

SYNTHESIS ESSAY:

“The Beat Goes On...”

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Every teacher has heard a student say: “I’m not smart enough.” For me, my response relies on a Growth Mindset, “You can’t do it yet, but you will.” I am no different from my students, I have moments when I think I can’t do something. I know I don’t know everything. To this day, I am still a learner. I will be a learner for the rest of my life. Everyday that you wake up you experience new things that you adapt to understand. That’s normal. I want to make sure my students understand this. There’s no such thing as perfection. Everyone makes mistakes. We are all smart in our own ways and as such grow in different directions and at different times.

I remember when I first told my students that I was going back to Michigan State University to take classes again and work toward my masters. They were honestly so confused as to why I would want to be a student again! Truthfully, I was excited! I’d missed being a student, strangely. Now, as I near the end of my journey to receiving my Masters, I’m reflecting on my time as a learner in the Master of Arts in Educational Technology (MAET) program.

Use Failure

During my first summer in the MAET program, we were asked to create a list of open ended questions before each main project before anything was explained. This list of questions could not ask about solutions. Honestly, this practice was infuriating to me. The questions we had just sat there. They weren’t answered. My peers and I just wanted to know what we needed to do so we could get started right away. As a teacher, if a student asked me a question I feel that I

couldn't just ignore them! If I don't know an answer, I'm honest about that. But looking back on this experience now, I realized that as infuriating as it was, the purpose was to slow our dependency on a rubric and outline and get us to actually think about the various sides of a problem before diving in head first.

In [CEP 812: Applying Educational Technology to Problems of Practice](#) I worked with a partner to "solve" a Wicked Problem: "allow failure to be as powerful a learning mode as success." A Wicked Problem can be defined as a problem that is difficult or impossible to solve, for various reasons. In regard to the problem we were trying to solve, I think the reason our problem is considered "Wicked" is due to the number of stakeholders involved (parents, teachers, students, administration, etc.) as well as how our society looks at failure. It's seen as well... a failure. A flaw. A blemish on society. Failure's negative connotation infects everyone, from an early age.

After coming up with a long list of questions regarding failure, I put myself in the shoes of a teacher, then a student, using a technique called "[Circle of Viewpoints](#)." My partner and I roleplayed scenarios from different perspectives to again dig deeper into this Wicked Problem. This practice, of placing myself in others' shoes, is something that I've tried to continue in my professional life, for example thinking of how a parent or student may feel in a given situation. Moving further into our analysis of this Wicked Problem we researched our problem before proposing two possible solutions that may lead to failure being a powerful learning mode just like success is.

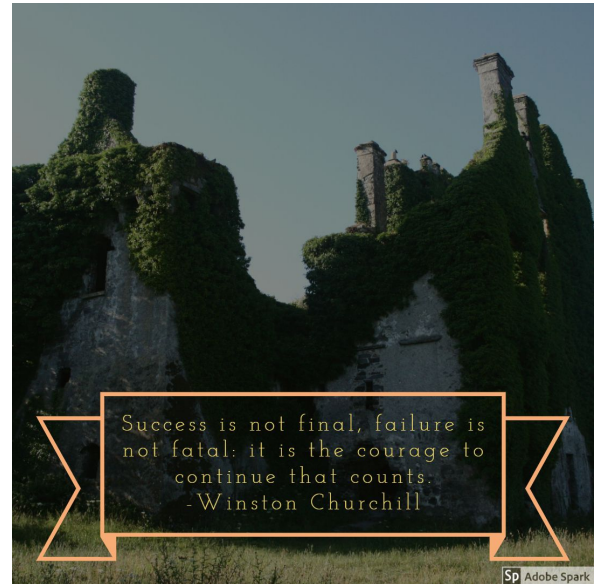
1. Instill a growth mindset in students, parents, teachers, and administration.
2. Create a positive, supportive, accepting, and collaborative classroom community.

Our solutions to this Wicked Problem won't fix society's outlook on Failure. They will however make a difference at a classroom level, which will then hopefully grow with each child as they move on through their education.

As a teacher, I have begun every school year working on these two solutions with my students. From day one we are working to create a family-like community of learners within my classroom where students feel safe and comfortable learning new things, even when they're hard. I am proud when I hear my students asking each other questions and feeling comfortable when they ask for help. Within the first few weeks of school my students learn about their brains and how having a growth mindset affects their brain's growth. As they make connections to things they've learned before the neurons in their brains grow more dendrites and connect with each other. Tied together as a class by a piece of twine and a stuffed toy "Norman the Neuron" students learned how their brains make connections daily (see image to the right.) The excitement over their brains is infectious. I send home information to parents about how they can help instill a growth mindset in their child and keep them notified of what their child has learned during that time about having a growth mindset. Hearing my students give themselves and each other pep talks and words of encouragement is amazing.

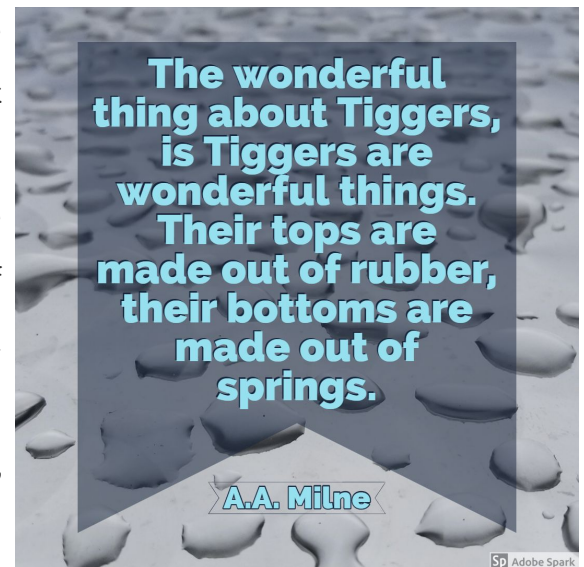
The reason that teaching students about growth mindset is so important is that students with that mindset are more likely to accept failure, reimagine new solutions, and change their course of action. For example, when my students finish a math test I grade them first. But I don't stop and move on. If students make an error, I circle it and ask them to check their work again. More often than not the child rushed through the problem or didn't understand what the question was asking. When they are given a second chance to learn from their mistakes,

they reimagine new solutions and change their course of action. Making sure my students understand that it's okay to make mistakes and learn from them is an important lesson that I try to teach in my classroom. I honestly feel that they learn so much from fixing those few mistakes in the grand scheme of things. The word "yet" has so much power when our students understand that it's okay to not know everything at first. Everyone started out at the same place, but we all take different roads to get where we need to go.



Make What Matters

I have a shirt that says "Make What Matters" that I bought at one of my favorite stores: Joann Fabrics. Every child that I have ever taught knows that I like to make things. I paint, draw, and sew, but the list goes on. I'm a "maker" and I like to bring that into my classroom. Whether it be in the pieces I decorate my room with or the activities that we sometimes do. In [CEP 811: Adapting Innovative Technologies In Education](#) we dove deeply into the Maker Movement. For some reason, when I think of this Movement I think of the quote by A.A. Milne that Tigger says. Maybe because to be a "Maker" you can use anything. Rubber, springs, cables, batteries,



paper, pencil. The opportunities are endless, just like Tigger's boundless energy.

During this course focusing on the Maker Movement, we created an activity for students. My small group of educators called our project “Coding with Colby.” Our objective was that students would be able to have a hands on learning experience with coding that illustrated how the sequence of events affect the outcome. We created an instructional video on how to code Colby, the lesson plan teachers could use, and did a prototype test with students at tinkrLAB in the Meridian Mall in Okemos, MI.

After this project, I was excited to try this activity with my own students. So thanks to some Black Friday magic I was able to purchase Colby Code & Go for my own classroom. I look forward to being able to use this technology for my students to build their sequencing and teamwork skills. It’s wonderful to see those lightbulb moments when students realize the error in their code sequence and are able to reimagine new solutions and change their course of action. I’m sensing a pattern here. Are you? Learning from failure is key! I hope to continue using similar learning opportunities in my classroom.

All About the Money

Most recently, in the summer of 2019, I spent four weeks in Galway, Ireland where I studied for my second summer semester of the MAET program. The second year of the program is more about leadership and was an equal mixture of independent and whole group projects. One of these projects had us find a Problem of Practice we face within our teaching and use the Technological Pedagogical Content Knowledge (TPACK) Framework to find solutions to our problem. I looked back at my students’ math scores and found, consistently, that

money was a struggle for them. So I then began to think about TPACK. TPACK has been a consistent concept and framework within the MAET program and it has helped me think of how I teach all subjects.

For my Problem of Practice I compiled information that explained my context (where and who I teach,) more specifics about the content misunderstood, the pedagogy behind this skill, and the technology used currently to help build mastery. After analyzing what I already know about the problem, I did research to see what other educators have done to help their students master money concepts and what researchers say are the best methods for teaching this skill. After the research, I created several ideations. I thought inside and outside the hypothetical "box." What are ways that may help my students understand money concepts?

The final project itself had concrete, pictorial, and abstract solutions as they are the normal progression of learning at an elementary level. In reality, when I came back from my summer of learning all it took was a daily chant - or rap - if you ask my students. This project inspired a new daily routine during our morning meeting. When we do our calendar math we say this chant. For the first month and a half of school I led the chant and students repeated each line after me. Students even began using hand signals to represent the coin amounts.

During this time, students took their first math test, which had two questions about money. Students would ask me, how much is a dime? And I would put the question back in their hands and say "Think of our song." As I was walking around the room I could hear my students saying the chant to themselves. If the picture of the coin was confusing, they were walking up to our morning meeting wall to check out the coins that they've grown so familiar with. This routine was

making them independent thinkers. Well over 80% of the class got those questions correct! Something that had not happened in previous years.

After awhile I asked my class to lead the chant and they are rockstars at it! To see my students rocking out this routine, watch the video at the end of my essay. Not only did this course help me practice using the TPACK framework with something meaningful to my own teaching, it helped me make something useful to bring back to my classroom that I began using on Day 1 of the 2019-20 school year.

Conclusion

During my time in the MAET program I have worked with peers outside my district, and some who teach outside the country! They have shared their experiences with me and given me new insight to old content. The opportunities I've had abroad, on campus, and online through this program have opened my future teaching to new avenues within technology. As in my first essay, my original reasons for getting my Masters of Arts in Educational Technology was to build my technology skills and implementation within my classroom. Over the last two years I feel that I have worked on that goal. While I will never know everything there is to technology, I feel that I've gotten a stronger grasp on my own skills and have definitely begun using technology with my students more often in that amount of time as well. But my story as a learner isn't over... the beat goes on.