

**Tuskegee University and TEAM-Math 2008 Conference
on the Mathematical Preparation of Teachers**

Friday, September 5, 2008

3:00 PM – 3:30 PM	Registration and Reception Kellogg Conference Center Registration Desk and Atrium	
3:30 PM – 4:15 PM	Kellogg Conference Center Ballroom B	
3:30	Opening and Welcome	Luther S. Williams, Provost Tuskegee University
3:40	Occasion and TEAM-Math Briefing	W. Gary Martin, TEAM-Math Project Director Marilyn Strutchens, TEAM-Math Project Co-Director
4:25 PM – 4:50 PM	Mini-Presentations I (Refer to handout in folder for complete titles and abstracts)	
Gayle Herrington	<i>Examining Teacher Change</i>	Ballroom A
Kenn Pendleton	<i>Geometry in Narnia</i>	Meeting Rooms D-E
Elizabeth Senger	<i>Can Students Construct Multiplication Algorithms?</i>	Meeting Rooms F-G
5:00 PM – 5:25 PM	Mini-Presentations II	
Denise Dark	<i>Using Music and Literature To Reach All Learners</i>	Ballroom A
Jack Frederick	<i>Saving Billions: Six Sigma for Educators & Students</i>	Meeting Rooms D-E
Rebekah Lane	<i>Graphing Calculators and Visual Imagery in College Algebra</i>	Meeting Rooms F-G
5:30 PM – 7:30 PM	Dinner and Address	Ballroom B
5:35	Grace	Herman Windham
5:40	Food Service	
6:15	Introduction of Speaker	Marilyn Strutchens
6:20	Dinner Speaker	Carol Malloy
7:20	Recognitions	Mohammed Qazi
7:25	Remarks	Carlton Morris
7:30	Closing	Mohammed Qazi

Saturday, September 6, 2008

8:00 AM – 9:30 AM	Breakfast and Address	Kellogg Conference Center, Ballroom B
8:00	Grace	Carolyn Sippial
8:05	Food Service	
8:20	Introduction of Speaker	Marilyn Strutchens
8:25	Breakfast Speaker	Liping Ma
9:25	Recognitions	Herman Windham
9:30	Closing	Herman Windham
9:40 AM – 10:55 AM	Round Table Discussions (Refer to handout in folder for details about each session)	
	<i>- Teaching Statistics in K-12 classrooms: Emphasis on Data Analysis</i>	
	Facilitator: Madhuri Mulekar	Ballroom A
	<i>- NCTM's High School Curriculum Project: Putting Reasoning and Sense Making at the Center</i>	
	Facilitator: W. Gary Martin	Meeting Rooms D-E
	<i>- Questions Teachers Have Related to Equity and Some Possible Solutions</i>	
	Facilitator: Marilyn E. Strutchens	Meeting Rooms F-G
11:10 AM – 12:25 PM	Concurrent Exemplary Teaching Practices (Refer to handout in folder for abstracts)	
	<i>- The Daily Five: Teaching the Process Standard in the Primary Classroom</i>	
	Facilitator: Pamela Norris	Ballroom A
	<i>- All You Ever Wanted to Know About Inclusion, But Were Afraid to Ask</i>	
	Facilitators: Gayle Holladay & Ann Stuedeman	Meeting Rooms D-E
	<i>- Teaching Elementary Education Majors about Probabilities</i>	
	Facilitator: Stephen E. Stuckwisch	Meeting Rooms F-G
12:30 PM – 2:30 PM	Luncheon and Address	Ballroom B
12:30	Grace	Elizabeth Senger
12:35	Food Service	
1:05	Introduction of Speaker	W. Gary Martin
1:10	Luncheon Speaker	William McCallum
2:10	Recognitions, Remarks and Conference Evaluation	Mohammed Qazi
2:30	Closing	Mohammed Qazi



Transforming East Alabama Mathematics FIFTH ANNUAL CONFERENCE PROGRAM

Transforming East Alabama Mathematics Conference

Titles and Descriptions of Addresses

Friday Dinner Address, September 5, 2008

Translating Research Findings into Classroom Practices that Give Students Agency, Competency, Commitment, and Authority

– Dr. Carol Malloy

Many students in the United States lack opportunities to learn and understand quality mathematics. This presentation translates results of research on cognitive and social processes that underlie students' growth in mathematics conceptual understanding in middle grades into instructional actions needed to improve student achievement. Particular attention will be given to the establishment of classroom instruction and climates that provide students with a *sense of agency* over their own learning, a *sense of competency* in and *commitment* to their mathematical thinking, and a *sense of authority* in the creation and verification of mathematical ideas.

Saturday Breakfast Address, September 6, 2008

Learning of Fractions: How Could it be Built on the Learning of Whole Numbers?

– Dr. Liping Ma

Recently, the importance of learning fractions has been emphasized in the field of math education. There are two traditions of teaching fractions. One teaches fractions in an approach almost independent from students' learning of whole numbers. Another builds the learning of fractions on the foundation of the learning of whole numbers. The latter is not known by most of today's US elementary teachers. In the talk I will first inform my audience with the tradition of teaching fractions based on the learning of whole numbers. Then I will discuss the inspirations we can get from it.

Saturday Luncheon Address, September 6, 2008

Finding the Thread: Tracing a Mathematical Idea from Elementary to High School

– Dr. William McCallum

Mathematicians' view of their subject is strikingly different from the experience of students. The mathematician I.R. Shafarevich said that mathematics "resembles the work of a single intellect ... much as in an orchestra ... the theme moves from one instrument to another." In contrast, the student's experience is often, in the words of Morris Kline, "like pages torn from a hundred different books, no one of which conveys the life, meaning and spirit of mathematics." I will trace the development of a mathematical idea through several grade levels, illustrating both the underlying unity and surface cacophony of the curriculum.

TUSKEGEE UNIVERSITY
Kellogg Conference Center
September 5-6, 2008

CONFERENCE THEME:

**The Mathematical Preparation of Teachers – Educators and
Mathematicians Working More Closely Together**



TEAM-Math is a partnership of Auburn University, Tuskegee University, fourteen school districts (Alexander City, Auburn City, Barbour County, Bullock County, Chambers County, Elmore County, Lanett City, Lee County, Macon County, Opelika City, Phenix City, Russell County, Tallapoosa County, and Tallassee City), and business partners working towards the common goal of improving mathematics education in East Alabama