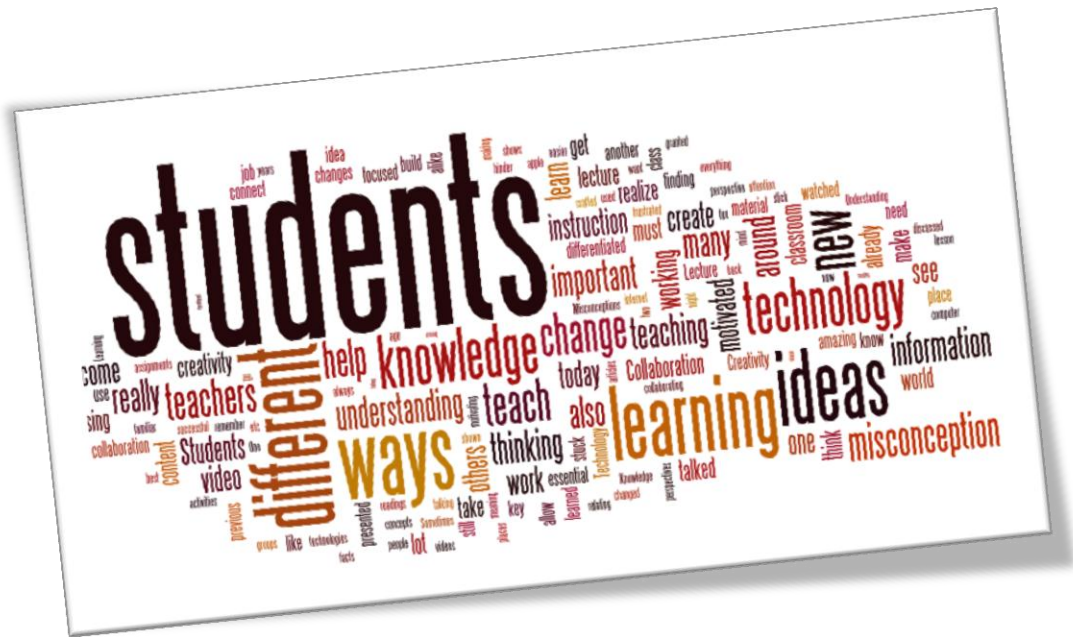


REFLECTION REFLECTION

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Looking Back

I created a “Wordle” from class and the following are the words that stood out to me: students, different, ways, knowledge, learning, ideas, and technology. In summary, I unscrambled the list to say,

“Students – Different ways of learning ideas/knowledge through technology.”

I believe that the courses in this master’s program, especially the past three courses in the summer cohort, focus on student learning. Students are the reason I go to work every day and do what I do. Without students, I would not have a career; therefore it makes sense that this is the focus of these three courses. The other component is technology and finding new, effective ways for students to learn through the use of

technology in the classroom. Technology can be a powerful tool if used correctly. Students' learning can be transformed if technology is used to its full potential as was the focus of the [DreamIT](#) proposal assignment.

Learning Theories

When I started the MAET program, my focus was on learning about technology to incorporate in the classroom. I never thought about the psychology behind why we use technology. This course has focused on the psychology of learning and thinking about how students learn and using that to incorporate technology that will enhance learning by aiding the various student learning types I encounter in the classroom. All students learn differently and as teachers we need to take this into consideration as we design and implement lesson plans while incorporating technology. Sometimes we get stuck in our ways and forget to step out of our comfort zone and try something new that may help students learn in a new way.

Throughout this cohort, student learning and ways to enhance learning through the use of technology were discussed. Looking back at my undergraduate courses at Saginaw Valley State University, I completed a course about the psychology of learning and became knowledgeable about Pavlov, Piaget, and other learning theorists and their ideas, but the connection was never made as to how they relate to the classroom and a child's education. As a result of this summer cohort, I finally see the correlation between the major learning theories and student learning. This correlation is important to me because, the theories were merely just theories and had no meaning or purpose to me. Now that the connection has been made, I can use these ideas when creating lessons for my class and the number of different learning styles I will encounter.

One idea that has really stuck with me is the idea that we all think differently. This idea was highlighted in the reading, ["It's as Simple as One, Two, Three."](#) where the author experiments with counting and time. In the end, the realization is made that everyone thinks differently even when it comes to something as basic as counting. This is an important idea in education. With thirty plus students in a classroom, no two students think or learn in the same way. With this in mind, I must use differentiated instruction and multiple perspectives of viewing math problems to reach as many students as possible. Not all students view math in the same way, and by teaching with many perspectives, more students will gain an understanding of the content.

Knowledge vs. Understanding

In the reading [Understanding By Design](#), by Wiggins and McTighe, the definition of understanding is discussed. Many people have trouble distinguishing between knowledge and understanding. Knowledge is composed of the facts presented in a lesson or a book, or responding on cue with what you know. Understanding goes deeper than that. It involves taking the facts and applying them to explain why. (G. Wiggins and J. McTighe, 2005) It is important for students to have an understanding of math, not just a basic knowledge of facts. Dan Meyer talked about different ways to teach math in [Math Class Needs a Makeover](#). In the article, he discussed how issues faced in real-life are usually problems we never have all the information that we need, or, just the opposite, we have too much information and have to sort through to figure out what is important. Textbooks do not teach math and the supplemental problems in a way that they are similar to real-life problems. They provide students with the exact information needed to solve the problem in examples, and practice problems are almost

identical to the ones faced during the assessments. As a math teacher, I think it is important to model real-life situations for students. This can be done by asking students questions that will require them to apply their math knowledge. Also, modeling real-life problems for students will help develop an understanding of the material, not simply learning facts. Technology plays a part in this alternative way of teaching. By starting with a simple question that does not include all the information that students need to solve, students can use technology to find and discover the unknowns.

Creativity

“Creativity is developed, not learned.” ~Punya Mishra

This statement really struck me. I have come to the realization that we all have creativity and it is our job as educators to help students realize that they have creativity that simply needs to be unleashed and expressed through a number of different avenues. Creativity is about learning to see the world in a new way. My goal is to create activities that are open ended enough to allow for the development of creativity. When strict directions are given for a project, students have no room to make it their own and to be creative.

Creativity is also something that I, as a teacher need to continue to develop as well. By finding creative ways of teaching, students continue to be engaged in the lesson. I firmly believe that there is a place for everything in the classroom, including a simple lecture, but there is always room for creativity to change the way of going about presenting the lesson to the students. The flipped classroom is an example of this. Instead of lecturing during class, teachers create or post a video that teaches the concept and students watch it as homework. This allows for more time to do projects

and lab exercises that will apply the knowledge of the lecture and allow for students to be creative and increase understanding. Students are still getting the information through a lecture, but they are doing it in a new, engaging way that corresponds to popular culture.

Engaging

Engagement is one of the most important ideas when it comes to teaching. If students are not engaged, minimal comprehension takes place. In the reading, *Teaching that Sticks*, Heath and Heath introduced six traits that make lessons “stick” with students. In order for lessons to be engaging and memorable for students, they have to contain these six components (Heath and Heath, 2010). Patricia Quayhagen discussed a similar idea in the reading *Returning the Human to the Humanities at All Levels*. She created lessons that incorporate things that students like and are interested in to help engage them with the presentation. This makes learning enjoyable for students and content “sticks”. If students can relate to what they are learning they will be more engaged with the content. Technology can help engage students if used effectively and in ways that relate to individual and unique learning styles. It is my goal to take this idea to engage my students in content to further their understanding.

A Look into the Future – Becoming a Technology Leader

When looking into the future, five years from now I see myself as an alumnus of Michigan State University with a Master of Arts in Educational Technology, having my very own math class at the secondary level, and being a technology leader in my district. Currently I am a substitute teacher and look forward to the day when I have a

classroom of my own so I can implement all I have learned during my time at Michigan State and Saginaw Valley State. I have learned more than I ever anticipated in the short amount of time since I started the MAET program a year ago. I plan to continue my learning with all the resources that I have been introduced to through my courses and through my own exploration.

Networking/Collaboration

In CEP812, I created a [professional learning plan](#). It consisted of tools I would use to aid in my life-long learning. Reflecting on my plan, there are a lot of great resources out there to continue learning if used correctly. I have all the resources, but have not done the best at keeping track of them. My goal is to find a way to keep up with these resources and to use them to their full potential. Resources mean nothing if they are not used. The resources I have come across for networking and collaboration are [Twitter](#), [Facebook](#), [MACUL Space](#), [Classroom 2.0](#), and more. It is my goal to keep up with these resources using my iGoogle page and make it a point to check these sites in one place on a daily basis. I plan to use my colleagues and classmates as learning resources, in addition to bouncing ideas off of during future conversations and communication. In this day and age, collaboration is key to success, especially in education. We are constantly sharing ideas from others and changing them to make our own in order to make the classroom a successful environment for students.

Technology Tools

Through my courses I have learned the importance of implementing technology to enhance learning, not for the sole purpose of using technology. There are many tools

out there that can be very useful to students and it is important to keep up on new technologies in order to keep making additional progress throughout my teaching career. The networks and resources discussed above are great resources to learn about new technology and ways of implementing in the classroom. Attending conferences both virtually and in person, such as MACUL, will also bring about new technology ideas. New tools mean new ideas for the classroom to enhance learning.

Leadership

A key component of MAET is to build leadership skills to share knowledge with others. It is my goal to share what I have learned with colleagues and the online community so others can learn new ways of effectively implementing technology into the classroom. I enjoy sharing what I know to help others become better, more effective teachers, by sharing educational resources, and assisting others in the learning of a new piece of technology. I hope to be a person in my district that teachers can come to for technology support and new ideas. Using the knowledge I have about technology, I hope to be a leader in the writing of grants and proposals for the purchase of new technology tools and the training of teachers on the use of these resources. Not only is it important to obtain these tools, but to train teachers in the proper use so they are used to the full potential and students can reap the benefits of the technology. Through my leadership role, I hope to share my passion for the implementation of technology to fellow teachers so that all students will be prepared for the future opportunities they will embark upon.

Taking what I have learned, I hope to continue in my life-long learning, even after I am done taking classes. With the resources available through the use of the internet,

collaborating is made easy. Through collaboration, new ideas are born to help students learn in different ways with the use of technology, which is the ultimate goal; finding new ways of teaching knowledge through the use of technology to increase creativity, engagement, and in the end creating a deeper, more meaningful understanding of content.

References

Feynman, R. P. (1989). *It's as simple as one, two, three . . .*. In What Do You Care What Other People Think (pp. 54-59) New York: Bantam Books.

Heath, C. and Heath, D. (2010). *Teaching that sticks*.

Meyer, D. (Producer). (2010). *Math class needs a makeover*. [Web]. Retrieved from http://www.ted.com/talks/dan_meyer_math_curriculum_makeover.html

Quayhagen, P. A. (1992). *Returning the human to the humanities at all levels*. Paper presented at the Annual Meeting of the College English Associates.

Wiggins, G., & McTighe, J. (1998). *Understanding by Design*. Alexandria, VA: association for Supervision and Curriculum Development. [Chapter 2: Understanding understanding](#)