

2006 HONOREE

## Michael Mack

School for Integrated Academics and Technology (SIATech)  
Albuquerque, NM • High School Math Education • 9th-12th Grade



**Years Teaching:** 6

**Average Class Size:** 17

**Classes Taught Per Day:** 4

**School's % of ESL Students:** 12%

**School Type:** Public, Inner-City

**Type of Class:** Technology Directed  
Curriculum

“It is my job as a teacher to help my students use different tools to make connections and gain mathematical understanding. It is my job as a teacher to help the students use these tools to make connections and gain mathematical understanding. To help in making these connections, I have students paint the walls of my room with equations and graphs, once they explain the significance and math behind the equations. Students build models of cars, boats, planes, and buildings to study ratios, perspectives, and engineering ideas. The students utilize pulley kits, drive simulation kits, all of the probes, sensors, and measuring devices for the TI-83, TI-84, and Voyage-200 calculators to make mathematical connections and build understanding. I also work to make math a community project. We all learn from each other in my classroom, as I believe that students learn best in a community of sharing, conversation, and work. As a learning community, we study the history of mathematics, the people of math, and the interesting and ‘cool’ stuff we can do with math. I diligently engage my students in conversations about mathematics. I believe in conversation before action. I want my students to get their brains working, then get their hands moving and the mathematical understanding will inspire the heart and mind of the student.”

“I believe mathematics is more than algorithms, memorization, and drills. Students can learn math in many unique

and different ways. I have manipulatives for kinesthetic students. I work one-on-one or in small groups for students who prefer verbal instruction, and I have written and diagrammatic curriculum for students who prefer a more visual approach. My administration allows me great latitude in trying new teaching approaches, techniques, and ideas. I am rewriting the mathematics curriculum using multiculturalism and social justice as a foundation because I want my students to explore topics from the real world like racism, sexism, social injustices, crime, poverty, politics, and other subjects the students want to talk about.”

“I’ve asked students what makes Mr. Mack’s class different from other math courses they have taken. They respond with quotes like, ‘I’ve never had a math teacher take so much interest in me,’ or ‘Mr. Mack makes math fun and easy to understand. We get to do cool stuff.’ I have never worked with a teacher like Mr. Mack who is constantly working to advance his craft. He searches for new and innovative ways to show students how math works in life. As an experienced school administrator, I can attest to the fact that I have never seen the kind of growth his students make.”

– Kelly S. Callahan, principal, School for Integrated Academics and Technology

### OTHER HIGHLIGHTS:

Teacher of the Year - Eagle Charter School Austin, TX (2002)  
Who’s Who Among America’s Teachers (1997)