## **Technology and Education**

Thinking back on my education, I remember teachers who brought history to life, activities that ingrained a subject in my mind and interactive games that helped me memorize spelling and grammar rules. Everything I did from kindergarten to seventh grade included books and poster projects. No aspect of my education focused on power point presentations or the Internet. But, the face of education is changing and everyone must change with it.

Fifth grade was my favorite year. My teacher, Miss Bestamen, created a fun and interactive classroom with routines and rules that maximized our learning. Everyday, when I walked into class, I knew that I hung up my bags, found my desk and started breaking down the sentence the teacher had written on the board. We had math and spelling every week and games and activity centers were part of our daily routine.

If I took anything away from fifth grade, it would be the unit we did on the Civil War. We memorized and acted out the Gettysburg Address in the first week. Over the second week we were given picture books, encyclopedias and textbooks to recreate what the life of a common person was like during the Civil War era. I researched the story of a young woman who worked at a bakery in a small town in Pennsylvania. After writing a report on the young woman, I made a costume and an item of food that my historical figure might have made and sold. Then, for the final week, there was the presentation displaying what each student had learned though their research. Some students participated in a wax museum, others chose to research and recreate games that people played during the Civil War era. I chose to act in a play that shed light into the lives of Mary Todd and Abraham Lincoln (I was Mary Todd Lincoln). Years later, I still remember the way this year made me feel. I loved school and everything we did, even though technology was a very small part of my education at that point.

When I entered middle school, all the schools were required to offer some sort of computer class. My seventh and eighth grade computer classes were simple, all we did was practice our typing skills on the Mavis Becon typing program once a week. Fast-forward two years and into high school. There was only one required class involving computers that each student had to take. In this class each student was taught how to use search engines, word processors and excel spreadsheets. We learned these things, but we never used the skills we learned anywhere else in school.

Throughout high school and into college I was gradually required to type papers and research online, but the majority of the work that I did in the early part of college was written and I was required to use the library to find any information that I needed. Towards the end of high school, a shift in technology happened. I can recall a time in Physiology class when the teacher asked if we wanted him to play music while we took our test. He told us that he offered to play music because some

people concentrate better when they listen to music. I was baffled! I could not understand how someone could listen to music and think at the same time.

At home, my family did not have the latest equipment in computer technology. We received hand-me-down computers that would freeze and needed to be rebooted constantly. I remember using our early computers for playing games and talking to friends via instant messenger. My sisters and I always had a half hour limit on the computer. Going into college I was given the family's old desktop. It took up a lot of space on my desk. There were computers in the basement of every dorm and there were computers in the library. I soon realized that I wanted a laptop so that doing my homework could be more convenient. Even though none of my classes required me to take a computer to class, I wanted to anyway. During my junior year, one of my professors assigned a project that required us to use the Mac lab in the library. We needed to use a program called "Garage Band" to record some of our student teaching and our personal statement. I was so stressed out. I had no idea how to use a Mac, let alone Garage Band! Through the struggles with this project, I learned how to use a Mac computer. Interestingly enough, now I own a Mac computer and do all of my work on it.

After college, I got a job and use a computer for everything from writing report cards to lesson planning. No one taught me how to do these things on a computer or to multitask with technology; I just learned it on my own. It is as if it happened overnight. I am shocked about how this multitasking simply snuck up on me. In his article, *Is Google Making Us Stupid?* Nicholas Carr says, that the way we think has changed "what the Net seems to be doing is chipping away at [our] capacity for concentration and contemplation. [Our] minds now expect to take in information the way the Net distributes it: in a swiftly moving stream of particles. Once [we] were scuba divers in a sea of words. Now [we] zip along the surface like a guy on a Jet Ski." I can see in my own life that I have become distracted and disjointed in my writing and thinking. Throughout my education I could sit and write for an hour and now I can hardly go 10 minutes without checking something on the Internet.

How much technology should be allowed in schools? We want our students to be on the cutting edge of technology, but isn't it still important that they know how to use a book? In a *New York Times* article entitle, "A Silicon Valley School That Doesn't Compute," I did some research on a Waldorf school that does not let their students use any technology in class. Ironically, these students have parents that are engineers at Google and Apple. Their goal is to, "subscribe to a teaching philosophy focused on physical activity and learning through creative, hands-on tasks." This school, like many others, thinks that computers and other forms of technology are distractions to learning. Many parents think that, "the idea that an app on an iPad can better teach [students] to read or [to do] arithmetic, [is] ridiculous." This thought focuses on the importance of human engagement; engagement with teachers and engagement with peers.

On the other end of the spectrum there are schools whose philosophy is to meet the students where they are in the culture of technology. In the documentary, "Digital\_Nation" on *Frontline*, researchers looked into a couple of schools in New York. One school was an elementary school built around games that children can

play. Most of these games are on the computer. Another school was failing, students were not showing up and violence ran the hallways. A new principle was hired in the failing school and gave it a "technology face-lift". He gave each student a laptop to complete in and out of school assignments on. As a result, attendance and test scores went up and violence went down.

No matter what type of school one prefers, it is foolish to think that technology and the Internet are not changing the way we look at education and the way we think. In the book *The Shallows*, Nicolas Carr talks about technology through the ages. Each time we gain a new piece of technology we loose something else. Loss is a part of gain. "Digital\_Nation" addresses this too. When we learned how to write we lost our ability to retain massive amounts of information. In tomorrow's world we will no longer have to remember things, we can just look it up in the Internet. Our minds morph as we evolve and as our technology evolves. The brains of the students I teach (who are in 5th grade) are different than my brain was in 5th grade. My student's brains are being pulled in ten different directions. The TV, computer, iPad, iPod are all going at the same time and my students are able to multi-task to keep up with all of them. This makes my job harder. I need to stimulate them with out completely relying on technology.

By looking back and tracing the progression of technology throughout my education, I am able to reflect and grow in my abilities to teach my students in this age of technology. Although this self-refection has its weak points, it is a place to jump into deeper forms of inquiry with colleagues and friends. Autobiographical inquiry is a great way to organize thoughts and finding a place to start an ongoing conversation with colleagues. All of the different types of inquiry that we have learned about this semester (even Vivian Paley's teacher inquiry) involved some sort of conversations with other educators or philosophers of education. In order to expand and grow an idea, one needs to discuss it with others. I can have my own ideas, thoughts and experiences that helped me throughout my career, but I will never grow as an educator unless I analyze my ideas and experiences with others and hear about what they have learned in their lives as well. By using the experiences of other, I will have a well-rounded understanding of education, which will ultimately be most beneficial to the students in my classroom.

The school I currently work at is in the middle of the debate between technology free schools and technology full schools. There are only a few computers in the school and they are for teacher or administrative use only. The students must learn how to research and learn without technology before they learn to rely on it. Each student has his or her own computer at home and is encourage to learn to type and research on appropriate websites with their parents, but not at school. So I guess to deprive children of the digital movement is not fair, but to allow it to run their lives is not fair either. Schools need to find that happy medium where children can stay current with technology but not allow it to warp their brains too much.