



Using STEM to create Growth Mindset Opportunities for Students

October 12, 2016

In a recent featured tweet, you saw Jessica Ehlinger's first grade students bobbing for apples in a STEM challenge. I asked Jessica, the 2017 Clay County District Teacher of the Year from Ridgeview Elementary School, to share with you a bit about her classroom.

"How do you raise self-esteem and academic achievement at the same time?" Rita Pierson posed this question in her infamous [TED Talk](#) (which, let's be honest, has become every teacher's Rocky theme song). My answer to Rita's question is, through building authentic relationships, giving students the opportunity to cope with struggle and failure and providing intentional teacher interactions.

I know it sounds counter-intuitive to create opportunities for your students to fail to build self-esteem, but think for a moment about your proudest achievements. I'd bet the six broken crayons, half-eaten apple and leaking water bottle in one of my student's desks, that those achievements didn't magically happen. Those achievements are the product of struggle, occasional failure, passion and perseverance. That work, those times, built your self-esteem, shaping you into the person and educator you are today. Failure is a by-product of deep learning and growth.

To achieve a culture of inquiry and resilience where students feel comfortable struggling and failing, I began implementing STEM challenges with kindergarten and first grade students several years ago. My mini-MacGyvers use the Engineering Design Process to collaboratively question, predict, explore, observe, investigate, create and reflect. Early exposure to STEM helps students develop important critical thinking and problem-solving skills. It also provides a unique opportunity for all students to be challenged.

With the first STEM challenges each year, there are plenty of failures and occasional tears of frustration as boats made of paper sink and houses made of index cards are blown away by my big, bad blow-dryer. With each challenge, students begin to accept that struggle and failure are part of learning. I watch this important lesson inspire my students to become risk-takers in everything they do. They enter my classroom each day fearlessly reaching far enough to do their best work with confidence, knowing that WHEN they fall I will be there to help them up, celebrate their effort and encourage them to dig in, asking "What went wrong?" and "Now what?" before I toss them back into the deep end.

I encourage you to share the mindset shifts that are taking place in your classrooms, like those taking place in Jessica's classroom, through email or Twitter.

Best,

Abbey Stewart

Teacher Liaison

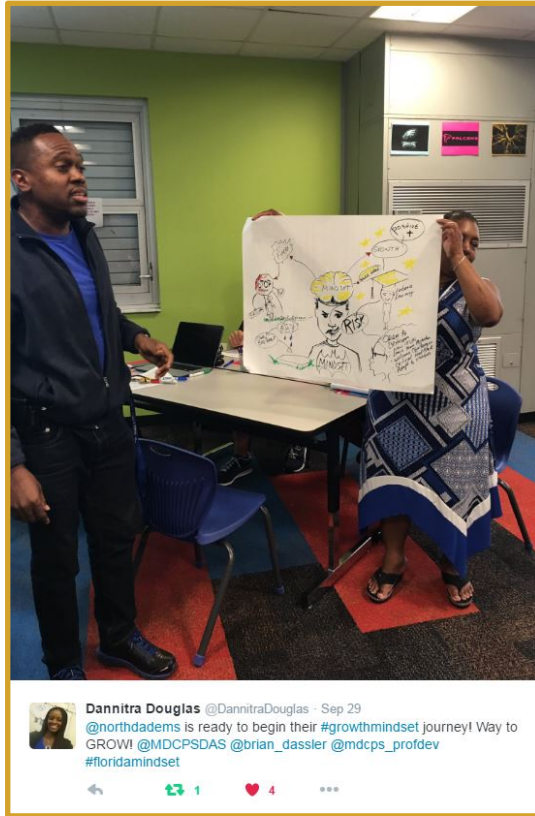
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Featured Tweet



Hot Topics in Tallahassee

Florida's Distinguished Educators Ceremony

On September 26, Commissioner Pam Stewart hosted the Distinguished Educators Ceremony in the Turlington Building lobby. Anne Bieber, recipient of the Outstanding Assistant Principal Achievement Award, Rhonda Hunt, recipient of the Principal Achievement Award for Outstanding Leadership, and Jessica Solano, the 2017 Florida Teacher of the Year, were introduced to Department staff and honored by Commissioner Stewart. Their pictures will be on display for the remainder of the school year.



Governor Scott Recognizes Seven Educators with the Governor's Shine Award

During a recent meeting of Florida's Cabinet, Governor Rick Scott recognized seven outstanding educators with the Governor's Shine Award. The Shine Award is presented to teachers and administrators in Florida who make significant contributions to the field of education.



You can learn more about these seven educators [here](#).