



Case Study: Ms. Mettler, 5th Grade Science/Math Teacher Carrollton-Farmers Branch, McWhorter Elementary

Veteran Teacher improves scores and creates an energetic culture of learning through MindBugs Professional Development.

Background

Sandy Mettler is a thirty year classroom veteran and 5th grade lead science and math teacher in Fort Worth, TX. Because Ms. Mettler is known for seeking out innovative approaches to teaching, she was invited to by her principal to move into a new school in 2001. The new school was located in an area in which 56.6% of the population was "economically deprived" and over 85% were from a minority subgroup. Ms. Mettler's first year in this new school was a challenge; to teach a 5th grade class that had achieved well below the state and district average on the state standardized test (TAAS) as 4th graders.

Motivation:

"I needed to motivate students who saw themselves as academic failures. There was not a lot of support at home for most of them.

"I didn't want a new curriculum or textbook. I wanted a different way to explain things and demonstrate things that worked with kids who didn't come to me on grade level without boring the ones who needed to be challenged. This approach helped me do that."

No Math Gene:

"I never considered myself a science or math person. That's

why I sought out some help in the subjects. The MindBugs strategies immediately helped me feel more confident. In continuing to learn and work with them over the years, I've kept improving professionally."

A Model Ten80 Classroom

Ms. Mettler participated in MindBugs professional development through which she and other educators were introduced to a conceptually based approach to teaching math and science. She took the new strategies and methods straight to her students by creating a model classroom. She also built an ongoing and supportive relationship with the Ten80 team.

Ms. Mettler's model classroom integrated Scaleville daily and weekly activities, MindBug Buster centers and Math2Go monthly activities into the core curriculum.

Results Summary

Starting in her first year at this school, Ms. Mettler's students scored significantly higher than the state and district average. Of particular note is the achievement of her minority students. 100% of Ms. Mettler's Hispanic students and 90% of her African American students passed the TAAS. These numbers represent a 10% to 20% gain for this subgroup as compared to the school's 3rd

and 4th grade scores that same year.

Since 2002, Ms. Mettler has taught both science and math, with her students consistently exceeding the achievement levels as compared to the state, district and her campus.

In 2005-6, Ms. Mettler taught only 5th grade science. Her 86% pass rate was a significant contributor to a commendable rating for the school in science. The math students did not meet expectations that year.

In 2006-7, Ms. Mettler returned to the math classroom and led her students to improve scores by 23% over the previous year. The district superintendent paid a special visit to congratulate her and her students.





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2002 was Ms. Mettler's first year at the new school and with MindBugs in Math. With her conceptually-based approach to teaching, 95% of Ms. Mettler's students passed the 5th grade TAAS test with 100% of her Hispanic students and 90% of her African American students passing. These rates were above both district and state achievement in those subgroups.

The next year the TAAS changed to the TAKS and Ms. Mettler changed from Math to Science. She began the MindBugs in Science Program. In 2004-5 Ms. Mettler returned to teaching 5th grade math, exceeding the average throughout the state, district and in other campus groups.

District Name: CARROLLTON-FARMERS BRANCH
Campus Name: MCWHORTER ELEMENTARY
Campus #: 057903129

TEXAS EDUCATION
Academic Excellence Indicator
2004-5 Campus Performance

Progress of Prior Year TAKS Failers; Percent Passing TAKS 2005 (04-05)

Indicator:		State	District	Campus Group	Campus	African America	Hispanic	White
Grade 4 Mathematics	2005	26%	31%	25%	17%	*	*	*
	2004	36%	46%	43%	*	*	*	*
Grade 5 Mathematics	2005	47%	55%	52%	71%	60%	*	*
	2004	31%	39%	30%	*	*	*	*

Progress of Prior Year TAKS Failers; Percent Passing TAKS 2006 (05-06)

Grade 5 Mathematics	2006	39%	42%	20%	*	*	*	*
	2005	47%	55%	52%	71%	60%	*	*
<p>Other instructors taught math in 2006; receiving only a 20% pass rate. Ms. Mettler taught science and raised achievement dramatically. Her 89% pass rate was a significant contributor to a commendable rating for the school in science</p>								
Grade 5 Science	2006	76%	83%	74%	89%	80%	83%	>99%
	2005	64%	72%	66%	66%	68%	43%	80%

In 2006, Ms. Mettler returned to her math teaching. The improvement over previous achievement was dramatic, prompting a visit from her school superintendent to congratulate Ms. Mettler and her students on their performance.

	2006 Items Correct Percentage	2007 Items Correct Percentage	Gains
Instructor	Other	Ms. Mettler	
Objective 1	75%	88%	+13
Objective 2	71%	81%	+10
Objective 3	77%	83%	+6
Objective 4	70%	83%	+13
Objective 5	76%	75%	-1
Objective 6	72%	83%	+11
Percent Passing after April Administration	71%	94%	+23