



Transforming East Alabama Mathematics

The East Alabama Partnership for the Improvement of Mathematics Education

Fifth Annual TEAM-Math Partnership Conference

Kellogg Conference Center

Tuskegee University

September 5 - 6, 2008

Round-Table Discussions

Saturday, September 6, 9:40AM – 10:55AM

- **Title:** *Teaching Statistics in K-12 classrooms: Emphasis on Data Analysis*
Facilitator: Madhuri Mulekar, Dept. of Mathematics and Statistics, University of South Alabama, Mobile, AL
Location: Ballroom A

Abstract: Over last decade, NCTM guidelines have indicated need for an added emphasis on data analysis in K-12 mathematics classes. The College Board Standards for College Success in Mathematics and Statistics (2006) describes mathematical knowledge essential for students' success in college, which includes data analysis as an important part of mathematics courses in middle school and high school at six different levels leading to Advanced Placement (AP) courses. Keeping in mind the needs of Pre-K-12 education, the American Statistical Association developed Guidelines for Assessment and Instruction in Statistics Education (GAISE) Report. Since 1997, the College Board started AP exams in Statistics the need for teachers trained in statistics including data analysis has increased. In this session, some of these guidelines will be discussed and time-permitting a data-analysis activity will be conducted.

- **Title:** *NCTM's High School Curriculum Project: Putting Reasoning and Sense Making at the Center*
Facilitator: W. Gary Martin, Dept. of Curriculum & Teaching, Auburn University, Auburn, AL
Location: Meeting Rooms D-E

Abstract: This session will provide an update on NCTM's High School Curriculum Project, including an overview of the public draft of *Focus in High School Mathematics: Reasoning and Sense Making* (NCTM, 2008). Paralleling the *Curriculum Focal Points for PreK Through Grade 8 Mathematics* (NCTM, 2006), *Focus in High School Mathematics* builds on *Principles and Standards for School Mathematics* (NCTM, 2000), although in a somewhat different manner. Rather than providing guidance about what topics to address as in the *Curriculum Focal Points*, this document argues that reasoning and sense making must be moved to the center of high school mathematics. Participants will be given an opportunity to respond to major concepts and sample problems from the documents. Other activities of the project, including follow-up publications, will also be discussed.

- **Title:** *Questions Teachers Have Related to Equity and Some Possible Solutions*
Facilitator: Marilyn Strutchens, Dept. of Curriculum & Teaching, Auburn University, Auburn, AL
Location: Meeting Rooms F-G

Abstract: This discussion focuses on questions that teachers have related to equity issues in the mathematics classroom and some of the answers from the research. We will examine questions that teachers have sent in to NCTM, and look at answers from the research. We will also discuss what research still needs to be conducted related to the questions.