

# Brian McCombs

Theodore Roosevelt High School, Kent, OH

High School Math Education

Geometry, Precalculus, Advanced Precalculus, and  
Statistics and Probability



2005 Honorees



“Each year I take a survey on the first day of school regarding my student’s likes/dislikes and areas of interest. I try to incorporate these into

my projects and curriculum. As a high school mathematics teacher, this is also one of the greatest challenges I face. The subject material is sometimes difficult to make ‘fun’ and relevant to my students... My geometry and statistics classes are project-laden. In geometry we construct 3-dimensional cities to study surface area and volume and miniature golf courses to study reflections and transformations. We use many forms of technology including Geometers Sketchpad, to Cabri geometry on the TI-84+, to SMART board presentations daily. I team teach my statistics class with two of my students each year. The first semester, two to three students apply to study statistics independently with me. They come in daily for lessons and applications during the entire semester. The second semester they become my teaching assistants. they plan and implement projects, tests, and exam questions. The statistics students have analyzed conditional probability of game shows and used probability concepts to study our US Navy bombers and their accuracy. We have created and completed projects dealing with statistical analysis of the NFL, the NBA, the creating and manufacturing of Chips Ahoy cookies and Hershey Kisses, the deer population of our area, and weather patterns in Ohio. At the end of a school year, all of my students have the knowledge and ability to apply mathematics to their lives and community.” – *Brian McCombs*

“Mr. McCombs, or McC, as we affectionately call him, does not teach to a class, he teaches to the student. McC has a way of bringing the world of math – a world that to me was complicated, out of my reach, and something I dreaded – into my world, into my head, and eventually landing a place in my heart. We ‘non-math’ students have a tough time grasping the abstract ideas of math, but McC makes it his job, which he loves, to bring the concepts to a place where we can reach them.” – *Former student*



## Other Highlights:

Department chairman at Theodore Roosevelt High School

Worked on several curriculum studies/re-writes for Summit County, Nardon Hills Schools, and Kent City Schools

Member and presenter, NCTM and OCTM

Presidential Award for Excellence in Mathematics and Science Teaching nominee (2003 & 2005)

George B Chapman Jr Mathematics Teacher of the Year Award, presented by Martha Holden Jennings Foundation (2003)

Created and implemented a workshop for K-5th grade teachers entitled SMILE (Seeing Math in Life Everyday), summers of 2004 and 2005

One of three teaching fellows working on NEOCeX (North Eastern Ohio Center of Excellence) project. to re-design the curriculum for college level math and science courses to be more constructivist in nature

**Years Teaching:** 14

**Average Class Size:** 21

**Classes Taught Per Day:** 5-6

**School’s Percent of ESL Students:** .8

**School Type:** Public, Suburban

**Type of Class:** Self-contained