Synthesis Paper: Visual Literacy and Multimedia

The road to a Master's degree in Educational Technology began long ago. In fact I can pinpoint two critical events which led to my specific interest in the field. The first most important event was in second grade when I learned I wanted to be a teacher. I stayed after school each week to help grade papers, clean the classroom and learn through careful observation of my teacher who was a tremendous influence. Through my experience there, I discovered a love for education. The technology part came later. In 1993, the first magnet schools opened in Tampa. Middleton Middle School of Technology was to be a state of the art facility for students to use the latest and greatest tools in the field of technology which, at the time, was just developing some of the gadgets we so commonly use today. I attended this school for the 7th and 8th grades and was exposed to things that many teachers would want to have even now, 15 years later. The school had computer labs completely outfitted for a class of 25. Teaches had handheld computers, precursors to the PDAs of today. The art room had flatbed scanners and some of the earliest versions of Adobe Photoshop. Video production students had access to full, professional studio quality editing equipment. Students had access to the internet when it was still quite rare to find the internet in most homes much less schools. Then of course, there was the technology lab where students could design airfoils, design roller coasters and practice electronic circuitry. Not only did I have a sense that I was getting to use equipment that most students and adults had only heard about but I felt the sense of power that this new knowledge was granting me. From that point on I have been interested in what technology can do for education.

Jerry Woodbridge acquired his taste for technology integration later in his life but with no less zeal. His exploration of the benefits of using multimedia in the classroom are not only convincing but energizing. He makes clear the advantages, even going so far as to list the abundance of state standards one lesson would meet while also tying research into his argument. To some extent, these ideas are not new. Educators have begun to realize in the past several years, the importance of integrating as many forms of learning as possible into the curriculum. Reaching a child through their auditory skills may benefit some; addressing information through visual means is a growing field that is becoming more prominent and is holding a greater importance. Visual teaching may reach more students. However most teachers would not settle for reaching a percentage of children less than 100%. It is critical that all students have an opportunity to learn on all levels. Multimedia seems to do just that. Woodbridge outlines the various intelligences for which his Twister lesson accommodates: musical rhythmic intelligence, visual-spatial intelligence, interpersonal intelligence, logical-mathematical and intrapersonal intelligences (Woodbridge 2004). The initial time taken by a teacher to create such a lesson seems a small price to pay to educate a child on that many levels.

Woodbridge cites Reeves (1998) who explains that "multimedia can stimulate more than one sense at a time, and in doing so, may be more attention- getting and attention- holding" (as

cited in Woodbridge 2004). The use of technology, particularly multimedia is a welcome addition to any lesson. One would be hard pressed to find a student who would prefer to read from a textbook over observing a multimedia presentation. In his conclusion, Woodbridge reminds readers that multimedia increases student attention and raises achievement (Woodbridge 2004). Essentially, a multimedia presentation is more memorable for students and because it addresses so many different learning needs, it helps student understand the concepts more effectively.

More importantly, providing students with an opportunity to create their own multimedia presentations further enhances learning through a constructivist model. Students achieve beyond ordinary classroom skills when they create their own learning. In a study by Kafai, Ching, and Marshall (1997) researchers stated that, "Recreating student knowledge through multimedia/hypermedia allowed for student self expression while using technology, which supported the learning process, and students simultaneously learned content, software programming, and negotiating skills while working with others and coordination of a multi-tasking design endeavor" (as cited in Woodbridge 2004). These skills benefit students on a broad scale, providing far reaching benefits for their future careers and enhancing their role in the global community. Real world skills are vital for all students but are sometimes secondary to more basic skills. Allowing students to create multimedia presentations accomplishes both needs. Going back to 1993, as a 7th grade student, I distinctly remember using a once state of the art, now obsolete program called Compel which was very similar in function to PowerPoint. The program was commonly used in the classrooms at Middleton. What is particularly interesting to me now as an educator is the knowledge that my middle school teachers had far less training on this program than I do when using PowerPoint in my own classroom. Teachers felt the best way to use this program was to show students the basic functions and let us discover and explore to determine the rest. Fifteen years later I can remember making a slide presentation with my peers to educate our classmates on one of the five themes of geography. This is a strong example to support the concepts described above: the use of technology aids understanding and enhances learning. It also promotes retention of learned material exceptionally well.

Clearly, technology, particularly multimedia has been effective for my personal learning experience however since I am not expecting a pop quiz on the five themes of geography, it is important to recall the benefits of the same technology in my professional learning experience. Digital Photography and Visual Literacy is my second class on this road to my Master's degree yet already I have experienced countless benefits for my professional career. Woodbridge explores the benefits of multimedia for middle school science students but he makes a point of saying that it is relevant in any classroom for any discipline or level. The benefits do not end at a high school graduation; in fact I believe they are even more valuable at the higher levels. Teachers specifically must know how to integrate technology successfully into their classrooms. They must learn and be fully competent before they can teach it to others. The creation of lessons in the two classes I have taken has been tremendously beneficial. Not only have I created several well planned lessons but I

have been given dozens of other ideas on how best to enhance my curriculum with visual techniques and technology.

In being essentially forced to learn by doing, I have also acquired skills I would not have otherwise. For example, I was pleased to get MS Office 2007 shortly before beginning my first class in Fall 2007. I immediately regretted my decision to install the new software before the first class (Instructional Computing) because the class required me to use the programs frequently and I did not yet know the new layout. Without the course I would not have so thoroughly explored the programs and would likely still struggle to find applications. I certainly know the programs now! Reading a book would have done little good in helping me figure out the new look of Office 2007. It was exploration and self discovery that led to my increase in confidence and ability. This further illustrates the points made in Woodbridge's article on how "technology has the potential to enhance and promote such interaction through inquiry, problem-solving, critical thinking, self-evaluation and reflection" (Woodbridge 2004). Learning by doing allows all students to take ownership of their work in a way that simply reading or writing does not. It allows students to create their learning environment to meet their personal needs. The flexibility of the coursework has allowed me to create lessons specifically for my unique school and student population making the lessons useful rather than ineffectual.

Finally, visual literacy has been at the forefront of all recent coursework. The concepts illustrated by Sankey and Stokes synthesize perfectly with those expressed by Woodbridge. Visual literacy and multimedia work together in synchrony. Multimedia is an enhanced form of visual learning, integrating heavily visual presentations with other critical learning forms. This makes such presentations valuable to a near universal audience of students. Both forms are vital to the success of students and both must be carefully integrated into the classroom curriculum. Visual literacy and multimedia are so broad and open ended that both genres can accommodate any learning need, grade or developmental level. I feel the best way to determine which concept to use in the classroom depends solely on the lesson and the amount of time a teacher wishes to devote to that particular concept. Entire units can be efficiently covered with a well designed, carefully planned multimedia presentation whereas visual enhancements to learning can be used frequently and spontaneously as the need arises or with more careful and thoughtful planning. The use of each is vital to prepare students for a career after school.

The only limits to full integration of multimedia into my classroom are financial and logistical. While these seem to be large hurdles to cross, I am confident the time is not far off where these tools will be more standard in my school. While I may not have the means to edit videos to put clips in my presentations, I am able to fully employ the use of PowerPoint in my classroom which could be used to recreate most of Woodbridge's presentation if desired. Logistically, I am not able to have all students sit comfortably at a computer at one time which makes technology instruction more difficult but by my own earlier experiences, I appreciate the benefits of allowing a student to explore a program and make discoveries on their own. Students currently use

PowerPoint and MS Word to complete assignments with guidelines. It is time for me to allow them to control their own learning and help them gain knowledge through exploration and the design of their own project. In the future, as new technology emerges, I will use information from this class as well as personal reflection on past experiences to provide students with the same sense of power and possibility I experienced many years ago.

Works Cited

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