When I entered the classroom for the first time at the beginning of our face-to-face session, I had no idea into what a different kind of classroom I was walking. While I had taken classes since graduating from Marietta College in 2004, it was the first time I sat in a classroom to do so. Large computer screens lined the wall, and small tables were gathered in the center to help provide a context for collaboration. It did not look very different, but in the first two days I discovered how very different it felt. After all, I had never sat in a class with a laptop in front of me, surrounded by others who also had a personal computer with cell phones and iPads out on the tables. We discussed readings and topics aloud, while individuals gave feedback using Twitter and Facebook. How very distracted I felt in these first few days! My closest experience had been sitting in my "Technology in the Classroom" course at Marietta on September 11, 2001. We sat in rows in a computer lab, trying to pay attention, while frantically searching the Internet to see what we could find as events of the day unfolded. Reflecting on this has allowed me to realize that while I may not feel very removed from my own classroom experience, my students are growing up in a time that is very different from what I experienced. I am thankful now for this opportunity to see what it is like to sit in a classroom with some of the same distractions they may face. It is here that I should begin any journey with my students, and the next few weeks would prove to be a reminder that I need to continue to learn and practice, not just gain more years of experience. As I look back and look forward, this learning carries great weight, as it has meaning for my students, myself, and my leadership.

# **Looking Back: My Students**

Transformative learning, the type of learning I believe we want for our students, is complex. Each person enters a learning situation carrying different items, and each person puts information together in different ways. According to Richard Feynman (1989), "what goes on in different people's heads when they *think* they're doing the same thing - something as simple as *counting* - is different for different people" (p. 222). As educators, our responsibility is to

determine how to reach all of our students, regardless of these differences. When we tap into the "natural impulses of the child - inquiry, communication, construction, and expression," (Dewey, Bruce & Levin, 2011, p. 1) we are able to lead students through a learning process that becomes more meaningful than simply knowing information. While educators tend to disagree on a number of issues, one agreement that seems to reach across the board is the importance of what the learner already knows. The teacher is not exempt from this, and perhaps this is one of the greatest difficulties with "the curse of knowledge" (Heath & Heath, 2007, p. 7). Not only do educators need to know what their students know, they must make their own knowledge understandable to a student.

I have been challenged through this course to think of learning in new ways. The ways that our misconceptions hinder our learning and understanding has put a radical new spin on all that I have considered to this point. Despite growing up in a digital world, students even have misconceptions about technology and its purpose in their lives, as danah boyd (2014) points out in *It's Complicated*. It takes a great deal of time to break down these misconceptions, and we must determine how to help students get their inside beliefs out so that something new can go in (Shulman, 1999, p. 10). This is partly what Watson and Kopnicek (1990) mean when they discuss what it means to uncover rather than cover. Using meaningful inquiry is an important step to leading students to understanding that transforms their misconceptions. This will lead us to the fundamental impulses of the child. If we consider how technology can be seen as media (Dewey, Bruce, & Levin, 2011, p. 2) and ways to repurpose it, we will be on our way to determining how to move beyond using technology for the sake of using technology.

## **Looking Back: Myself**

If I want to continue to have an impact on my students, I must also learn. This is not an idea that is new to me, but it continues to be clear to me that these concepts about understanding not only matter to how I relate to my students, but they also matter in how I focus

on my own learning. I must reconsider what misconceptions I may have, what my own background knowledge is, and how these come together to shape how I practice my teaching and my leading. Because it is "natural to explain an idea in terms of what you already have in your head," (Feynman, 1989, p. 223) an idea that I believe is closely linked with the "curse of knowledge" as described by Chip Heath and Dan Heath (2007), I must consider in greater detail the pedagogical principles I use and why they will be most useful for student understanding. While much of what we studied regarding learning and understanding came as a review to topics studied during my undergraduate years, I find that the authors of Doing History raise a good point that is important to remember with myself. "Understanding complicated concepts develop gradually...requires the time for sustained attention; learn more each time they encounter them" (Levstik & Barton, 1997, p. 11). This has been true for me this summer, but should also serve as a significant reminder that this must continue to take place, not just with social studies as one of my main content areas, but also with integrating technology and leadership. I believe this is the point that Willingham (2009) makes in Chapter 9 of Why Don't Students Like School?; this is why we must practice teaching and be willing to open new doors while doing so. The people around us become an integral part of how we practice teaching, which directly links to the idea that people are wired to work collaboratively.

We must be willing to teach students the skills necessary in order for them to become more proficient with technology. How we do this is dependent on how students learn, regardless of whether or not the term "digital native" exists. Danah boyd (2014) has made it clear that students will not know everything they need to in order to use technology in ways that are most helpful to their learning. By integrating technology using TPACK and the SAMR models, educators are able to teach some of these skills in a meaningful way. Adults must become more willing to open up about how teenagers are using technology and realize that this is necessary if we want them to use technology appropriately. While schools have spent the better part of the last ten years fighting certain technologies, it's time that they engage with

technology in ways that foster understanding across the board. Technology is not free from misconceptions, and so we must apply the same thinking to this area of student learning. Regardless of the term "digital native," students will come to class with a varying degree of understanding of how to use technology.

### **Looking Back: Leadership**

While leadership is something that has been important to me since high school, I am struck by the level to which leadership has been critical to my learning this summer. In the middle of the cohort this year, I found myself being faced with new opportunities to be involved in heightened leadership at my school. Suddenly, this part of the courses this summer took on a new meaning. As I reflect on what this means for me, I am reminded of how everything that we have learned about understanding applies to adults as much as it does my adolescent students. There are profound implications for what this signifies as I look back and look forward. If I hope to make an impact on student learning through leadership with adults, I should consider all of the same things I would if I were teaching adolescents.

Adults have misconceptions, and learning what these might be can aid a leader in knowing how to communicate, guide, and educate parents, colleagues, board members, and community members. Instead of asking why students don't like school, it might be necessary to ask why teachers don't like professional development or why teachers don't like staff meetings. In recognizing the ways that Willingham's book might also answer these questions, I am led once again to *Made to Stick* by Chip Heath and Dan Heath (2007). Perhaps more life experience gives adults more misconceptions and prior knowledge that will need to be worked through in order to grasp new ideas. As a leader, it is critical to make learning "public and communal," (Shulman, 1999, p.2) because this is how even adults will make sense of new ideas.

Technology is simply one area where these ideas can be applied. While many experts debate whether or not "digital native" is a term that should be used with kids and teenagers today, there is no question that some amount of learning will need to take place for adults. What we know about learning and how people gain understanding can be used by leaders to help teach these skills to all stakeholders in a school. When presenting ideas to integrate technology into a school or classroom, using the SUCCES model defined by Chip Heath and Dan Heath (2007) could play an important role in helping others to see the value technology can have on student learning.

## Looking Forward: Improving Pedagogy using Old Principles with New Technologies

Over the next five years it will be important for me to explore how to review the pedagogical methods I use in my social studies classes to be sure they best serve students and the way they learn. This may uncover new problems to address, and together this content and pedagogy can be used to help determine how technology may be incorporated to redefine what is possible in a social studies classroom. This TPACK framework will become more critical as technology continues to change while the way people learn may not change, at least not drastically. As new information becomes available about both understanding and technology, we will need to evaluate how we use both in order to increase student learning. I would like aesthetics and creativity to play a larger role in my pedagogy over the next five years. More specifically, I would like to continue to explore how technology can enhance these areas for students. I must recognize the times when nostalgia, as described by Shulman (1999), can creep in when perhaps we become too comfortable with how we design our classes and do not seek to improve pedagogy. It may then be necessary to consider whether I am continuing to practice becoming effective or if I am simply gaining more experience (Willingham, 2009).

Some resources that may be helpful with this key topic include both resources from this set of courses and outside sources. I am interested in reading *Doing History* by Linda S. Livstek

and Keith C. Barton in its entirety. I enjoyed the selection we read for class, and I am particularly interested in reading this with a "technology" lens. I would like to specifically look for ways that the ideas of this book, many of which I believe I already at least attempt, could be used with technology. Likewise, I am interested in reading *Made to Stick* in its entirety. I am intrigued by the ways in which these ideas fit with Willingham's *Why Don't Students Like School?*.

### **Looking Forward: Educational Technology and Leadership**

A second key topic for me over the next five years will be educational technology and leadership. I am particularly interested in how to train other teachers in healthy practices using technology. It will become increasingly important for teachers to understand how using technology fits with pedagogy and content knowledge as demands placed on teachers continue to increase and technology changes at a rapid pace. Using technology for the sake of using technology will continue to become more problematic. While we will have a higher number of educators who are "digital natives," just as our K-12 students need to learn how to use technology, these educators will need training for how to best incorporate technology into the classroom. It's possible that at some point degrees in educational technology will not be a specialty. It will be important to bridge the gap. Some current teachers could be likened to our "reluctant learners" in the classroom. Applying what we know about these students in our classroom and how people come to understanding may be helpful when working with teachers who are skeptical of the use of technology in education. Too often, nostalgia comes to play a large role in what we are doing. If I continue to teach my classes as if I were sitting in the computer lab on September 11, 2001, I will miss a wealth of opportunities to reach my students in meaningful ways. As technology changes, so must we be looking for ways to improve our practices.

The resources that will be useful for this key topic include using some of the readings from this course to help begin some discussions with other teachers in my building. In addition, the Bridge webinar series will be useful both for myself and for potential professional development for others. I would like to explore beginning a book club with faculty at my school to help begin discussions around educational technology and how students learn. I will need to be willing to reach out to other people as I continue to discover things that may need to be considered as I seek to know what will be useful for the staff at my school.

# Looking Forward: Social and Ethical Uses of Technology

Social and ethical uses of technology will continue to be important over the next five years, particularly because I work with teenagers. As quickly as things change, it will be necessary to keep up to date with how teenagers are using technology and how educators are able both to tap into this and stretch students to think of innovative uses for their technology. I believe that the issue of digital equity will continue to be redefined, and staying on top of this will be important as more technology becomes available. Understanding how healthy practices should be revisited often will not only influence my students, but other teachers and student families.

Danah boyd's book *It's Complicated* could serve as a starting block resource for social and ethical uses of technology. In addition, the experts who served on our webinar panel could serve as new connections. The work that they do and the organizations they work for will be useful to keep track of over the coming years. It's possible that schools may develop more resources as leaders become more comfortable with the ways in which change may need to take place. Using social media and online journals will be helpful to determine if this is happening.

A personal learning network made up of classmates, colleagues, and other educational professionals is critical in the development of each of these topics. More specifically, this

includes making connections with those who are in the same content area and a conscious effort to keep in touch with these people over great distance. These people will only be able to give me useful feedback about my efforts to evaluate my current practices more in depth with the TPACK framework if I am in touch with them. I also believe that it is important to think outside of the typical professionals that may be a part of an educator's personal learning network. These people, who include leaders in other contexts, can provide insights that I may not otherwise consider.

The resources I choose to use to address these topics over the next five years are important because they will support my own learning and understanding. It is important to have the trusted professional opinion of others and to include them in my journey. I must also choose resources that will challenge my misconceptions and prior knowledge. After all, this is how learning takes place. If I only seek resources that fit what I believe now, I may miss an opportunity to better engage my students.

#### Conclusion

While looking back and looking forward, I believe it is necessary to realize that everything cannot be known at this time. Some resources, including people in my personal networks, have yet to unfold for me. It may be that these easily come to me over the coming weeks, months, and years, but it is also important to actively seek out resources that may not be known now. In addition, if I do not continue to look back and process the learning that took place this summer, I may miss some continued opportunities for growth. Knowledge grows and changes (Watson & Kopnicek, 1990). I would be doing a disservice to my students, myself, and those I seek to lead if I believed any differently.

### References

- boyd, danah. (2014). It's Complicated: the social lives of networked teens. New Haven: Yale University Press.
- Dewey, J. / Bruce, B.C. & Levin, J.A. (2011). Media for Inquiry, Communication, Construction, and Expression.
- Feynman, R.P. (1989). It's As Simple as One, Two, Three. In *What Do You Care What Other People Think* (pp. 217-223) New York: Bantam Books.
- Heath, C., & Heath, D. (2007). Teaching That Sticks.
- Levstik, L.S. & Barton, K.C. (1997). The Theory Behind Disciplined Inquiry. In *Doing History* (pp. 9-16) Mahwah, NJ: Lawrence Erlbaum Associates.
- Shulman, Lee S. (1999). What is learning and what does it look like when it doesn't go well? *Change*, 31, 10-17.
- Watson, Bruce & Kopnicek, Richard. (1990). Teaching for Conceptual Change.
- Willingham, Daniel T. (2009). Why Don't Students Like School? San Francisco: Jossey-Bass.