

2006 HONOREE

## Jason Shields

William Mason High School, Mason, OH  
 High School Math Education • 9th-12th Grade



**Years Teaching:** 7

**Average Class Size:** 28

**Classes Taught Per Day:** 4

**School's % of ESL Students:** 2%

**School Type:** Public, Suburban

**Type of Class:** N/A

"One of the toughest obstacles I face as a math teacher is turning concepts that many high school students find relatively boring into activities that are exciting and fun. I strive to create mathematical work for the students that is interesting, fun, rooted in application, and intrinsically motivating, thus leading students to high levels of Bloom's Taxonomy. By associating students' interests through music, video games, technology, movies, and hobbies, I plan the most intriguing lessons possible. As a student, I remember learning the trigonometric values of different angles by reciting the information until it was stored away in my short-term memory. After the test was over, I quickly forgot it. Yearning for a different experience for my students, I created a game called, Duck, Duck, Trig. Based on the most loved childhood game, Duck, Duck, Goose, students sit in a big circle at various increments of 30 degrees and 45 degrees. Instead of saying 'Duck, Duck, Goose,' students give the sine of the angle for a duck and the cosine of the angle for the goose. Thus the concepts learned are deeply imbedded in their minds within application. I strive to ingrain these tools, necessary for independent learners and problem solvers in the 21st century, into students from the first day of class."

"Rather than teaching isolated skills, teaching problem solving is the key to unlocking the students' ability to undertake and conquer any difficult problem found in high-stakes testing.



From the first day of class, I give students the tools to begin tackling difficult and abstract problems. My mathematics classroom many times resembles a science room, where students are investigating, testing, creating conjectures, and forming their own rules and theorems based on careful analysis. By having students constantly investigate models that are graphical, empirical, and variable based, students are forced to problem solve and construct creative solutions to real world phenomenon."

"I have always viewed Mr. Shields as caring, compassionate, and as having a tremendous ability to connect with all kids in a special way. He challenges himself to teach all of his students and he works until he finds a way that everyone in the class understands the material and how it connects to a bigger plan. Mr. Shields is not afraid to take a risk by teaching new lessons and he constantly changes his approach to get the most out of his students. He is truly one of the top educators in the country."

— Dave Allen Ed.D, principal,  
 Mason High School

### OTHER HIGHLIGHTS:

Project Excellence Award - Warren County (1999)  
 Sallie Mae First Year Teaching Award (1997-98)