



Transforming East Alabama Mathematics

The East Alabama Partnership for the Improvement of Mathematics Education

Sixth Annual TEAM-Math Partnership Conference
Kellogg Conference Center
Tuskegee University
September 11 - 12, 2009

Round-Table Discussions

Saturday, September 12, 11:00 AM – 12:15 PM

- **Title:** *Preparing Teachers for the New Generation of PreK-12 Students: Letting Go of the Standard Introductory Statistics Course*

Facilitator: Christine Franklin, Dept. of Statistics, University of Georgia, Athens, GA

Location: Ballroom A

Abstract: Statistical literacy is a must have competency for our citizenry to thrive in our information rich modern world. Sound statistical reasoning skills take time to develop and cannot be honed in a single introductory college statistics course. To acquire proficiency in statistical thinking requires that statistics education begin early. Foundational statistical concepts should be introduced and nurtured in the elementary grades, and these ideas should be strengthened and expanded throughout the middle, high school and postsecondary grades. The participants in this session will experience examples of a developmental framework based upon the American Statistical Association PreK-12 GAISE Framework describing a conceptual and cohesive structure for statistical education at Grades PreK-12. We will discuss the importance of letting go of the standard introductory statistics course to prepare PreK-12 teachers and growing to develop college-level courses designed specifically for teachers that advance both content and pedagogical knowledge for delivering data analysis within the PreK-12 mathematics curriculum.

- **Title:** *Standards for K-12 Mathematics: Where Are We Headed?*

Facilitator: W. Gary Martin, Dept. of Curriculum & Teaching, Auburn University, Auburn, AL

Location: Meeting Room D-E

Abstract: There has been renewed attention on national standards over the past few years—including the National Council of Teachers of Mathematics' (NCTM) *Curriculum Focal Points* which set forth suggested content for grades K-8; NCTM's forthcoming *Focus on High School Mathematics*, which promotes a renewed focus on reasoning and sense making; suggested grade-by-grade objectives developed by Achieve, Inc.; and parallel grade-by-grade objectives developed by the College Board. Most recently, the Common Core State Standards initiative has been endorsed by 49 states and territories and has the goal of producing national consensus on what mathematics should be taught at each grade level. What do all these initiatives, which may or may not be in agreement, mean for the future of mathematics education in this country? What can we learn from these different efforts that will inform our efforts to improve mathematics teaching and learning?

- **Title:** *What Do We Know about "Good Mathematics Teaching" for All Students?*

Facilitator: Marilyn E. Strutchens, Dept. of Curriculum & Teaching, Auburn University, Auburn, AL

Location: Meeting Room F-G

Abstract: In this session we will examine teaching practices that are dubbed to promote effective mathematics learning for all students. Vignettes, case studies, and other artifacts from research articles will be examined to help participants think about the validity of the claims.