



Automaticity Tidbit—Elephant in the Room

Fact- Results of an international exam given to teenagers ranked the USA 9th in reading and 31st in Math out of 79 countries. USA scores have essentially been flat for two decades. (2020 USA Today) Fact-The 2019 NAEP scores for 4th and 8th graders hasn't budged since 2009. Educations reaction to the above were to change the order of high school math classes or reassess algebra, move classes down to middle school or change the dynamics and demographics of the classes. Let the blame game begin! But doesn't the issue about Math achievement really begin at the elementary level?

Research shows that math anxiety is real. Studies show that students learn less math from a math-anxious teacher. It suggests that when teachers improve their attitude toward math, it can help raise student test scores. Many elementary teachers are teaching math as they were taught—memorization and procedures. Did you know that 63% of elementary teachers are anxious about math and 33% have full blown math anxiety? How can we teach something we are anxious about? Some studies believe an alternative to teacher anxiety is giving support by hiring math specialists who would serve as consultants to teachers, or math coaches who would offer classroom observation and feedback. But what if the teachers don't grasp their suggestions because they do not know the 'why' the methods they are suggesting work? The problem- Many districts don't have the resources for such positions. Another problem-Many districts 'move' teachers to these positions and they do not have the expertise to make a difference. Another suggestion—departmentalize elementary schools and/or have full time math instructors...like we do for Music, PE, etc. This is NOT taking an existing grade level and with a coin toss Mary gets to teach math, Jody teaches reading etc What if they are both anxious about Math and are mediocre in reading? This IS placing teachers in their expertise to teach. But is that possible? Or do what high scoring countries do, one teacher teaches math and he/she is a certified mathematician. Do any of those scenarios seem feasible?

I was a primary teacher for 36 years. No, I am not the elephant in the room...well...I was...let me explain. I don't know about you but I had one math methods class in undergrad and another one in one of my Masters programs. I am one of those teachers who want to go back in time and apologize to all of the students that I thrust anxiety upon because I was also anxious about math myself. Not knowingly, of course, but looking back it was a reality. I soon realized I needed to begin the learning journey in math just as I had done in reading and writing. I read every book, studied the research, learned best practice, attended classes...no podcasts and social media at that time...ok I am old! With this knowledge I had changed my mindset which impacted my instruction and that knowledge continues to grow!

Once I was a witness to a change in my students I created and taught grad level classes on Early Mathematics and began speaking to other teachers at conferences. I knew there were other dedicated teachers wanting to be more effective in their classrooms, wanting to learn, wanting to make a difference. It was time to give back to those I cared most about... teachers and kids. Christina Tondevold says it best as she describes herself, myself, and others as Recovering Traditionalists.

Here sits the elephant...the herd of elephants...can we self reflect and make the changes? (Sorry if you took offense to that...) Changes within ourselves need to take place, we need to make informed decisions as we teach math. Math is a precursor to success. Kids need to be able to problem solve. Kids need to know math is challenging and the challenge is fun, not scary. Answers may take *time*...and we need to honor that time (even though it is a four letter word to us)

We GOT this!

You may be screaming, “Are you freaking crazy? I don’t have the time or energy to ‘specialize’ in math? Did you forget that elementary teachers teach reading, writing, science, social science, social emotional and the list goes on. How in the heck can teachers be experts in all these subjects and do the testing, collect the data, attend meetings, be on committees and that list goes on as well.

The answer is ...teachers do the best we can. Our job is difficult and emotionally, physically, and mentally draining. But we maintain a positive attitude, we serve kids and their future. IF you are reading this, you are wanting to confirm what you are already doing, learn more, or you are bored out of your mind! Ha

MathRack wants to help! Fact Fluency...I prefer Automaticity.. is the ongoing, most discussed topic in primary grades. Why can’t there be an end to this discussion? Why are so many kids unable to think flexibly about number? MathRack is gathering the research, synthesizing the resources, and finding the common threads to share with you. We don’t claim to have all of the answers, but if we take the time to investigate and share what we learn and lead you to people who may have the answers for you...Maybe, just maybe, with a tweak here and there in your instruction, an AH HA moment or two, we can make a difference.

So keep your eye out for weekly automaticity tidbits!

Change is difficult But...

If you don’twho will?

PS More tidbits on automaticity to assist and/or reaffirm your wonderful instruction are on the way!