

Part 1: A Look Back.....

When looking back at this whirlwind of an experience, it's amazing to me how much material, information, technology, and resources were packed into the two-week face-to-face class and then extended along the following month. Within these past few weeks off of campus, I have had time to digest, understand and think about how this will impact my world as an educator.

Within these few weeks we were introduced to a lot of different web 2.0 tools to use within our classroom. When we first started talking about all of these different tools, we started off by talking about explore, create and share. These three words can be used to remind us that even if a technology tool is not specifically designed for education, there is some way you can incorporate it into your classroom and teaching. The idea of repurposing a specific tool, for something other than what it is designed to be used for, is a way to explore new things and incorporate new ideas within the classroom. Sharing these ideas is much more accessible on the web now and people can see, comment, critique, make better, and even use because of your willingness to share them! It really opens your eyes to be looking out for the 'unfamiliar' and making it 'familiar' for the openness to try new things and find out how you can incorporate them to be useful to your students.

One of the great ways that I thought this was incorporated to show us different ideas was having us take pictures of other things in the world that may create letters and use these letters to create words. This was just an idea of

repurposing and a reminder to us to keep our eyes open to things you may not normally see and that we need to open our eyes to the world around us! This idea made me think of tools that I could use within the classroom, that I may not normally think of to be used, such as something as easy as going out into the world and taking pictures of geometrical figures to discuss geometry in the world. “It is through this creative repurposing of tools to meet the fundamental impulses of the learners that we can truly achieve the potential of these new media” (Dewey & Bruce, 2011).

Throughout all of information, resources, context etc., and looking back through my reflections, I think something that really resonated with me was the idea that I need to be focusing on the content and then the technology to help me incorporate the content. That being said, I think with so much new technology always being introduced, and the expectation to use the latest technology, I sometimes forget the purpose of the technology is to enhance our teaching, not change everything. As stated by Cuban “integrating technology is not about technology, it is about learning” (Cuban, 2010). I need to focus on the problems with the content, and struggles that the students are having, and then the usefulness of the technology will come later. When faced with technology, I will now think ‘how am I going to use this to allow my students to fully understand the material?’

Within the integration of technology to help my students learn the material, the fact of actually facing the meaning of what is ‘understanding’ has been brought out throughout many readings, discussions, and thoughts throughout the class. The idea that “to understand a topic or subject is to be able to use (or “apply,” in Bloom’s

sense) knowledge and skill wisely and effectively” (Wiggins & McTighe, 1998), is a real eye-opener when thinking if my students actually ‘understand’ the material. When thinking about teaching, and the focus on standardized testing, it made me think ‘am I really giving the students the opportunity to understand the material or am I just focusing on giving them the knowledge to recall the information when it comes to testing?’ It made me realize that within my classes, we try to cover so much material but don’t allow the time to “elaborate and deepen them pedagogically” (Shulman, 1999). Then when reading I was faced with the realization that “many students do not get to explore this rich conceptualization of mathematical thinking“ and that we are “denying them access to some of mankind’s greatest achievements” (Mishra, Koehler, & Henriksen, 2011). I realized that within my class, there needed to be more time for elaboration, discovery, and discussion for a way to have students explore mathematics both in the class and real world context, and be able to have the opportunity to check for their ‘understanding’ of the concepts.

Something that was another big realization, and reminded me I need to focus more on this in the future is the importance of background knowledge. Background knowledge can both be something that is helpful in the development of furthering skills and understandings, but it can also be the main problem for students having misconceptions of ideas! If something is a misconception to begin with, they tend to build off of those misconceptions and it is hard to change the student’s ideas from these earlier misconceptions. However, it would be really important for me to understand these misconceptions and help discover where they are coming from

and see if there is a way to work with the students to try to change these ideas. It is said that “children who are asked to predict the results of their experiments are more willing to change their thinking than are children who function as passive observers” (Watson & Kopnicek, 1990). That being said, what I do in the classroom needs to be more focused on having students express their ideas of what will happen, and use a variety of strategies to help them understand and discover what the solution is and why on their own, in order to overcome such barriers.

Part 2: A Look Forward.....

When looking forward into my future, I think of the statement that came about when reading “Confusing technology integration with instructional reform” by Cuban, that it’s not about going and changing everything! Therefore, my goal should not be to buy into one philosophy, but to have a grab bag of different philosophies. I think in education there are always so many philosophies people encourage you to follow, administration pushes a learning theory, etc. but that I need to do things in smaller increments. When not changing everything at once and doing small changes, if something fails, it’s ok because I can fix the smaller things. This is what I plan to keep in mind when looking into the next few years of my career.

One of the things I am going to focus on in the future is the realization that within my class, there needed to be more time for elaboration, discovery, and discussion for a way to have students explore mathematics both in the class and real world context, and be able to have the opportunity to check for their ‘understanding’ of the concepts. That being said, that is one thing I am working towards changing to

incorporate my DreamIt project of writing and understanding students conceptual knowledge within my everyday math class. This will allow both the students and myself to evaluate their understanding, misconceptions, and work in different strategies to help delve deeper into the concepts of mathematics. This is the start of my writing integration within my classroom, in which I hope to grow and improve over the years. There are many resources for incorporating writing into the classroom that could be as easy as a quick journal concept of 'what did you learn,' to help students self reflect, which can allow them to grow their mathematical understanding and pursue further concepts of things they still question.

Throughout this journey of trying to have my students 'understand' mathematical concepts, I plan to use resources that I have had and new ones coming, all while keeping in mind that "integrating technology is not about technology, it is about learning" (Cuban, 2010). One technology that we have had, but I plan to try to use it more thoughtfully is the use of the Promethean Board. Along with this promethean board, I will use the Promethean Planet to enrich my lessons, activities, and classroom interactions. Along with our promethean boards, I will incorporate the activotes with more thought behind what they are going to be used for. This will be an easy way for me to get instant feedback of understandings, misconceptions, and questions throughout class periods with informal assessments periodic on a daily basis.

Another technology that is coming at us fast, is the iPad. I needed to re-evaluate my mindset of the iPad integration, and this summer has really helped me to do that! I will be going about the iPad not as how am I going to fit the iPad into

my curriculum, but how is the iPad going to help enhance the delivery of my curriculum content. I need to realize that maybe some of the technologies of the iPad will not be blatantly obvious to be used within my curriculum, but I need to expand my horizons to the possibilities of repurposing such technologies to help deliver my content. This summer has given me a lot of resources such as blogs and apps. Some of the apps, that I hope use within my curriculum in the future would be things like ShowMe and Skype, for the students delivering material, sending me questions outside of school, or just communicating with each other.

As educators, we need to remember that “being a ‘life-long learner’ is not ignoring what’s going on around us; we don’t get to claim the title of ‘effective educator’ or ‘excellent professor’ if we do this” (Mishra). Therefore it is our duty to our students and our educational profession to stay connected to what is changing and learning how we can change with it. One of the main ways I plan to do this is by staying connected to MACAUL. This is a great resource to stay connected to other educators and their ideas for the classroom. As teachers we “need to develop a willing-ness to play with technologies and an openness to building new experiences for students so that fun, cool tools can be educational” (Mishra).

When starting this program, I was skeptical to go back to school shortly after just finishing a masters, however, after this hybrid experience, I wouldn’t take it back because of all the information and resources I have learned about that I will take back with me. I am thankful, that after only 4 years of teaching, I feel like I have been a little revived in being able to look at integrating technology in a different light, and when feeling overwhelmed I will remember the mantras I have taken with

me from these course. Throughout changes in my career, I need to remind myself that “if you exist in a world where failure is not tolerated, then you will not have a great idea and you need to fail to learn things” (Mishra). Ideas may not be great the first time around, but to fail is to learn what you can do better, and in education this is no different!

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