Technology Integration into the Curriculum in Practice

8th Grade Social Studies = Mrs. Oldfield
8th Grade Language Arts = Ms. Anderson
7th Grade Math = Ms. H
7th Grade Social Studies = Ms. Webber
7th Grade Language Arts = Ms. Harris
6th Grade Digital Photography = Mr. Bullock

Observations #1 & #2:

Over the last six weeks, I have had the opportunity to visit six different classrooms and see how well other integrate technology into the curriculum. Due to my experience as a science teacher, I decided to see how other content areas are able to use technology, so I visited two Social Studies teachers, two Language Arts teacher, one Math teacher, and a Digital Photography class.

The first class I visited was an 8th grade Social Studies teacher. Her class was actually set up in the Library/Media Center because the librarian was part of the lesson. Mrs. Oldfield's class was being introduced to their research project, so the librarian was teaching the students the best way to find research. I found this class a great example of integration technology as well as collaboration. Mrs. Oldfield informed me that the students were researching an approved social studies topic for her class, then her students would learn the proper way to write an research paper from their 8th grade language arts teacher (Ms. Anderson), and the librarian (Ms. Grimmesy) was helping with both classes! Ms. Grimmesy was teaching the students a better way to find research by using the school's databases instead of Google, then Mrs. Oldfield taught the students how she wanted them to record their research on note cards. It was unique to see Mrs. Oldfield rely on Ms. Grimmesy to pre teach the "how to" to the research component, and Ms. Grimmesy rely on Mrs. Oldfield to provide the students with details and requirements for the note cards. Honestly, as I observed, I felt I was watching two teachers that had co-taught for years. Due to Ms. Grimmesy and Mrs. Oldfield's consistent answers, it was evident that both educators took some time to collaborate and know each other's roles.

I had the chance to ask Mrs. Oldfield if she and Ms. Grimmesy used some kind of planning tools, but she informed me they did not. However, they did spend about an hour working together to go through details to the project and what Mrs. Oldfield needed Ms. Grimmesy to show her class. Ms. Grimmesy also did the same thing with the Language Arts teacher, Ms. Anderson, as well. Once the lecture portion of the lesson was over, the students spent the rest of the class period working on the the computers in the library. Later in the day, I noticed the same students were in the computer lab next door to the library with their Language Arts teacher. These two teachers had their students in the library and computer lab for three days. It was obvious this collaboration was definitely well planned because the students were able to spend two hours a day working this project and had the chance to see their Language Arts teacher for advice on the actual paper or the Social Studies teacher for guidance on the research. The librarian was traveling back and forth from both areas and helping with everything. Due to this collaboration, the students were able to stay actively engaged and use their time wisely. Also, the teachers were able to monitor and mange the students research techniques and technology components.

The technology components that were used for both of these classes were the subscribed databases, ABC-CLIO, Worldbook Online, Culturegrams, and Gale provided by the district and Microsoft word document. During my observations, I did notice that there were a few students that were Google Docs to write their papers. These particular students liked the fact that their paper was available on any computer. So, I asked Ms. Anderson, why all the students were not using Google Docs instead of Microsoft Word. She informed me it was due to the students not having email addresses. Little did Ms. Anderson know, our district actually provides all students with an email address and a Google Docs account! This was a perfect example of the lack of knowledge that many teachers have regarding technology and all that our district offers. The best way to improve this would be through more professional development and continuing education opportunities.

Based on my observation of both these teachers, Mrs. Oldfield felt confident with technology and Ms. Anderson did not. When I asked both teacher, Mrs. Oldfield informed me that she does try to integrate technology into her curricula as much as possible. She said, "History is a boring topic for students, so it is my job to make it more interesting; technology helps with this." Ms. Anderson was the opposite and does not incorporate very much technology into her curriculum. However, she does try to incorporate the educational components to technology. "I may not use a lot of technology in class, but I do teach the students the proper way to write an email and paper that will come in handy when the students are using technology."

Observation #3:

My third classroom visit was in a 7th grade Math teacher's classroom, Ms. H. This particular teacher was in the process of teaching proportions to her students. Ms. H was using a document camera to write the math problems and have them projected onto the board for the students to copy. Although it look effective, and Ms. H was doing a great job presenting the information, the students did not look as actively engaged as the students did with Ms. Oldfield and Ms. Anderson. I saw very little evidence of technology integration in practice. When Ms. H had a few minutes to talk, I did ask her if she used much technology. She informed me that she did not. She was a big fan of cooperative learning, but she did not take much time use technology in her classroom. However, she did let me know that the Math department had purchased an on-line program, ALEX, to help those students that struggled with math. The great thing about this program was the fact they students could access it at school and at home. So, the students that needed more practice, they had the possibility to use it.

Along with asking Ms. H about technology integration, I asked her if she had ever thought to use the librarian or Technology Specials, Shannon, to help create any lessons that incorporated a technology component. She informed me that she had not for a couple of reasons. One being that she doesn't have a lot of time to cover all that she needs to in time for TCAP, and her second reason was that she honestly didn't feel it would be as useful in her class. Personally, I found her comments to be a little frustrating because there are so many technology resources available for math! Hopefully, I hope that I get a chance to show her soon!

Observation #4:

My fourth visit was spent with Ms. Webber and her 7th grade Social Studies class. Her class was in the process of creating on line flip books using a free website: www.flipsnack.com. I've actually had the chance to see Ms. Webber have her students create flip books in previous years, but this was the first year I've seen her use a technology component. When I asked her why she changed she informed me "well, this is the 21st century." The lesson seemed to be very well thought out; however, the technology specialist was not involved in the lesson development. Ms. Webber let me know that she had come across this website in a technology class she had taken and thought it would be fun to have the students use it. The class was in the computer lab, so every student was able to work on a computer, then collaborate with their partners. Each student was assigned a certain portion and then they had to

combine their work with their partners to complete the project. This seemed to work well for most students; however, some students seemed to struggle with some of the technology. So, I noticed that Ms. Webber spent a great deal of her time helping the struggling students with technology. This issue could have been avoided if Ms. Webber had possibly collaborated with our technology specialist. Although it seemed that everything was fixed that needed, but it may have been even easier if there were a few management techniques incorporated with the technology.

Ms. Webber seemed to feel very comfortable with technology. In fact, I have actually used her as a resource before when it came to my own integration of technology into my curricula. She has spent a great deal of time teaching students how to use particular software like flipsnack. She feels it makes the lessons much more purposeful to her students and it is worth the time.

Observation #5:

My fifth classroom visit was with a 7th grade Language Arts teacher, Ms. Harris. Ms. Harris was teaching her students how to create on line poetry portfolios using a free website: www.livebinders.com. I've actually used this website for my own classroom; it is a great organization tool for websites. This was the first time that Ms. Harris was using the program. In previous years, she had her students create poetry portfolios with an actual 3 ring binder. This year, she chose to challenge herself by having the student complete this project electronically. The lesson that I watched was the students first day in the computer lab. Ms. Harris spent approximately fifteen minutes demonstrating how to use LiveBinders and projecting her own example for all the students to see how it works. By projecting her own copy was a great visualization tool for the students; however, it seemed to be a great deal of information fairly quickly. This was evident when the students started to work and some were confused. The rest of the class time was spent allowing the students to start working on their portfolios.

Just like Ms. Webber, Ms. Harris seemed to be conducting this lesson without the assistance of the technology specialist. Many of the students seemed to have technology difficulties, and I even had to help many of them. Ms. Harris seemed to take these technical challenges quite well. She just asked the students to raise their hands, and she continued to work her way through everyone. However, due to so many hands up, a great deal of the students lost valuable work time. So, my advice to Ms. Harris would be to have some assistance next time. Another way this may have worked a little easier was to have the students doing the same thing on the computer as she was describing how to create the LiveBinder instead of just watching her. In my experience, this has always seemed to work better. By

having the students follow along may take more time to teach the students the software, but in the long run it would be beneficial. This way the students would actually know how to use the program versus Ms. Harris going from computer to computer to do it herself.

Observation #6:

My final observation was in a 6th grade Digital Photography class. Mr. Bullock used to be a Spanish teacher with a passion for technology. Due to his passion, he has continued to teach himself a variety of technological resources and managed to create some wonderful classes for the middle school. One of the classes Mr. Bullock as really enhance with his knowledge is the Digital Photography program. The class I observed seemed to be in complete chaos, yet Mr. Bullock knew exactly everything that was going on. Many of the students were in the halls using cameras and tripods, while others were on the computers manipulating videos and photographs. It was evident that this class was technological inclusion! The students seemed to really understand how to use the equipment and programs. I asked Mr. Bullock how long it took for him to teach the students how to use the hardware and software. He admitted that it did take a great deal of time; however, being that this class was a 6th grade class, he looked at as an investment. As the students move on to 7th and 8th grade, he will not have to worry about spending as much time to teach the hardware because he spent so much time in 6th grade. Mr. Bullock also mentioned that he did rely on the technology specialist a little bit when it came to teaching the "how to" of technology. Although the technology specialist did not teach the actual lesson, she did come in from time to time to offer some assistance when the students were learning new devices or software.

This teacher conscientiously integrated technology into every component of his planning and instruction. Although, I did not see Mr. Bullock use his projector, he did inform me that he enjoyed having the students "follow along" with the device when he was teaching how to use it. This was evident by just looking around the classroom. Mr. Bullock's class was designed with technology in mind! The entire border of the room was full of Macs, a projector in the middle, and few tables. The lack of desks really proved that the students are either at a computer or out of the classroom using things like cameras and tripods.

Final Thoughts:

Overall, these observations really opened my eyes to some of the ways that other educators integrate technology into their curriculum. Some of the teachers did a great job collaborating and utilizing resources such as the librarian or technology specialist, but many of them chose to try things on their own. The key was that they really tried to integrate technology. All the teacher that I saw use technology have some great ways of creating a fun and engaging educational experience for our 21st Century learners.

The thing that I found the most frustrating was the teacher that didn't really want to try to incorporate technology. I do understand the stress to getting through all our required standards and curriculum, but we also need to consider that education is changing to involve more technology. Hopefully, this type of attitude will change. The key is to create professional development opportunities for these type of teachers.

This was a great experience. It got me out of my "science" world and had a chance to really connect with other teachers in my school building.