

## **There is No Finish Line**

I believe that to be the best possible educator, one must be a lifelong learner. Pursuing my Master's degree has always been a personal goal of mine since I began my career as a 4th grade teacher. When contemplating what type of degree I would want to pursue, I was unsure. I finally settled on educational technology. Our school had recently implemented one to one devices for all students so I was excited to learn about how I could provide improved technological experiences for my students. I realized that there was much more to learn in the Master of Arts in Educational Technology program (MAET). Not only did I discover wonderful tools and develop new skills, but I also became a student, and I now will be able to share my experiences with my students.

Every course I took truly taught me something useful and important. I found that everything I learned had value and could be used in my teaching right away. I have already implemented many of the things I have learned into my classroom, and I know I will continue this trend throughout my career. The important aspects of my coursework can be summarized in three themes: how students learn, integrating technology effectively and equipping students for the 21st-century.

### **How Students Learn**

*Courses that impacted me: CEP 800, CEP 813, CEP 816*

My first two courses in the MAET program (CEP 800 and CEP 810) were the perfect springboard for me. Reviewing the psychology of how students learn allowed me to reflect on my teaching in a unique way. I rediscovered that learning is the act of acquiring knowledge. This process entails adding new content to our pre-existing knowledge or schema. This process varies from person to person since everyone has different life experiences. Novices and experts have completely different learning processes, due to their differing schemas about topics (Bransford et. al, 2000). This should be kept in mind when designing or teaching lessons to students.

Cognitive load is something that I explored in CEP 816. Students only have a limited amount of working memory and every student has a different amount. How much existing schema a student has on a subject will determine

how much cognitive load is appropriate. It is important to present students with information that has an appropriate amount of cognitive load. If a teacher is showing a video that has words, pictures and a voiceover relaying information, it can be too much for the student to take in at once. Breaking things down or presenting it differently can be a solution to the problem of too much cognitive load.

Assessment is an area in which I have grown immensely since beginning my coursework. In CEP 813, I was able to realize that the emphasis should be on formative assessment, not summative assessment (Black & William, 1998). Formative assessment finds out where the student is as compared to where they need to be. Students should have the ability to show their learning or understanding in a way that works for them, so formative assessment should reflect this (Meyer et al., 2014). I also learned about designing with the outcome in mind when reading *Understanding By Design* by Grant Wiggins and Jay McTighe (2005). When designing a learning experience for students it is important to start with the desired outcomes. Ask yourself, "What do I want students to learn?" You have to determine what acceptable evidence would be that show the desired outcomes' have been reached (Wiggins & McTighe, 2005). Lastly, I could see that feedback is also an important part of assessment. Students need to have specific feedback so students know how to move forward (Hattie & Timperley, 2007). I have been utilizing a "strengths and suggestions" section on my assessments to make sure I give proper feedback. This course transformed my assessment in my classroom.

### **Integrating Technology Effectively**

*Courses that impacted me: CEP 810, CEP 811, CEP 812, CEP 816, CEP 817, CEP 820*

Before taking CEP 810 and CEP 811, I thought that digitizing an assignment automatically made it technological. That is not the case at all. To effectively integrate technology, it needs to be incorporated in a 21st-century way. Students can use the Internet to find anything they want to know in this day and age. Now, the focus must shift away from students memorizing facts to analyzing this information that is so readily found. Integrating technology must have an authentic purpose, not solely using technology for the sake of using technology. The task needs to be something that can only be achieved by using

that particular technology. If the task can be just as easily done without the technological component, then the lesson is not integrating technology effectively. The lesson can have an essential or guiding question, but students should still have room to play and create when using the technology.

Online learning has different guidelines for teaching. When designing online activities for students, there are several things to keep in mind. I designed an online course, a virtual book club, in CEP 820. I had to make sure that everything students needed was included in the course due to the instructor not being physically present to explain and guide the students. This meant adding a communication policy or expectations for communication, tools, guidelines, screencast videos with explicit instructions and allow for differentiation if needed (called Universal Design Learning). When it is all done, it is important to get feedback from students to keep improving the experience for years to come.

### **Equipping students for the 21st-Century**

*Courses that impacted me in this theme: CEP 811, CEP 812, CEP 822, CEP 815*

In CEP 812 I had to research a “wicked problem” or a problem that can have many different solutions. My wicked problem was “rethinking teaching” or how to teach in a way that prepares students for life in the 21st-century. After creating a survey and asking my personal learning network to weigh-in, it was found that creativity was deemed the most important skill for students to learn. This was surprising because in the past the emphasis has typically been on traditionally academic skills like problem-solving. I think it makes sense to incorporate creativity because it can be used in all areas of life. Allowing student choice or giving them a target allows creativity to flow. Examples of this could be having students use ordinary materials to create something like the Cardboard Challenge.

More research on necessary skills for the 21st-century was carried out in CEP 822, an educational research course. I learned about action steps that can guide teachers. Saavedra and Opfer (2012) offer ways for educators to incorporate 21st-century skills into their instruction directly. The authors, who study 21st-century skills, make nine suggestions. Number one is to “make the learning relevant”, this allows the learning to be relevant for students and directly apply to their lives as much as possible. The second is to “teach through the

disciplines” by teaching the skills that go with specific subjects. The third way is to “develop thinking skills, combining both lower and higher-order thinking skills” so students are exposed to different levels of thinking. The fourth way is “encourage learning transfer” which directs students on how to transfer the skill to other situations. The fifth way is to “teach students how to learn” or demonstrate metacognition. The sixth way is to “address misunderstandings directly” to overcome misconceptions they may have. The seventh way is to “treat teamwork like an outcome”; although it is often a vehicle for work, it can be a skill. The eighth way is “exploit technology to support learning”; it can be a tool to enhance these skills. Lastly, “foster creativity” because it is valued in many different arenas (Saavedra and Opfer 2012). In my own classroom, I have been checking my intentions for every lesson I create using these guidelines. Tasks are varied between different levels of thinking, provide choice whenever possible and include collaboration and creativity.

Classroom design has always been on my mind as a classroom teacher, but for aesthetic purposes, not for purposes to improve student learning. In CEP 811 and more in CEP 815, I discovered that room set-up can contribute to student learning. It is integral to update the design of classrooms to be more in tune with the current modes of learning. Modular classrooms are key because they allow the spaces to change depending on the type of learning taking place. Classrooms shift to facing the teacher for traditional instruction, separate for small group discussions or instruction, or spread out for reflective or independent work (NMC/CoSN Horizon Report, 2017). Student-centered spaces better incorporate collaboration, self-directed learning, active learning, and inquiry and creation (NMC/CoSN Horizon Report, 2017). It has also been found in a study that optimizing physical characteristics improved student achievement in reading, writing, and mathematics by 16 percent (Barrett et al., 2015). Flexible seating was found to have a profound effect. Focusing on allowing more student choice and flexibility was a large driver of student engagement, representing 28 percent (Stephen Merrill, 2018). Creating classroom spaces that can adapt to what is currently happening in the classroom can complement the new modes of learning while also boosting student engagement.

## **Conclusion**

Erika Parsons  
CEP 807

What I have learned while pursuing my master's Degree has truly exceeded all of my expectations. I feel that while I had a solid foundation upon entering the program, my teaching philosophy has shifted for the better. Becoming a student again allowed me to see from my students' perspective when trying new things and completing assignments. I also was able to improve my teaching practices by studying how students learn, effectively incorporating technology, and equipping students for the 21st-century. Although I am glad to have completed my master's degree, it has motivated me to continue learning. I look forward to using all I have learned and to continue this process of learning throughout my career.