunity to explore an eye-opening, real-life, problem-based scenario about a student's actual DUI case. Using simple mathematical models that include tables, graphs, and critical reasoning, the participants will collaborate with one another to investigate the relationship between drinking alcohol and the increased risk of an automobile accident. This engaging task will spark the curiosity of students while connecting and applying the mathematics they learn in school with a real-world situation. Participants will be provided with everything included for the presentation.

John Abby Khalilian
AMSTI-University of Alabama

Richard Tinker
Greensboro High School

HIGH SCHOOL TEACHERS, Do you have a Math Team?

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ajohnson18@una.edu or mbowie@una.edu

Program by Time Slots on Friday, November 4th

Lead Speaker	ID #	TITLE OF PROPOSED SESSION FRIDAY, NOV 4	Grade Band Focus						Start Time	Session length (mins)	Room & Level
			K-2	3-5	6-8	9-10	11-12	13+			
ACTM Leadership, University Math Educators		Preservice Teachers & School Administrators Welcome Session	X	X	X	X	X	X	820am	30	Lunch Hall B Lower Level, LL
Daryl Williams Jr.	R13	It's a Win-Win: Checks for Understanding that Students Can't Get Enough of		X	X				9am	50	302 Level 3
Basil Conway IV	R14	Differentiating Instruction through Open Tasks		X	X	X	X		9am	50	301 Level 3
Ronald Eaglin	R15	Learn Pyramath & Prime Bomb	X	X	X	X	X		9am	75	Explore Lab Level 2
Amber Trantham	R16	Capitalizing on Culture	X	X					9am	50	Rushton Theater Level 1
Jane Owen	R17	Math Fact Fluency - See How It's Affecting Test Scores		X	X				9am	50	Lunch Area Room A Lower Level LL
Cassie Martin Reynolds	E9	A Double Number Line Can Do That?			X				9am	75	Science Classroom Mezzanine Level
Marilyn Strutchens	E10	Micromessaging: Are You Fostering Positive or Negative Mathematics Identities?		X	X	X	X	X	9am	75	GENEius Lab Level 1
Gary Kubina	E11	Activities for Algebra I and Pre-Algebra			X	X			9am	75	Regions Room Mezzanine Level
Justin Boyle	E12	Algebraic Reasoning: Task Design to Create Opportunities for All Students			X	X			9am	75	304 Level 3
Sara LeCroy	E13	How to Incorporate Technology in a Math Classroom			X	X	X		9am	75	303 Level 3
Karla Moore	R18	Algebra 1: Pre-AP to 1A, how we create equity in learning across levels			X	X			10am	50	Lunch Area Room A Lower Level LL

Lead Speaker	ID #	TITLE OF PROPOSED SESSION FRIDAY, NOV 4	Grade Band Focus						Start Time	Session length (mins)	Room & Level
			K-2	3-5	6-8	9-10	11-12	13+			
Joanne Wells	R19	Building A Community			X				10am	50	301 Level 3
Nicolette Nalu	R20	Why Invert and Multiply? Understanding the Why Behind the Memorized Rules		X	X				10am	50	302 Level 3
Megan Burton	R21	Connecting Formative Assessment to Current Instructional Strategies	X	X	X	X	X	X	10am	50	Rushton Theatre Level 1
Ronald Eaglin	R22	Learn Fractazmic & Prime Bomb	X	X	X	X	X		10am	50	Explore Lab Level 2
Leslie Hilderbrand	E14	Outstanding Math Guides - OMG1		X					1030am	75	Science Classroom Mezzanine Level
Melanie Martin	E15	Empowering Students with Rich Online Algebra Activities on Desmos			X	X	X		1030am	75	Regions Room Mezzanine Level
Jim Wilder	E16	Connecting Math with Your Community: The St. Clair County Math Project		X	X				1030am	75	304 Level 3
Kent Haines	E17	A Conceptual Approach to Teaching Integers			X				1030am	75	303 Level 3
Johanna Massey	E18	No Algorithms Allowed! Using Models to Engage with Fractions		X					1030am	75	GENEius Lab Level 1
W. Gary Martin	R23	Technology to Support the Learning of Mathematics: Beyond the Hype			X	X	X	X	11am	50	302 Level 3
Teri Owens	R24	Making High School Math Meaningful: A Panel on the Meaningful Math Program				X	X		11am	50	301 Level 3
Erika Bell	R25	ELL Math Differentiation Demystified		X					11am	50	Lunch Area, Room A Lower Level LL
Jennifer Towles	R26	Closing the Achievement Gap: Bridging K-2 to 3-5	X						11am	50	Explore Lab Level 2
Denise Porch	R27	Change: Building a Better Tomorrow	X						11am	50	Rushton Theatre Level 1
Lunch 12-1 Lunch Hall B – Lower Level LL											

Lead Speaker	ID #	TITLE OF PROPOSED SESSION FRIDAY, NOV 4	Grade Band Focus						Start Time	Session length (mins)	Room & Level
			K-2	3-5	6-8	9-10	11-12	13+			
Linelle Johnson	R28	Find Time to Teach with Classroom Management Strategies That Really Work!	X	X	X	X	X		110pm	50	GENEius Lab Level 1
Ann Dominick	R29	Number Talks in the K-2 Classroom	X	X	X				110pm	50	Lunch Area, Room A Lower Level LL
Derrick Ward	R30	Numerology For Teachers (Differentiating Instruction Through Numbers)	X	X	X	X	X		110pm	50	302 Level 3
DeLaura C. Downs	E19	Using Formative Assessment Lessons to Gauge Student Growth			X	X	X		110pm	75	301 Level 3
Tanya McCain	R31	Spreading Pockets of Mathematical Greatness Throughout the Building	X	X					110pm	50	Rushton Theatre Level 1
Kitty Morgan	E20	Illustrative Mathematics Tasks in Algebra II and PreCalculus				X	X		110pm	75	303 Level 3
Leslie Hilderbrand	E21	Outstanding Math Guides – OMG2			X	X			110pm	75	Science Classroom Mezzanine Level
Tanya Barnes	R32	ACT Aspire Math Data Interpretation		X	X	X			110pm	50	Explore Lab Level 2
Denise Peppers	E22	Dividing Decimals Conceptually using Cuisenaire Rods		X	X				110pm	75	304 Level 3
Shelia McGee Ingram	E23	Assessment in the Mathematics Classroom: Measurement of Student Learning		X	X	X	X	X	110pm	75	Regions Room Mezzanine Level
ACTM Leadership, University Math Educators		School Administrators, Teachers, and Preservice Teachers' Exchange	X	X	X	X	X	X	2:10pm	30	Lunch Hall B Lower Level LL
CLOSING SESSION, PRIZES, 2:40-3:00 Lunch Hall B – Lower Level LL											

ACTM is now on Facebook!

Like the Alabama Council of Teachers of Mathematics page

Friday, November 4, 2016

Major Grade Band Focus, General Interest Sessions

8:20-8:50a	Preservice teachers & school administrators welcome session	Lunch Hall B Lower Level LL
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30 minutes prior to the start of the Friday agenda, preservice teachers and administrators attending ACTM, will be briefed by ACTM leadership and Mathematics Education faculty from around the state. We intend on this session being interactive and set the learning goals for both preservice teachers and administrators during the Friday sessions. We encourage administrators and preservice teachers to consider attending the last session of the day before the closing session at 2:10 in the Lunch Hall B – Lower Level LL, to facilitate discussions between schools, teachers, and preservice attendees. See program for more details.

ACTM Leadership & University Math Educators

Session R14 9:00-9:50a	Differentiating Instruction through Open Tasks Grades 3-12	301 Level 3
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Often teachers think of differentiation as giving students multiple tasks or activities that meet students' individual needs. This idea leads teachers to being overwhelmed and student isolation. This session will provide opportunities for teachers to investigate ways to differentiate their instruction by opening problem tasks to multiple solutions or solution pathways. Teachers can use multiple sources, including their textbook to create tasks that meet the needs of struggling and gifted students. Opportunities exist in many problems to increase the cognitive demands in activities and pull out important mathematics by removing problem constraints.

Basil Conway
Jacksonville State University

Session E10 Ticketed 9:00-10:15a	Micromessaging: Are You Fostering Positive or Negative Mathematics Identities? Grades 6-13+	GENEius Lab Level 1
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In this session participants will examine the micromessages that students are receiving from teachers, administrators, family members, other students, and themselves related to mathematics learning and ability. We will discuss student micro-affirmations (valued, included, encouraged, intentional, and positive) and micro-inequities (excluded, devalued, unintentional, negative, and discouraged). We will also discuss the type of classrooms that foster positive mathematics identities for each and every student.

Marilyn Strutchens
Auburn University

Session R15 Learn Pyramath & Prime Bomb
9:00-9:50a Grades 2-12

Explore Lab
Level 2

Learn how to play fun games used by thousands of teachers. Games applicable to grades from 2-12 will be covered with emphasis on how to introduce these games in a classroom setting. Focus on basic math facts (addition, subtraction, multiplication, and division) using Pyramath and additional instruction on primes and factoring using Prime Bomb. Most importantly, students will enjoy and look forward to math! All participants will receive a deck of Pyramath and a deck of Prime Bomb cards.

Ron Eaglin
Daytona State College

Session R21 Connecting Formative Assessment to Current
10:00-10:50a Instructional Strategies
Grades K-13+

Rushton Theater
Level 1

The National Council of Supervisors of Mathematics (NCSM) and the Association of Mathematics Teacher Educators (AMTE) formed a task force in 2013 that has been exploring ways to effectively support teachers' use of formative assessment to guide instruction. Rather than being an additional thing to add, it should be a central part of mathematics teaching. Come explore how formative assessment can be woven into current instructional professional development and teaching to strengthen both.

Megan Burton
Auburn University

Madison Hutto, Elizabeth Daniel
Auburn University

Session R22 Learn Fractazmic & Prime Bomb
10:00-10:50a Grades 2-12

Explore Lab
Level 2

Learn how to play fun games used by thousands of teachers. Games applicable to grades from 2-12 will be covered with emphasis on how to introduce these games in a classroom setting. Focus on basic math facts with fractions using Fractazmic and additional instruction on primes and factoring using Prime Bomb. Most importantly, students will enjoy and look forward to math! All participants will receive a deck of Fractazmic and a deck of Prime Bomb cards.

Ron Eaglin
Daytona State College

**Involved with Mentoring/Supervising/Teaching
Preservice Teachers in Alabama?**

JOIN AMTEA, read up at <http://amtea.net/>

Session E23 Ticketed 1:10p-2:25p	Assessment in the Mathematics Classroom: Measurement of Student Learning Grades 3-13+	Regions Room Mezzanine Level
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Assessment is an essential part of teaching and learning. Many teachers find that changing the way they assess their students' learning significantly improves their teaching effectiveness. This session will begin with a brief presentation designed to provide a framework for assessment, measurement, and evaluation. Participants will acquire a better understanding of how to develop effective classroom test. This session will be practical in that participants will develop a "table of specification" using the Common Core Mathematics Standards and become more knowledgeable regarding how to use a variety of measurement techniques. Participants will also be able to communicate more effectively why they used particular assessment methods, and why those methods are better than the alternatives.

Shelia McGee Ingram
Birmingham-Southern College

**Stephen P. Hooper, Savannah Sims,
Adam Stansell, Ruby Steele, Haoran Yang**
Birmingham-Southern College

Session R30 1:10p-2:00p	Numerology For Teachers: Differentiating Instruction Through Numbers Grades K-12	302 Level 3
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Numerology is the science of numbers, and it is used to understand human behavior, learning styles and personality types. Using my latest book *Numerology for Teachers* (available on amazon.com), this fun-filled session will show educators how to evaluate strengths, weaknesses, learning styles, and personality types, in order to develop relevant differentiation strategies. By understanding our students better, educators will build strong relationships, as well as identify the specific needs of each child. I have taken this ancient number system, developed by Pythagoras, and I have modified it to meet today's challenges. Not only can educators use this system for students, they can also use these strategies for positive team building, and an overall positive school climate.

Derrick Ward
Conyers Middle School

Help us stay connected to you!
Update your contact information
at the ACTM membership table
or visit <http://acotom.wildapricot.org/>.

Friday, November 4, 2016

Major Grade Band Focus, General Interest Sessions

Session R23 Technology to Support the Learning of Mathematics: 302
11:00-11:50a Beyond the Hype Level 3
Grades 7-13+

Is technology really the silver bullet that will solve all of our problems in teaching mathematics? Or is it just a distraction that keeps us (and our students) from getting the job done? NCTM's Principles to Actions describe a somewhat different view of technology, which they describe as mathematical action technologies; these technologies engage students in "doing" mathematics, building mathematical practices and processes. This session will contrast mathematical action technologies with other possible technology uses in the mathematics classroom, providing a range of illustrations in algebra, geometry, and statistics. For optimum fun, bring your own device (tablet, phone, etc.)!

W. Gary Martin
Auburn University

Session R28 Find Time to Teach with Classroom Management GENEius Lab
1:10-2:00p Strategies That Really Work! Level 1
Grades K-12

Imagine a classroom where students obey... the first time! Where you spend more time doing what you love...teaching! Eliminate multiple warnings and repeated requests without gimmicks. Learn techniques that will increase the time spent on academics and empower students to take responsibility for their own actions.

Linelle Johnson
Lamar County Schools
Mississippi

Session R32 ACT Aspire Math Data Interpretation Explore Lab
1:10-2:00p Grades K-10 and Administrator Level 2

This session will assist the participant in understanding ASPIRE mathematical reporting categories, justification and explanation skills progressions. Participants will also acquire knowledge of how to pull data from their school's Aspire spreadsheet to inform classroom and improve classroom instruction. Participants will learn how to better focus their instruction utilizing the mathematical practices so as to directly affect student performance as measured by ASPIRE.

Tanya Barnes
AMSTI UM

2:10-2:50p

School administrators, teachers, and preservice teachers' exchange

Explore Lab
Level 2

The ACTM leadership purposefully invited school administrators this year to ACTM to learn about emerging practices in mathematics education. We also recognized the opportunity to have preservice teachers and administrators have a chance to meet and exchange ideas about future employment opportunities with school systems around the state. We encourage this session to be an open discussion between administrators and teachers whom work in their school, to engage with preservice teachers and allow both groups to have an ongoing dialogue about anticipated or existing openings in schools around the state. AMSTI specialist may also attend to discuss professional development opportunities.

ACTM Leadership & University Math Educators

Does your work involve supervising or coaching teachers?
Go to www.mathleadership.org to learn about the National Council of Supervisors of Mathematics (NCSM)

NCSM Fall Leadership Conference
It's TIME—Themes and Imperatives in Mathematics Education
St. Louis, MO
November 16, 2016

NCTM Innov8 Conference
Engaging the Struggling Learner
St. Louis, MO
November 16-18, 2016

ACTM is now on Facebook!

Like the Alabama Council of Teachers of Mathematics page

Friday, November 4, 2016

Early Childhood K-2 Focused Sessions

Session R27 **Change: Building a Better Tomorrow**
11:00-11:50a Grades 1-2

Rushton Theater
Level 1

Change-we all want it, but have a difficult time embracing it. This session highlights the process of changes made to second grade instruction and the positive results in student learning. The changes were grounded in collaboration, communication, and connections.

Denise Porch
Arab City Schools

Michelle Mullins
Arab Primary School

Session R26 **Closing the Achievement Gap: Bridging K-2 to 3-5**
11:00-11:50A Grades K-3 and Administrator

Explore Lab
Level 2

With the multitude of standards in kindergarten, first, and second grade, it is often difficult to determine which key concepts and skills impact mathematical success in the intermediate grades. In this session, you will learn which concepts and skills directly impact performance in the upper grades. You will have the opportunity to explore simple assessments and intervention plans that will assist you in closing the achievement gap in your K-3 classroom.

Jennifer Towles
University of Montevallo

Kimberly Davis
University of Montevallo

Rachel Stockard
University of Montevallo

Session R29 **Number Talks in the K-3 Classroom**
1:10p-2:00p Grades K-3 and Administrator

Lunch Area, Room A
Lower Level

A Number Talk is a 10-15 minute classroom routine to help students make sense of mathematics. This interactive session will focus on how to conduct number talks and build number sense with students in kindergarten, 1st and 2nd grades.

Ann Dominick
University of Alabama at Birmingham

Are you an ACTM member? Are you a K-12 Teacher?
Apply for an ACTM Teacher Grant

Go to the ACTM website, www.actm.education, for information on how to apply for a teacher grants for Spring, and for the application. The deadline is **December 11, 2016**.

Friday, November 4, 2016

Elementary K-5 Focused Sessions

Session R16 **Capitalizing on Culture**
9:00-9:50a **Grades K-5**

Rushton Theater
Level 1

Rather than viewing students by their deficits, use their cultural backgrounds and heritage to build upon the strong mathematical backgrounds they have already built. This session will have participants consider their own mathography and culture as well as connect to the backgrounds and cultures of the families and students they serve.

Amber Trantham
Jacksonville State University AMSTI

Erika Bell
Saks Elementary School

Session R31 **Spreading Pockets of Mathematical Greatness**
1:10p-2:00p **Throughout the Building**
 Grades K-4

Rushton Theater
Level 1

Attendees will gain a sense of how to model and support collaboration among grade levels as well as within the vertical alignment. Fellow administrators, math coaches, and teachers will discuss the importance of using professional discourse to enhance the overall effectiveness of how to implement research based mathematical strategies in order to maximize student success. Throughout the session, ideas will be shared on how to spread "pockets" of greatness throughout the grade level and building. Effective student and teacher debriefing will be described as a method for closing learning gaps and accelerating mathematical thinking, which results in individual academic growth.

Tanya McCain
Principal, Priceville Elementary School

Amanda Haskins, Deedee Hendrix
Priceville Elementary School

*****Vendor Exhibits will close at 2:30 PM*****

***Don't forget to visit the VENDORS & Exhibits
before the closing session begins at 2:40!***

Level-3 Events Center – Near Registration Desks

Friday, November 4, 2016

Elementary 3-6 Focused Sessions

Session E14
Ticketed
10:30a-11:45p

Outstanding Math Guides - OMG1
Grades 2-5

Science Classroom
Mezzanine Level

Come make an Outstanding Math Guide (OMG) containing graphic organizers with steps, examples and vocabulary for every key concept taught throughout the year. This student created reference will transform your classroom and help students become self-sufficient learners! You must see it to believe it! (Designed for 2nd-5th grades)

Leslie Hilderbrand
Fairplay Middle School

Session E18
Ticketed
10:30-11:45a

No Algorithms Allowed! Using Models to Engage with Fractions
Grades 3-5

GENEius Lab
Level 1

National Council of Teachers of Mathematics' (NCTM, 2014) publication Principles to Actions calls for teachers to use research-based teaching practices that are essential for a high-quality mathematics education for all students in conjunction with core mathematics principles in order to build a successful mathematics program. The presenter for this session will engage participants in developing a conceptual approach to teaching fractions by employing models. The presenter will make the case for using model to teach operations with fractions without using the standard algorithm. Participants will be engaged various operations with fractions using models. At the conclusion, participants will engage in a Number Talks with fractions without algorithms.

Johanna Massey
Alabama A&M University

Session R25
11:00a-11:50a

ELL Math Differentiation Demystified
Grades 3-5

Lunch Area, Room A
Lower Level

Teachers will investigate commonly held myths and misconceptions about English learners. Participants will discuss what it means to differentiate and will investigate and practice strategies that will help them implement stronger, more targeted differentiation in math. Teachers will engage in activities designed to help them strategically plan their math content and resources with each student's unique needs in mind. Additionally, an overview of the latest research in English language development and math instruction will be provided.

Erika Bell
Saks Elementary School

Amber Tranthum
Jacksonville State University

Friday, November 4, 2016

Upper Elementary & Middle School 3-8 Focused Session

Session R17 **Math Fact Fluency - See How It's Affecting Test** **Lunch Area, Room A**
9:00-9:50a **Scores** **Lower Level**
 Grades 2-8

Students who can automatically recall math facts are more capable problem solvers, learn new math skills more quickly, and are more likely to succeed in future math courses. Unfortunately, many students still spend too much time and brainpower on simple facts. Find out how to help students build a strong math fact fluency foundation and see how it's making a difference on tests.

Jane Owen
Explore Learning

Session R20 **Why Invert and Multiply? Understanding the Why** **302**
10:00-10:50a **Behind the Memorized Rules** **Level 3**
 Grades 4-6

Participants will collaboratively engage in solving mathematics problems conceptually using manipulatives to divide fractions. Participants will learn about teacher change in pedagogical and content knowledge for teaching mathematics. Participants will explore concrete models and connect them to symbolic representations in order to develop a deeper understanding of dividing fractions; shifting from an instrumental to relational understanding.

Nicolette Nalu **Amy Tilford**
The University of Alabama Tuscaloosa City Schools

Session E21 **Outstanding Math Guides - OMG2** **Science Classroom**
Ticketed **Grades 6-11** **Mezzanine Level**
1:10p-2:25p

Come make an Outstanding Math Guide (OMG) containing graphic organizers with steps, examples and vocabulary for every key concept taught throughout the year. This student created reference will transform your classroom and help students become self-sufficient learners! You must see it to believe it!

Leslie Hilderbrand
Fairplay Middle School

Session E16 **Connecting Math with Your Community: The St.** **304**
Ticketed **Clair County Math Project** **Level 3**
10:30-11:45a **Grades 3-8**

This hands-on session will include attendees building Menger Sponges with business cards, dodecahedrons with sticky notes, a super-hero collage with sticky notes, hexaflexagons, and other activities meant to engage a larger audience in mathematics. The session will feature multiple stations with middle and high school students leading activities that can be used in the classroom to formally explore ideas in standards or in math clubs. Session will be co-lead with 5 to 10 middle and high school students.

Jim Wilder
Odenville Middle School

Session E22 **Dividing Decimals Conceptually using Cuisenaire** **304**
Ticketed **Rods** **Level 3**
1:10-2:25p **Grades 4-8**

Join us as we explore the two models of division: partitive and measurement. Caution: we aren't going to focus on the algorithm! Instead, we will use Cuisenaire rods to enhance our conceptual understanding of decimal division and make connections to proportional reasoning.

Denise Peppers
Columbus Regional Mathematics Collaborative

Please join us for a wonderful LUNCH!
12:00 PM – 1:00 PM
Lunch Hall B – Lower Level LL
Included in your Friday registration!

Perennial Math Competitions Announcement

Registration and Flyers available at
<http://perennialmath.com/onsite-tournament>
Birmingham Southern College- Nov 12
University of Tennessee Chattanooga- Dec 17
University of Mobile- Feb 18
Tupelo- March 4

Friday, November 4, 2016

Middle School 6-8 Focused Sessions

Session R13 **It's a Win-Win: Checks for Understanding that** **302**
9:00-9:50a **Students Can't Get Enough of** **Level 3**
 Grades 4-9

Checks for understanding are vital to an effective progression of a lesson, and for guiding instruction. In this session, teachers will experience engaging ways to check how well the students are receiving the material. Teachers will love these strategies because they get an accurate read on what the students know, and students love them because of the high levels of engagement.

Darryl Williams, Jr.
McNair Junior High School

Session E9 **A Double Number Line Can Do That?** **Science Classroom**
Ticketed **Grades 6-8** **Mezzanine Level**
9:00-10:15a

Are you struggling to find the resources that will help your students create equivalent ratios on a double number line? Interested in learning how the double number line helps students connect multiple ratio representations? Come to this session to see real world problems in a hands-on, student-centered environment and leave with a lesson you can use immediately with your students.

Cassie Martin Reynolds
Carnegie Learning

Session R19 **Building A Community** **301**
10:00-10:50a **Grades 5-8** **Level 3**

Want to apply math, basic life skills, and encourage parent involvement? Build it! Learn how to use a construction project to build school ownership, parental involvement, and see math in action ... even if you have no woodworking skills of your own. Receive a copy of construction plans, discuss other projects, and see the project in action through pictures. Learn how you, too, can Do-It-Yourself!

Joanne Wells
Eclectic Middle School

Twenty-First Annual Conference of the
Association of Mathematics Teacher Educators
Thursday - Saturday, Feb 9-11, 2017, Orlando, Florida
Visit <https://www.amte.net/conferences/conf2017> for more information

Session E17
Ticketed
10:30-11:15a

A Conceptual Approach to Teaching Integers
Grades 6-8

303
Level 3

Come to this session to find out how students can build a conceptual foundation for learning integers while still having fun in math class. In this hands-on session, participants will experience an entire unit of instruction based around games and activities that help students build a conceptual understanding of integers so that they no longer need to rely on memory tricks to add and subtract integers. In addition to games, participants will learn about innovative techniques such as vertical number lines and open number sentences that push students beyond the procedural and into a deep understanding of integers.

Kent Haines
Simmons Middle School

Please join us for a wonderful LUNCH!
12:00 PM – 1:00 PM
Lunch Hall B – Lower Level LL
Included in your Friday registration!

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Apply for an ACTM Teacher Grant

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HIGH SCHOOL TEACHERS, Do you have a Math Team?

Participate in the Alabama Statewide High School Mathematics Contest!

Deadline for registration for next contest is February 8, 2017.

First round competition will be held on February 25, 2017.

Second round (at UNA) on April 8, 2017.

Check out the website: <https://una.edu/math/mathcontest/>

For information contact

Dr. Ashley Johnson or Dr. Miranda Bowie, University of North Alabama,
ajohnson18@una.edu or mbowie@una.edu

Secondary 6-12 Focused Sessions

Session E11 **Activities for Algebra I and Pre-Algebra** **Regions Room**
Ticketed **Grades 7-10** **Mezzanine Level**
9:00-10:15a

Algebra I is one of the biggest stumbling blocks for many students. Teachers complain that there is little opportunity for creativity and appropriate activities. This session will help make the abstract world of Algebra become more concrete and understandable with activities and games that will get you and your students excited about Algebra. During this workshop you will create a human number line, play the Algebra I card game, do a little Algebra aerobics, graph on an adjustable XY coordinate plane and find out how heavy 1000 m & m's are. Come join the fun.

Gary Kubina
Math Consultant

Session E12 **Algebraic Reasoning: Task Design to Create** **304**
Ticketed **Opportunities for All Students** **Level 3**
9:00-10:15a **Grades 8-10**

Participants will examine five traditional algebra textbook problem sets. We will modify the tasks to provide access for all students, build on prior knowledge and promote opportunities for students to reason and develop mathematical arguments. The presenter will support the participants in designing tasks and will share his created tasks.

Justin Boyle
The University of Alabama

Session E13 **How to Incorporate Technology in a Math Classroom** **303**
Ticketed **Grades 7-12** **Level 3**
9:00-10:15a

Ever think that you would use technology in your classroom, if you taught anything else but math? Many Web 2.0 tools exist to help you incorporate technology in your math classroom. ACT Review, learning checkpoints and many other options are available to help you connect with your students on a technological level.

Sara Lecroy
Faith Academy

NCTM Innov8 Conference
Engaging the Struggling Learner
St. Louis, MO
November 16-18, 2016

Session R18 **Algebra 1: Pre-AP to 1A, how we create equity in** **Lunch Area, Room A**
10:00-10:50a **learning across levels** **Lower Level**
 Grades 8-9

Come see how we differentiate to be able to use the same learning tasks and activities for all Algebra I students. We will discuss methods we use for engaging all students and work through at least one task based learning lesson. Leave with tasks and activities that are classroom ready.

Karla Moore
Hillcrest High School

Jill England
Hillcrest High School

Session E15 **Empowering Students with Rich Online Algebra** **Regions Room**
Ticketed **Activities on Desmos** **Mezzanine Level**
10:30-11:45a **Grades 7-12**

Instead of the computer programming our students, let's have our students use mathematics to program the computers. This session introduces online lessons being developed at Desmos--lessons whose goal is empowering students with algebra, and that put students' ideas together with networked devices. (Note: laptops or tablets highly recommended for participants)

Melanie Martin
Jacksonville State University AMSTI

Nicholas Fink
Jacksonville State University AMSTI

Session E19 **Using Formative Assessment Lessons to Gauge** **301**
Ticketed **Student Growth** **Level 3**
1:10-2:25p **Grades 6-12**

Formative Assessment Lessons and activities will be demonstrated to participants in order to for teachers to gauge the true level of student understanding, as well as giving feedback to teachers as to what the obstacles, misconceptions, and gaps in learning are that exist for each student as well as the class. Presenter will step participants through the key components and non-negotiables for effectively implementing Formative Assessment Lessons, as well as recording pertinent data associated with the lessons.

DeLaura C. Downs
Irontdale Middle School

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First round competition will be held on February 25, 2017.

Second round (at UNA) on April 8, 2017.

Check out the website: <https://una.edu/math/mathcontest/>

For information contact

Dr. Ashley Johnson or Dr. Miranda Bowie, University of North Alabama,

ajohnson18@una.edu or mbowie@una.edu

Friday, November 3, 2016

High School 9-12 Focused Sessions

Session R24 **Making High School Math Meaningful: A Panel on the** **301**
11:00-11:50a **Meaningful Math Program** **Level 3**
 Grades 9-12

High school mathematics teachers frequently struggle to find instructional materials that effectively incorporate the Standards for Mathematical Practice into the high school mathematics curriculum. Over the past year, teachers throughout the state of Alabama have been piloting the Meaningful Math Program, a curriculum based on the exemplary Interactive Mathematics Program (IMP) that is designed to promote student engagement with rich mathematical tasks, thus supporting deep conceptual learning as well as development of the mathematical practices. In this session, a panel of teachers who have used the curriculum will share their experiences, including its impact on student learning and issues related to successfully implementing the program, as well as address your questions.

Teri Owens
Etowah High School

Tanya Barnes
AMSTI

Session E20 **Illustrative Mathematics Tasks in Algebra II and** **303**
Ticketed **PreCalculus** **Level 3**
1:10-2:25p **Grades 10-12**

Let's spend some time looking at and working some amazing tasks that cover some of the "interesting" common core standards in the upper level mathematics classes. Participants will be asked to share their thinking about the tasks and discuss about how to best implement these types of tasks in the classroom. Let's have some fun doing MATH!!

Kitty Morgan
A+ College Ready

*****Vendor Exhibits will close at 2:30 PM*****

Before the closing session begins at 2:40 in the Lunch Hall B – Lower Level LL

Fall Forum Closing Session

Friday, November 4th, 2:40 – 3:00
Lunch Hall B – Lower Level LL
Get a ticket when entering the room!

Door Prizes!

Must be present to WIN!!!

Lead Speaker Index

Lead Speaker Name:	City, State:	Preferred Email address for contact:	Affiliation:
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McWane Science Center Map

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On level C in the parking garage, the EVENTS CENTER entrance is located about 20 yards from the elevator bank. Look for signs on level C in the parking garage for guidance!

