

## **Reflecting on my Master's Degree**

From a very young age I have always had a love for learning, reading, and even teaching. I remember when I was younger, I would spend time at my Grandma's house with my cousin and we would play school in the living room. We would use the piano bench as the teachers' desk and the "students" would sit on the floor with a clipboard on their lap. I would teach my cousin math, reading, and we would also conduct science experiments. She was not the best student though, since she knew everything I was teaching because she was a year older than me. But she still let me take the lead during this time.

Many years later, it was not a surprise to my family when I decided to change my major from Kinesiology to Teacher Education when I was a Sophomore at Michigan State University (MSU). They knew all along that children and teaching was the place for me before I did. Throughout high school I helped out with Children's Liturgy, coached my younger sister's soccer team, and babysat. You would think I would have figured it out on my own a long time ago!

I completed my Undergraduate degree at MSU in 2018 with a Bachelor of Arts in Elementary Education with a specialization in Language Arts and a minor in Teaching English to Speakers of Other Languages (TESOL). Immediately after graduation, I knew I wasn't done advancing my career but I didn't know where specifically I wanted to go next. Did I want to become a reading specialist? Become a Librarian? Go into Administration? There were too many possibilities.

I started my first teaching position in a school that guided me in the perfect direction: technology. Students all had their own iPads, there was a district technology specialist in our building, and we also had Sphero's in our buildings. All of these facets peaked my interest in the technology field. I wanted to learn more about creating lessons that are meaningful for students where they aren't just placed in front of an iPad and get told to go play on x, y, or z. I wanted to learn how to use technology for collaboration, either with my peers or creating spaces for my students. I also wanted to learn more about coding, since my students could not stop talking about video games and I had access to the Sphero's.

Through the Master of Arts in Educational Technology (MAET) at MSU, I learned about all of these things plus three aspects of educational technology that shape my teaching practice. These include meaningful activities within 21<sup>st</sup> century learning, critical thinking, and computing and creativity for students.

### **Meaningful Activities and 21<sup>st</sup> Century Learning**

I have always had a love for Project Based Learning (PBL) and Personalized Learning, where there are real world applications included and students learn from those experiences. Little did I know that these meaningful activities are just a small part of a coined term called 21<sup>st</sup> Century Learning. During CEP 810 (Teaching with Understanding with Technology), we did our own research about 21<sup>st</sup> century learning, collaborated with our peers about the topic, and created a lesson plan encompassing our new learning.

Going into my research, I believed that my search would lead me towards a technology heavy discussion and how it should be utilized in the classroom. Surprisingly, I was wrong and technology is not the base of the concept. I learned that I already use a lot of the 21<sup>st</sup> century

concepts in my classroom, which felt very rewarding but I still felt like I could take it even further. In my practice, I already used the 4 C's (critical thinking, collaboration, communication, and creativity) in my lessons but I never purposefully thought to put them together or use them more meaningfully.

I have learned that 21<sup>st</sup> century learning is more about the individual students and their learning. The learning is student centered where students do most of the talking and have accountability in their work and their choices. As a teacher, I am there more as a guide or a facilitator.

I used what I learned from my research and incorporated these tactics into several jam packed lessons. Specifically, I made a lesson about United States Landmarks and immediately implemented it into my classroom to see the change in my thinking and my students. They were elated when they were able to choose how to showcase their learning, it was such a rewarding experience to see almost 100% of my students engaged in an activity.

During these lessons, where I put 21<sup>st</sup> century in the forefront of the lesson I noticed a lot about my students as a whole and individually. They took more ownership in their work and they used experiences from outside of the classroom and brought them into the classroom. These were the lessons that the students told their parents about and I would hear about them at conferences. While I would love all lessons to have this kind of impact on my students, it is not doable all the time. I hope as time passes, I will continue to have the drive to develop these lessons for my students where in the end I will have a large repertoire of meaningful activities.

### **Critical Thinking**

Throughout my Master's program I was intellectually challenged the most during the course CEP 812 (Applying Educational Technology to Issues of Practice). During this course we read *A More Beautiful Question* by Warren Berger where we learned about asking questions starting from a young age, challenging others ideas, coming up with solutions, and so on. As a child, I wasn't the one that was constantly asking questions about the revolving world around us. I was the quiet one sitting in the classroom soaking all the information in without questioning a thing.

While reading this book, I forced myself to go outside of my comfort zone and question what I was doing personally, within my practice, and what my district expected me to do within my career. As part of an assignment, I created my own beautiful question of: How do you incorporate technology into personalized learning? During this time, I learned to break apart this loaded question into smaller ones, get other people's perspectives, designed multiple solutions with technology incorporated, and learned how to implement it all into the classroom.

This form of critical thinking became something that I tried to incorporate into my day-to-day routines. The knowledge that I gained from this course became very useful when we were designing our Project Based Learning (PBL) units as a second grade team. I was continuously asking questions about the standards we wanted to utilize, thinking about how we can meet those standards with the project we wanted the students to make, and encouraging others to critical think when I asked them specific questions about their ideas. I would like to

think I helped my colleagues with my new questioning expertise, but I would not be surprised if I frustrated and annoyed them instead.

Taking this critical thinking and questioning journey even further, I decided to instill this practice into my second grade students. Since I did not question anything myself as a child, I want to give my students the opportunity to do more than I did. For example, during down time, I would put weird looking pictures on the board (for example – the head of a bee and the body of a whale) and students would have to ask questions about this made-up animal. Not only did students (and I) had fun during this time, but they also asked questions, and even made up fun solutions to go with the animals. Later, we continue to ask questions about real world experiences, different books we read, during PBL lessons, and the list continues. Questioning is a skill that I hope I continue to utilize personally and professionally and introduce to my students so they can become critical thinkers as well.

### **Computing and Creativity**

The last course that impacted my learning drastically was CEP 833 (Creativity in K12 Computing Education). I first wanted to take this class to help me connect with my students. Video games are very prevalent for the younger generations and while I do not play them, I still wanted to take steps to connect with students regarding the topic. While I don't like to encourage students to go home and play video games all day (I rather them go outside or pick up a book), having them understand the programming or science behind it makes it more worthwhile.

CEP 833 was my first time in the "coding world", I had to learn about functions, loops, and so on, all while completing a project for the class. But the most important part of this aspect of the class, is that we aren't just coding something to just code, there should be a purpose to the assignment. For example, using Sonic Pi to learn and practice patterns, using Python to help students learn grammar or using Scratch for storytelling. Students deserve time to tinker and play with different coding tools, but I also learned that giving them expectations and an assignment, they will learn how to utilize coding in other real world experiences.

I also learned a lot about the term creativity. There are a lot of people that are stuck inside the notion that creativity just means to be "artsy or crafty" but that is not even half of it. Creativity or creative thinking is applicable to all people when they have to think outside of the box or to be innovative. While learning about this, I took this notion into the classroom with my students, especially during our PBL units. We talked about creative thinking when coming up with solutions for their projects. I explained that creativity does not necessarily mean to make your project look "pretty" but instead it is to think of a very different solution that someone else may not have thought of. I believe they took that conversation to heart when I saw the ideas that they thought of for a handicap style zipline. This is a conversation with my students that I will be doing every year. Everybody can be a creative thinker, it just might look different depending on the person.

The most impact that I had from this course was the piece about assessing creativity. Students can show their expertise and knowledge in many different ways, but I struggled in how to specifically assess these pieces. I now keep the [NEW framework](#) (Novel, Effective, and Whole) in mind when assessing student's creativity in their projects.

This course has already connected me to my students in ways that I would not have imagined and I took the leap to teach a week long coding class to third through fifth graders, where they got time to tinker, learn about Scratch, learned from others, and so on. This course will continue to help me build relationships with my students for years to come.

When I started this Master's Program, I had no idea that it would have such a huge impact on my teaching career so quickly. I learned about topics that experiences in the classroom would not have touched. Throughout this journey, I have learned to be a lifelong learner, critical thinker, coder, better listener, and better teacher for my students and I am forever grateful.