



The 29th Annual GRCTM High School Mathematics Conference Report

On March 24, 2006, the 29th Annual High School Mathematics Conference was held at J. Sargeant Reynolds Community College (Parham Road Campus). Ms. Donna Dunnsmore, Facilities Rental Officer, worked with the Committee securing rooms and The Gallery for usage during the conference. Cathy Durvin and Ann Schaefer, mathematics teachers at Hermitage High School, served on the Committee securing guest speakers and door prizes.

About 125 high school students and chaperones attended the conference from 8:30 a.m. until 1:30 p.m. Students attended from Huguenot High School (Richmond), L. C. Bird High School (Chesterfield), Matoaca High School (Chesterfield), Monacan High School (Chesterfield), J.R. Tucker High School (Henrico), Deep Run High School (Henrico), Mills Godwin High School (Henrico), Henrico High School (Henrico), Hermitage High School (Henrico), Atlee High School (Hanover), Hanover High School (Hanover), Powhatan High School (Powhatan), and Maggie Walker Governor's School.

The theme for this year's conference was *Robotics: The Mathematics of the Future*. Opening the conference was Dr. Roland Moore, Dean of the School of Mathematics and Science at J. Sargeant Reynolds Community College, who welcomed all the students and chaperones. Guest speakers invited to participate were:

Ms. Betsey Davis from the Mathematics and Science Center who gave a presentation on *Code Breakers 101* which involve writing various types of code.

Dr Kam K. Leang from the School of Engineering at Virginia Commonwealth University whose topic was *Robotics and Mechatronics at VCU* which dealt with the mechanical, electrical, and computer systems in the design of robots.

Dr. John Barnes from Maggie Walker Governor's School whose presentation was *Mathematical Modeling—The Art and Science of Solving Real World Problems with Mathematics*.

Dr. Barnes brought members of the award winning mathematical modeling team from Maggie Walker Governor's School which gave examples of how math can be used to better understand the real world.

Ms. Patricia Crocker from the Mathematics and Science Center whose presentation was *Mathbots* which gave participants the opportunity to program a car to direct its movements using TI-Basic and numerical commands.

Two break-out sessions were held from 9:15 – 11:15 for the participants to attend. At 11:15 lunch was held which was provided by Riverbound Café in Hanover County. At 12:00 Mr. Steven Lapinski, Treasurer of GRCTM and Mathematics Specialist for Henrico County, gave greetings to the attendees. At 12:15 the keynote speaker was introduced. Ms. Dee Tomasak from FIRST Robotics Competition explained that FIRST was an exciting, multinational competition that involved teams professionals and young people to solve an engineering design problem in an intense and competitive way. Ms. Tomasak was able to show national news clips to go along with her presentation and brought with her a mentor and student participant who also defined their roles in the competition and what it meant to them. At the end of her presentation, Ms. Tomasak challenged those schools who were not involved in the FIRST Robotics Competition to take the first step and organize a team to become a participant at the next competition held at Virginia Commonwealth University in March 2007.

At the end of the conference door prizes were given out to students with winning tickets. A TI-89 Graphing Calculator, a TI-83 Plus Graphing Calculator, and a Casio 9850 GxPlus were first awarded followed by three baskets filled with items students could use when going away to college. Finally, at the conclusion each participant walked away with a "goodie bag" filled with items that had been donated by various groups.

C. James Guthrie
High School Conference Chairperson