

## **Holly Concannon - Comments to the National Math Panel – September 14, 2006**

My name is Holly Concannon. I want to thank the panel for this opportunity. I have been teaching in the Boston Public School for ten years. I have enjoyed my job immensely and have learned just as much as my students every year. I am currently a looping teacher for grades four and five. I am pleased that the panel has a working group focused on teachers and professional development, because that is what I want to speak to today-my growth as a teacher.

I spent my first two years teaching kindergarten and first grade. I started teaching fifth grade eight years ago, and I admit I was a little bit anxious about teaching in the upper grades. Moving up to the fifth grade gave me a chance to revisit some math I hadn't seen in a long time. I was handed a text book accompanied by a teacher's guide and was told exactly what I should do. The book was easy for me to understand, and I assumed that if I followed the book's instruction, I would see success with all of my students. For the most part, I did. The majority of the students were able to answer questions in the book after being told what steps to follow. The students either got it, or they didn't. Some felt very successful and confident in their abilities, and others began to feel as if math was not their subject, or strong point. After all, that was what my method of teaching was telling them, and me.

What else strikes me about the memory of teaching in this fashion is the way the students responded to higher level questioning. Often times, they would defend their work by saying things like "I just knew." Explaining their thinking was not a strength of any of the students, and they weren't asked to. Therefore, I couldn't assess their understanding and identify gaps in their thinking.

I now teach grade five with a more balanced approach, using the Investigations in Number, Data, and Space curriculum. Aligned to the Massachusetts state standards, this rigorous curriculum helps the students develop computational skills with an understanding of the underlying concepts. In my classroom, students get daily skills practice, and they apply these skills to meaningful problems. We hold the children to high standards, which include having them explain their thinking. By getting to know my students this way, I now have multiple ways to assess their thinking, so I can figure out what they need in order to progress.

When I reflect upon the way this more balanced approach has affected my students, there are many children who come to mind. One in particular, is very easy for me to talk about. She entered the Murphy school very shy, timid and to some extent, academically damaged. She transferred into our school from a private school she had been attending in her neighborhood since kindergarten. She was terrified of her new school setting, and especially the dreaded subject of math. You see, she was one of those students who thought she just didn't get it. She assumed that she would always do poorly in math because she was use to failing grades on traditional assessments. She was not use to being asked how she was thinking about numbers, or how she arrived at her answers. After a few weeks of being asked those questions and feeling as though she was able to think mathematically, she was able to progress. I was able to identify what she knew and understood, along with what she didn't understand. Because I was able to get to know her in this fashion, I was able to provide experiences for her to grow. Along with her confidence and desire to learn, her achievement in math skyrocketed. For the rest of the two years she spent with me, she looked forward to math and figuring out why

numbers worked the way they did. She, like many of my students, grew to love the idea of figuring out the why, along with the how. She grew to think like a mathematician, rather than a girl on an individual education plan who hated math.

It is easy for me to talk about the progress I have seen because I have experienced it first hand. However, the students in my room are not the only students who have benefited from this rigorous and challenging curriculum. The Murphy school has seen success in all of our classrooms. Not only are our teachers talking about the improvement we are seeing on our citywide assessments and the higher level of classroom discussion, we are also seeing results on our state assessment (MCAS). I am proud to share with you today the gains we have made in math. In 1999, our school had devastating results on the statewide tests. 54% of our students landed in the warning category. Six years later, we have just 9% in that same category. The number of students achieving advanced or proficient rose 32 percentage points. These statistics have given the Murphy great reason to celebrate.

However, we are not the only school worthy of the celebration. The Boston Public School District as a whole is making progress. Early this year, we made national headlines for having the greatest gains in our NAEP scores, among 11 major urban districts.

I credit these gains to our district's commitment to professional development and I believe strongly that the successful implementation of any curriculum depends on strong teacher support. Thank you.