

# MATH MATTERS

The 2011-2012 academic year will bring new opportunities and challenges to the College in the new year.

IT HAS BEEN AN EVENTFUL YEAR FOR THE FACULTY of the Center for Math Educas Fellow

Dr. Lawrence Clark, with colleagues in the Mathematics Department, has received Noyce fellowships for pre-service secondary teacher candidates. We are pleased that the grant has been awarded! Dr. Clark and colleagues will use the grant to provide support and scholarships for students interested in becoming secondary school teachers. Lisa Boté and Ann Edwards launched hybrid teacher



*This cohort of Prince George's County teachers graduated in December 2010 with an M.Ed. in Middle School Mathematics Teaching and Learning. This cohort was partially supported by an Improving Teacher Quality grant from the Maryland Higher Education System.*



## The Quantitative Study Project by Toya Jones

After more than a year of data collection, our research team has finally settled into the writing, revising, and disseminating phase of the project. We are working on three drafts for publication. From our preliminary analysis, we have found that upper-elementary (grades 4 and 5) and middle-school (grades 6-8) teachers' pedagogical content knowledge was significantly related to their students' academic achievement. For upper-elementary teachers, content knowledge and their awareness of their students' dispositions towards mathematics were significantly related to student achievement as well. Based on the results of our secondary analyses of teacher knowledge and teacher beliefs, we will re-run our models to include new variables that may help to better explain the relationship between teacher- and school-level characteristics and teachers' mathematical beliefs and knowledge.

These initial findings were presented at annual meetings of the American Educational Research Association and the Research Pre-session of the National Council of Teachers of Mathematics. The discussants and audiences received our findings with interest and found the results intriguing, particularly that teachers' awareness of their students' mathematical dispositions influenced student achievement. We also learned from the work of other

researchers that the relationship between teacher knowledge and student achievement is complex and multifaceted.

These findings are part of a larger project that is currently under review for publication in a peer-reviewed journal.

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use student data to make decisions that  
shape mathematics

## Changing the Equation to Improve Math and Science Learning by Dr. Linda R. Rosen

In 2010, President Obama launched his *“Educate to Innovate”* campaign that aims to improve the participation and performance of Americans in math and science.



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