

Mathematics Efficacy Reflection

by Gina Brinser

Evaluating my own learning efficacy for math is a challenge! I have such a passion for the subject and desire for a deeper understanding that I'd have to say that over the years my rating has gone from **very** anxiety-ridden in my much younger years, to an 8 now.

In school, I was more of a conceptual learner of mathematics. I had trouble with the algorithms because I was the type of student who needed to know why things worked. I did well, despite most of my classes being taught using cumbersome step-by-step methods. I did love math, though. When a light bulb would turn on over a concept that I suddenly understood, it was more like fireworks! Because the methods in school did not seem to work for me, my father would stay up late nights with me and feed my craving for a better understanding of the concepts. We would often work on real-world problems late into the night.

By the time I got to college, after changing majors a time or two, I ended up in the math department. The coursework was amazing. As we studied what they described as "abstract" concepts, suddenly I wondered why on earth I had not been taught these things all along. Why were these "abstract" concepts kept mysterious from my early experiences? Surely I would have benefited from learning these things first and the algorithms afterward. I made up my mind that I could teach these concepts to young students, perhaps even in elementary school, and that they certainly could grasp these ideas!

On the day that I received my Bachelor of Science degree in Mathematics, my parents confided that I had been evaluated in school as "learning-disabled" in math. Yet, if that was the case, I had just accomplished a nearly impossible goal. How could that be? Perhaps, I considered, the *schools themselves* had been "teaching-disabled" in mathematics all along.

Naturally, I keep all of this in mind when teaching my students. I love coaching math this way: conceptual understanding is mastered first, before any confusing algorithms. I enjoy watching students use manipulatives to develop their own methods and draw their own conclusions. I've used methods that are inquiry-based, and what a difference from the way I was taught! Because it is tailored to my learning style, I am very comfortable teaching with this method. It is delightful to see students discover math on their own. They enlighten me each day as they share new ways of problem-solving. I tell them to let their Natural Mathematician that is inside all of them, shine.

I like to show my enthusiasm for math because I believe it is contagious! Working on real-world problems is the perfect way to demonstrate that.

~Gina Brinser has been teaching in the New Orleans community since 2006. With a Bachelor of Science degree in Mathematics (Loyola University) and a Master's in

Business Administration (UNO), Ms. Brinser held a position as an accountant at a design firm for many years, prior to pursuing a career in math education. She has taught 2nd through 12th grades, but her experience also includes a semester of work in the Tulane Teacher Preparation and Certification Program as an Adjunct Professor in a methods college course to prepare prospective teachers to teach science and mathematics in the early childhood setting. In 2015 through Project Lead the Way, she completed building-level training in order to provide STEM launch as a lead teacher and instruction at the elementary level utilizing the PLTW curriculum. For three years Ms. Brinser taught PLTW Robotics and Automation Project to fifth-grade students. Currently, Ms. Brinser is teaching Introduction to Engineering, and Principles of Engineering, in conjunction with the Engineering Department at LSU, which is part of the Sci High Advanced Tech Pathway. She has two sons - one with a degree from SLU in Sports Management, and the other beginning his college career at ISU.