

AMS Lexington, KY **Abstract**, March, 2010

11/29/09 final

### Discussing Mathematics Outreach as Working with a Variety of Stakeholders on Math Content

What can be considered “math outreach”? As a first definition, it consists of mathematicians working on the application of math content knowledge to projects with a variety of constituencies. These include collaboration with K-12 students, practicing and future teachers, parents, school and state administrators, colleagues at colleges and universities and are motivated by Hyman Bass’s view that the collaboration between mathematicians and math educators “...can be productively pursued in the spirit of “applied mathematics” by first deeply understanding the domain of application.” A major point is the need for the statewide core content to play a central role in the collaboration. An example will be in estimation (or modeling) for fourth graders and the use of that material for future teachers. A second outreach point is to involve parents in their children’s mathematical education as a reality check about mathematics. A third is for mathematicians to integrate mathematics into STEM projects. In that context, SLIDER, an NSF supported project at Georgia Tech (GT) which is dedicated to physics of 8<sup>th</sup> grade, will be described. In addition, GT’s Calculus II and III project for high school students and its role in new quality, content mathematics courses for all high school seniors will be presented.

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. A second outreach point is to involve parents in their children’s mathematical education as a reality check about mathematics. (Cobb County schools, Singapore Math)

. Results of the initiation of a new set of performance and its effect on parents will be discussed. (Cobb)

Do the differential geometry and the OR course

### References:

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