A Qualitative Participant Observation Study Investigating the Use of Web 2.0 Technologies in One High School Visual Arts Classroom Using a Social Constructivist Lens

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by

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Abstract

This qualitative project studied the benefits of Web 2.0 technology in one high school visual arts classroom using a participant observation stance. I examined an advanced art class through a social constructivist lens, with student’s ages from 16-18 years. I implemented several lessons teaching the students how artists display ideas within their artwork, through having the students use the blogging service Tumblr and the video sharing Web site YouTube. In analyzing the student’s interactions with their peers and their experiences with the technology, the project revealed that using the technology benefited their learning. I collected data from a variety of sources that included both pre- and post-questionnaires from the students, interviews with students and classroom teacher, my own reflection logs and observations, and document analysis of the student blogs and artwork. Through reading and re-reading the data and organizing the data into word documents, the student’s individual stories began to reveal the categories of the findings. Through interacting on the blogs, students began to build a classroom community that had a positive effect on their learning. The students discovered that blogs provided them with the opportunity to reflect as they responded to assignments. The students became teachers both directly and indirectly through completing assignments and posting responses. Using Web 2.0 technology motivated the students by giving them an active role in their learning. These categories contributed to larger themes: students gain enjoyment and value through Web 2.0, social interaction benefits student learning, and Web 2.0 provides teachers with tools that help students succeed. My research displayed how Web 2.0 technology can be implemented in a high school visual arts classroom, and documented the students’ personal experiences with the technology.
Introduction

Background Narrative

One of the greatest technological advancements of the twenty-first century is the development of the Internet and its growing dependence among people across the world. The Internet has been changing rapidly to not only accommodate our learning needs but also our social needs. Long gone are the days that we view the Internet as only a depository of information readily available to peruse or surf Web pages. Today the Internet is full of opportunities for the user to create content, share it with others, and interact on a global scale (Richardson, 2007). The tools that allow for such interactions can be identified as Web 2.0 technologies. Since this technology has become an everyday aspect of the current 2011 generation, I question why it is not found more often within our schools. Imagine a classroom where the teacher regularly uses the Internet as a platform for social interaction, a tool for discovering new information, and as a way for students to gain multiple perspectives from people all over the world. I find it exciting to think of the possibilities for teachers to utilize this readily available resource that already has students intrinsically motivated in their personal lives.

I see the excitement of the Internet first-hand by observing my brother who is a sophomore in high school. The first thing that he does once returning home from school is log on the computer to check his Facebook. He checks for any notifications, asks a friend to come over via Facebook chat, and then logs onto YouTube. Here he watches videos of people from all over the world riding bikes and doing tricks; he then tries to learn how to do the tricks by watching the videos. Next he picks up his iPod, plugs in the headphones, and listens to his favorite music, all the while, reading the newest post on his
friend’s blog; there he discusses the latest technology and how to use it. Finally he decides to play some flash games on another Web site as his cell phone beeps. He receives a text message announcing that his friend is in the driveway ready to try out those new bicycle tricks. Watching his interactions with the Internet left me to believe that if we could harness this excitement and implement new technologies within our curriculum, the opportunities for education would be endless. These tools would create motivated students who in turn would become lifelong learners.

If art teachers have this same opportunity to improve their curriculum, I wondered whether, with the use of Web 2.0 technologies, art teachers could help create a sense of classroom community and a better understanding of art concepts. Additionally, might teachers engage students in critical thinking about art, and motivate them with aesthetic and visual culture experiences? In observing my brother’s high school experience with Web 2.0, I can also reflect upon my own experiences.

In high school I was fortunate enough to take a course in computer arts which opened my eyes to a whole new world of art that could be explored. I was also fortunate that my school permitted Internet access through which the teacher used YouTube clips to expose us to contemporary art concepts and current aspects of visual culture. The use of YouTube in the art room excited and engaged all students in the class. I realized that the use of Web 2.0 technologies in teaching art helped to make art content more accessible to all students rather than just a select few. Therefore, in college I expected a class that would teach me how to incorporate new technologies into my future classroom. Although I was able to take a graphic design class, no course taught us pre-service art teachers how to incorporate Web technologies into their curriculum. I felt inadequately
prepared to use Web 2.0 technologies to enhance my teaching practice, which left me wanting to research the technologies that currently exist, how they are being used in art classrooms, and obtain an understanding of the technology so that I feel comfortable incorporating it into my future classroom.

The Internet plays an incredibly important role in my private life. Being an art educator and artist, I have discovered many aspects of the Internet that enhance the creative process. Countless Web communities exist for sharing, discussing, critiquing, and creating art. The Internet allows one to view the perspectives of multiple artists through the artist’s Website. Additionally, Google’s Art Project allows users to explore art exhibits from museums around the world. Free Web sites allow artists to create blogs to display artwork that can be viewed and critiqued by anyone with Internet access. I frequently visit blogs, actively participate in conversations on discussion boards, and constantly construct new knowledge for myself through research. I regularly use the Internet for examining art and have created blogs to display my artwork; therefore, I know first-hand that using these Internet technologies provides an easy way for students to experience an authentic-artistic process. This realization has made me wonder in what other ways I could enhance my art curriculum by using technology. Roland (2005) believes that harnessing the use of Web 2.0 technologies allows students to construct their own knowledge by investigating information that is meaningful to them. Web 2.0 also provides students with multiple perspectives that increase their appreciation and understanding of art (Roland, 2005). Therefore according to Roland and Prater, using Web 2.0 technologies as a teaching tool is based heavily in constructivist theory (Roland, 2005; Prater, 2001).
A main source of inspiration for this topic came from the discovery of a single Web site called “The Art Teacher’s Guide to the Internet” (2005) created by Dr. Craig Roland who is a professor of art education. In this blog he discusses valuable tools and Web sites which can be used to integrate Web 2.0 technologies into the art classroom. Roland (2010) posts monthly Web sightings which highlight exciting aspects of art and art education found through different Web sites, blogs, videos, lesson ideas, online tutorials, and animations. From this Web site, I discovered Craig Roland’s Web site “Art Education 2.0” (http://arted20.ning.com/). This Web site is an online community of art educators who discuss the use of new technology as they participate in forums, groups, blogs, and photo and video sharing. The discovery of Roland’s Web sites excited me for the possibilities that exist to engage and motivate students.

As a teacher I have had two main teaching experiences. My first experience was as a long-term substitute for a high school creative crafts class and my second as an elementary art teacher within two separate school districts. I quickly became aware of the pressure from the administration to incorporate technology into the classroom in both of these situations. In most cases the administration does not provide any information on how to incorporate technology into art teaching practices, therefore the art teacher remains unprepared, yet pressured. I wanted to discover ways that art teachers can easily incorporate technology into their classrooms to alleviate that overwhelming feeling. Likewise, trying to communicate with high school students within a classroom setting is very difficult. However, it is clear that they easily interact using social media Web sites such as Facebook. If it were possible to use similar technologies in the classroom, teachers could use those social interaction mechanisms as educational tools. It seems as if
distinct possibilities exist for using Web 2.0 technology to enhance the art curriculum. Many researchers have discussed the practical uses of Web 2.0 technology within the classroom today (Buffington, 2010; Roland, 2005). Through the Internet, students have a whole world of information available right at their fingertips. As a teacher, it is my responsibility to introduce students to the most current and accurate information available, and to improve my teaching practices. While technology is a key component to the success of both teachers and students alike, the problem of implementation remains and is the impetus for the problem statement of my research.

**Problem Statement**

Students continue to show an increased interest in the Internet and have made Web 2.0 technologies a major part of their daily lives. In the field of art education we know that the creation of Web content that occurs when using Web 2.0 technologies can be paralleled to the creation of art. Buffington (2008) states that “both art and Web 2.0 are inherently about creating, whether it be a traditional art object or something that exists on the Web” (p. 1). Therefore it makes sense to study Web 2.0 technologies within the art curriculum as a new medium for communicating ideas. According to Roland (2005), November (2010), and Richardson (2010), by successfully integrating technology into their classrooms, a teacher can truly improve their teaching practices.

Although many researchers (Roland, 2009; Buffington, 2008; Richardson, 2010) advocate for the use of Web 2.0 technologies in the art classroom, just how art teachers successfully integrate those technologies into their curriculum to improve student learning in art remained unclear. Undertaking a research project that explored how art teachers are using Web 2.0 technologies became necessary.
Purpose of the Study

The purpose of this study was to discover the ways in which art teachers can use Web 2.0 technology to enhance student learning in the visual arts. I wanted to explore the ways that teachers use Web 2.0 technology as a vehicle for learning. Additionally, I wanted to explore how art teachers use Web 2.0 technology to facilitate learning in key components of the art curriculum such as art history, criticism, production, aesthetics, and visual culture. In researching major contributors to Web 2.0 in art education, I hoped to help art educators better learn how to use Web 2.0 technologies to enhance student learning. At this stage of the research project, Web 2.0 technologies are described as any aspect of the Internet that allows for the creation, publication, and sharing of information with others (Richardson, 2007).

Through this study, I wished to gain an understanding of how an art teacher can integrate Web 2.0 into their art curriculum and how a school would support this effort. I wanted to team-teach with a high school visual arts teacher and integrate Web 2.0 technologies in their classroom, and document how those technologies may improve student learning processes. I wanted to survey students within this classroom and ask them the impact of that technology on their education.

Throughout this study, I wished to see how a high school visual arts program could use Web 2.0 technology. I felt that getting an overall perspective from students and teachers in this study would aid in understanding how to incorporate the technologies in my own art classroom and may help others to do the same. I explored research questions that address how and to what degree these tools affect art teaching.
Research Questions

Research questions for this study include:

- What are the benefits of using Web 2.0 in a high school visual arts classroom?
- How can Web 2.0 technology be used to enhance student learning in the visual arts?
- How can Web 2.0 technology be used to improve student motivation or engagement?
- What are the student’s social benefits of incorporating Web 2.0 technologies into the art classroom?
- What value do students and teachers find in incorporating Web 2.0 technologies in the visual arts classroom?

Significance of study

I felt that researching the ways in which Web 2.0 technology can be used to enhance student learning in the visual arts is important due to the climate of technology today. Schools, now more than ever, are pushing for the integration of technology within the classroom.

This study has broad implications to help many within the field of visual arts education. Pre-service art teachers can use this study as a starting point and may benefit from the many examples tested through using Web 2.0 technologies. Teachers who are currently using Web 2.0 technologies may learn ways to improve their own use of the Web 2.0 technology and discover more options that they may not have considered previously. Finally, this study will help close the digital disconnect between teachers who are unfamiliar with Internet technologies and their students who embrace technology by
helping these teachers become more aware of Web 2.0 technology. Within my study certain terms need to be understood.

**Definition of Terms**

The following definitions are to help the reader understand these terms in the context of my study.

- **Web 2.0**: Any Web technology that enables the user to create and publish content on the Internet. Web 2.0 technologies include blogs, podcasts, wikis, and social networking sites such as YouTube and Facebook, all of which emphasize collaboration.

- **Constructivist Theory**: A theory where students are exposed to new information and make connections with the information they already know with the teacher as the facilitator of knowledge. Students become researchers and discover new knowledge (Brooks and Brooks, 2001).

- **Social Constructivist Lens**: A major focus of social constructivism is to uncover the ways in which individuals and groups participate and learn from each other. In the social constructivist model, teachers are knowers who craft a curriculum to support a self-directed, collaborative search for meanings (Brooks and Brooks, 2001).

**Limitations of Study**

Although my research gathers information from students and teachers within a high school visual arts classroom, my study was limited in certain aspects. Within the confines of college course work, the time constraints for this project limited the study. Ideally, I would have liked to survey a student in the beginning of the school year, in the
middle of the school year, and after the class is completed to see how their perspective changes on the benefits of Web 2.0 on their education. My study was limited by the small number of art teachers who seem to be using Web 2.0 technologies in their teaching. Finally, my study was limited by the lack of Internet access in some schools. Although there were limitations to my study, I felt that I was still be able to gain a better understanding of how Web 2.0 technologies are used in high school art classrooms.

Conclusion

Students today have a great interest in technology. I believe by harnessing that interest and using technology in ways that support and enhance our curriculum, teachers can drastically improve their teaching practices. I have identified my research questions, focusing on answering how Web 2.0 technologies may benefit the high school visual arts classroom. My problem statement arose because although many researchers advocate the use of Web 2.0 technology in the visual arts, just how to integrate the technology remains unclear. Few art educators use Web 2.0 technologies. The purpose of my study is to discover the ways in which art teachers can use Web 2.0 technology to enhance student learning in the visual arts. In the next chapter, I share an in-depth review of literature relative to the use of Web 2.0 technologies in education and provide foundational research necessary to my study.
Review of Literature

My research was grounded in trying to gain thorough understanding of the ways Web 2.0 technologies can be used in visual arts teaching. To provide background for my study, I examined research and theories that show what Web 2.0 technology is and how it is being used in education today. I also looked at how Web 2.0 technology is currently used in art education and what researchers say about the benefits that Web 2.0 technology has on students. I also observed research that shows what teachers need to consider when implementing Web 2.0 technology and how it can affect their teaching. Finally, I examined research that discusses a social constructivist lens, highlighting the ways students can learn from another.

Social Constructivist Learning Theory

Constructivist teaching methods focus on the idea that learning is not a linear process but rather it is a complex process which is highly affected by the individual (Brooks and Brooks, 2001). Brooks and Brooks (2001) stated, “What student’s ‘know’ consists of internally constructed understandings of how their worlds function. New information either transforms their old beliefs or…doesn’t” (p. viii). Knowing how students learn new information is important because when students use Web 2.0 technology they are discovering new information and rapidly constructing new knowledge. Brooks and Brooks (2001) noted that constructivist classrooms have several common characteristics.

They free students from the dreariness of fact-driven curriculums and allow them to focus on large ideas; they place in students’ hands the exhilarating power to follow trails of interest, to make connections, to reformulate ideas and to reach
unique conclusions; they share with students the important message that the world is a complex place in which multiple perspectives exist and truth is often a matter of interpretation (p. 21-22).

McMahon (1997) said in constructivism students are responsible for their own learning with teachers as their facilitators. McMahon (1997) pointed out that teachers create opportunities that encourage their students to become intrinsically motivated to acquire new information. A branch of constructivism which focuses more on how learners interact to construct new knowledge is called social constructivism (McMahon, 1997).

Researchers conclude that social constructivism began with the work of psychologist Lev Vygotsky (Jaramillo, 1996; McMahon, 1997). These researchers believe that Vygotsky’s zone of proximal development, explained later in this chapter, and his views on how children learn and construct knowledge were the basis of this constructivist theory (Jaramillo, 1996; McMahon, 1997). In social constructivism the context in which the learning takes place is paramount; therefore the learning situation is considered as important as the learning itself (McMahon, 1997). Technologies create entirely new learning situations.

To Jaramillo (1996), the goal of Vygotsky’s research was to figure out how and why we learn and his results had a major impact on the field of education. According to Jaramillo (1996), Vygotsky believed that social experience is at the core of how people think about and interpret the world. In discussing Vygotsky’s ideas, Jaramillo (1996) stated, “To learn concepts the learner must experience them and socially negotiate their meaning in the authentic context of a complex learning environment” (p. 135). Individuals interact with one another in social situations to discuss the meaning of new
concepts and through this act of communication the individual then makes their own interpretations and creates new constructions of knowledge (Jaramillo, 1996). These collaborative activities are a major aspect of constructivist teaching strategies, thus Jaramillo credits Vygotsky for the development of social constructivism. In the following paragraph, I examine Vygotsky’s work in developing the zone of proximal development.

The zone of proximal development (ZPD) explains how students working collaboratively can benefit their individual learning and development. Vygotsky (1987) defined the zone of proximal development as “the difference between the child’s actual level of development and the level of performance that he achieves in collaboration with an adult (or more capable peer)” (Vygotsky, p. 209). Thus by collaborating with more capable others, the student is able to achieve more than if they were to work independently. Vygotsky stated, “What a child is able to do in collaboration today, he will able to do independently tomorrow” (Vygotsky, p. 220). Through a process, that Vygotsky called scaffolding, a learner extends beyond their own physical and cognitive maturity that causes their learning to surpass their own developmental level (McMahon, 1997). I found myself being curious to find how art teachers might employ concepts of social constructivism in using Web technology.

Social Constructivism in Technology

Several researchers described how aspects of Web technology support constructivist teaching practices (Anderson, 2008; Roland, 2005). Roland declared, “The decentralized nature of the Web encourages non-linear, constructivist learning, and exploration of ideas. It allows students to choose their own paths through material and to probe a subject from different points of view” (p. 58). Anderson (2008) noted that
students have the opportunity to experience information first hand by visiting the Web sites and actively participating in their learning. Being active participants in learning allows students to contextualize the information to make sense of personal experience and find personal connections that they may not have made if the information came directly from the instructor (Anderson, 2008). Many aspects of the art curriculum are inherently constructivist in nature and can be enhanced by the use of Web technologies (Prater, 2001).

**Social Constructivism and Technology in Art Education**

Michael Prater (2001), a professor of art education, discussed how learning within discipline-based art education is constructivist in nature and can be enhanced by the use of Web technology. He stated, “Moving from link to link, students connect ideas and develop their own interpretation of the social, cultural, and individual contexts of art” (p. 46). By forming those understandings, Prater felt students are better able to perform art criticism and internalize aspects of art history. Concerning aesthetics, Prater (2001) stated that what a student believes is aesthetically pleasing is discerned by their own ideas of beauty and artistic value; and through the Web students can be exposed to other ideas and experiences, which build on their own ideas of artistic value. Roland (2005), Anderson (2008), and Prater (2001) suggested that constructivism and the use of Web technology can enhance art curriculum and highlight the social aspects of using Web technology in the classroom.

The social aspects of Web technology also have an impact on teaching and learning in a constructivist classroom. In examining Vygotsky’s concept of scaffolding, McMahon (1997) pointed out the major implications for the Web as a tool for
communication. He stated, “While it may not be highly interactive in a physical sense, the Web has strong potential for social interactivity” (1997, p. 5). Anderson (2008) declared, “Learners receive the learning materials through the technology. . . . [I]n the transformation process, learners interact with the content, with other learners, and with the instructors to test and confirm ideas and to apply what they learn” (p. 20). Seeing that internalizing information and reflecting upon that information is an important aspect of constructivist teaching, Anderson (2008) stated that creating a blog could aid in the processing of and reflection on newly constructed information.

In sensing a gap of theory to support the use of the social aspects of Web technology in education, a group of researchers began the development of a new branch of constructivism called communal constructivism (Holmes et al., 2001). Holmes et al. noted that communal constructivism, based on notions of constructivism and social constructivism, seeks to engage students in the process of constructing knowledge for their learning community (2001). The authors stated that learning through communal constructivism must be “dynamic and adaptive” to compensate for the rapid changes within Web technology (2001). In describing the main ideas behind their theory, they noted the use of Web 2.0 technology creates “the potential for students to become publishers and not just consumers of information through the use of information and communication technologies, for example word processing, Web, and multimedia authoring tools” such as blogs, Podcasts, and wikis (Holmes et al., 2001, p. 4). The creators of communal constructivist theory were forward thinking and predicted a change in the way education would begin to utilize new technology. This technology came to be called Web 2.0.
Web 2.0 History and Uses

Many researchers recognize the effects that digital technologies have on the educational system. Those researchers note the difficulties in bringing technologies into schools, how youth are affected, and their ability to enhance visual arts education (Buffington, 2007; Prensky, 2005; Richardson, 2006; Roland, 2005).

In observing the history of Web technologies one must understand the history of the Web and the definition of Web 2.0 technology. Roland (2005) described the arrival of the World Wide Web in the mid 1990’s stating that the Web is a “global network” that connects millions of users together throughout most of the world. Roland (2005) declared the Web is a way for people to share their ideas with others. He wrote, “The Web is used daily by people of all ages and from all walks of life to communicate, to collaborate with one another, to share resources, and to access information of all kinds” (p. 25). Simply using the Web as a library of information was the first stage, known as Web 1.0. As the Web rapidly grew and increased in popularity, Web 1.0 began to transform.

Roland (2009) said that “the term Web 2.0 has been coined to describe the Web’s transition from a collection of static Web sites containing information to a more dynamic, interactive, and social, participatory culture” (2009, p. 1). Web 2.0 allows for a significant amount of interaction between authors of Web content and readers, and provides readers with an equal opportunity to become authors themselves. According to Buffington (2008), popular Web 2.0 technologies used today include blogs, wikis, Podcasts, photo, and video sharing sites such as Flickr and YouTube. Buffington (2008) stated, “This change in content authoring allows many more voices and viewpoints to be represented on the Web, challenges the notion of authority, and encourages the continual
reconsideration of content and ideas” (p. 304). In the future, according to Berners-Lee (2010), the Web will continue to develop and change with the creation of the “semantic Web” that will further change the way we use the Web with the use of artificial intelligences. This can be seen today in “Google Instant” where the user begins typing in the search bar and the Web site instantly provides several possibilities of what the finished sentence could be. This advancement of technology will usher in a third generation of Web technology, likely Web 3.0. With a constantly changing and advancing world of technology, the advent of Web 2.0 technologies within education, and the popularity of digital technology among youth, teachers now have the added responsibility to help their students become Web literate.

**Addressing Web Literacy**

We now live in a world where information is accessible and abundant, but we have yet to restructure our traditional school model, which is based on the obsolete idea that information is scarce (Richardson, 2006). Richardson (2006) believes that the idea of literacy has changed, and Internet readers need to be editors since anyone can publish just about anything in a heartbeat. Roland (2009) stated, “A truly literate person today must not only be able to create, communicate and distribute one’s own messages with new technology tools but also be able to analyze, interpret and evaluate the messages that one receives in a technology-mediated environment” (p. 1). A major contributor to this idea is educational researcher Alan November, who runs November Learning, an educational consulting company that empowers educators to apply powerful tools and strategies across the curriculum. November (2009) believes that if teachers fear the credibility of the Web, it will be a disservice to their students who frequently use it outside of school.
He stated, “With a thoughtful teacher leading the discussion and requiring students to learn to question credibility, we can better prepare students to enter a world where they will have access to essentially any version of ‘the truth’” (2009, p. 44). Although it may be important to teach students Web literacy, doing so does not come without complications.

**Addressing Complications**

According to Prensky (2006), two major things stand in the way of technology adoption in schools. The first is the need for one-to-one computing in schools where the students would have their own personal computers available for individual use. Most art classrooms lack necessary technology (some rooms have only one outdated computer available for a class of twenty or more students). The second and more challenging obstacle to overcome is teacher opposition to using new technologies and methods, reflecting that teachers and schools are resistant to change (Prensky, 2006). Prensky (2006) refers to students today as “digital natives” because they were born into technology. Opposing the natives, he titles their teachers (and all older adults) as “digital immigrants” who learn about technology later in life. Where digital immigrants believe that virtual (or online) relationships and communication is less real or important than real world relations, digital natives do not. This division poses a barrier to digital technology integration (Prensky, 2006). Even though teachers resist change, Web 2.0 has the potential to help educators more easily facilitate curriculum within their classroom.

Discussing resistance to change, Roland (2005) acknowledged, “While some art teachers may harbor an aversion to new technology, consider the potter’s wheel, loom, printing press, pencil, tubed paint, camera, art reproductions, and even linear perspective
were all considered revolutionary technologies at one time, though few would question their place in art classrooms today” (p. 8). Buffington (2008) stated, “With Web 2.0 cost is not an issue; many of the technologies are intuitive and have low learning curves, and the software is relatively stable” (p. 305). Because of the ease of these tools, content on the Web can be updated quickly and easily. For example Buffington (2008) suggested that a person can easily update their MySpace or Flickr page with new text, images, or video on a daily basis, which takes the creation of Web content away from the experts and allows anyone to publish new content. Students today are actively engaged in creating content for Web 2.0. Lenhart & Madden’s study (2005) discovered that “more than half of all teens who go online create content for the Web. Among Web-using teens, 57% (or 50% of all teens, roughly 12 million youth) are what might be called content creators” (p. 8). With this many teens using Web 2.0 technologies, incorporating these technologies within a curriculum makes sense. Web 2.0 also has many implications within the visual arts curriculum.

**Using Web 2.0 in Art Education**

Using Web 2.0 technologies within the art curriculum is becoming increasingly popular. One of the major arguments for integration of Web 2.0 technologies within the visual arts is their common core goal of creation (Buffington, 2008; Roland 2005). Buffington (2008) stated that “the two aspects of Web 2.0 that make it particularly well suited for art education are the creation of new content and the social aspects of the technologies. Because art is inherently about creating, using Web 2.0 to create offers artists, art teachers, and art students a new medium” (p. 40). The social implications make Web 2.0 a strong fit because teaching and learning in the art classroom or in a museum
setting are both highly social in nature. These socially interactive environments are perfect for Web 2.0 technologies because the technology allows many opportunities for the users to learn from each other. Therefore Vygotsky’s (1987) social constructivism fits within this interactive type of art teaching.

Using new Web 2.0 technologies provides means to teach students about contemporary art. According to Buffington (2010) many contemporary artists use the Web and aspects of Web 2.0 technologies. Artists use blogs to document their newest artwork, discuss concepts found within their work, and list upcoming gallery showings. Currently many museums use Podcasts, a Web 2.0 technology that involves the creation and distribution of sound recordings to deliver information about the art and artists that they display within their galleries. Buffington (2010) believes that art educators have an exciting opportunity to make connections between the tools used in contemporary art practices and the ways we teach our students.

The use of Web 2.0 technologies in the visual arts provides specific advantages to instruction. Web 2.0 allows students to participate in collaborative projects that connect them to the world outside their school community. Buffington (2008) discussed the possibility for students to use Web 2.0 technology to collaborate with artists, other classes, and museums across the world. This collaboration may help students see the relevance of their artwork beyond simply working for a grade (Buffington, 2008). The ability for students to publish their artwork and thinking processes through Web 2.0 technologies provides students with a broader audience than just their teacher and peers. In addition, the same technologies allow parents, other students, and people around the world to interact with students and their work (Buffington, 2008).
In his extensive work on integrating Web 2.0 into the visual arts, Roland created an *Art Education 2.0 Manifesto* (2009), which discussed many ideas art educators might consider when beginning to implement Web 2.0 technologies into their classrooms. Roland (2009) believes that the “increased use of these new technologies will not in itself lead to improved art learning; rather, technology is a catalyst that can provide new ways to enhance and in some cases transform art learning if it is appropriately engaged through challenging curriculum goals and sound pedagogical practices” (p. 2). Roland (2009) implied that a strong curriculum that uses Web technologies as a vehicle can aid student learning. Mayo (2007) stated, “Art educators have the unique opportunity to integrate studio practice with technology that can help lead the way in teaching with technology and crossing boundaries between real-world materials and digital media” (p. 50). When crossing boundaries it is important to utilize both old and new technologies for expressive and creative purposes and to be able to recognize when it is appropriate to use each (Roland, 2009). According to these authors mentioned above, Web 2.0 technology within the art classroom holds numerous benefits for student learning. My research wanted to uncover just how Web 2.0 technologies can aid student learning.

**Benefits of Web 2.0**

In recognizing the benefits of Web 2.0 and connecting with social constructivist theory, Roland (2009) discussed how Web 2.0 is about having students participate in communities of creativity and knowledge sharing, and noted, “Doing so creates a richer, more diverse classroom environment within which students actively learn from each other as well as on their own” (p. 4). Buffington (2007) recognized the benefits of using the World Wide Web to help students develop critical thinking skills and wrote,
Students will need to consider the motivations of the different sites and think about why the different sites are promoting different ideas. This type of activity recognizes the existence of a multiplicity of ideas and could enable students to think critically about why and how people come to interpret works of art in different ways (p. 20).

Buffington stated that through using the Web, teachers can expose their students to multiple interpretations of artworks including some that may challenge the student’s comfort zone, causing the students to reflect upon why these opposing ideas exist (2007).

A second benefit of Web 2.0 technology is its ability to enhance the sense of classroom community. Senior (2010) discussed the importance of connectivity within the classroom. Buffington (2007) believes that the importance of class as a community, developing a rapport with students, teaching in engaging ways, and encouraging cooperation, can be achieved by using Web 2.0 technology. Blogging with other students enables them to maintain a supportive social network and fosters the sense of a class community. Senior (2010) wrote, “A key feature of class blogs is the fact that they play both pedagogic and social roles. Not only enabling students to learn from both the teacher and their peers as they process assignments and so on, but also enabling them to maintain a supportive social network” (p. 143). Other benefits to using the specific Web 2.0 technologies are explained in detail in the following sections.

**Types of Web 2.0 Technologies for Classrooms**

In researching Web 2.0 technologies I focused on the three major tools available for integration within education include blogs, wikis, and Podcasts. More Web 2.0 technologies continue to emerge within the field, the most recent being Flickr. These
technologies are influencing art teaching, and are reshaping visual arts education as well (Buffington, 2008; Overby, 2009; Parker & Chao, 2007; Richardson, 2010).

**Blogs**

Blogs have become the most widely adopted tool of Web 2.0 (Richardson, 2010). A research study conducted by Lenhart & Madden (2005) found that one in five online teens (19%) created their own blogs, and 38% of all online teens say they read blogs. According to Richardson (2010), “A blog is an “easily created, easily updatable Web site that allows an author (or authors) to publish instantly to the Web from any Web connection” (p. 17). He stated that the distinguishing factor that separates a blog from a static Web site is that blogs are comprised of reflections and conversations that are in most cases updated every day (2010). Blog use thrives by the interaction between the author and reader. Utecht (2007) wrote, “Often used as personal journals, the power of a blog is its ability to carry out a conversation and to provide external links for extensions of information” (as cited in Overby, 2009). In Overby’s (2009) view, this extension of information is what allows students to construct personal meaning. An author is able to create a blog in minutes by using a blog hosting site, such as Blogger or WordPress (Overby, 2009).

Blogs have several uses within the classroom setting. According to Richardson (2010) teachers are using blogs as filing cabinets for student work, e-portfolios, and as collaborative spaces. He says that when students post their work online for teacher and peer response, the class has the potential to go paperless (2010). All of the student’s work organized in one place allows opportunities for student reflection (Richardson, 2010). Blogs are used as e-portfolios when students select their best work which represents their
progress within a class, reflect on the choices they made, and publish these results in a post (Buffington, 2008; Richardson, 2010). Richardson declared blogs “open up all sorts of new possibilities for students to learn from each other or from authors or scientists and other professionals who can now work side by side in digital space even though they may be far away from one another physically” (p. 23). When used within the visual arts, Overby (2009) stated, “The act of explaining and validating artistic choices is invaluable to the process of art creation” (p. 19). This documentation of the artistic process can then be viewed by teachers, peers, and parents, who in turn can post comments about the work, provide feedback, and ask questions (Buffington, 2008). With this new collaboration tool, blogs have many implications within the field of visual arts education.

In regards to making connections within the visual arts, Overby (2009) stated, “Conversations can be continued from the class critique and connections to similar ideas and artists can be provided. The dialogue starts to move in new directions, creating links and connections that deepen our understanding” (p. 23). The discussion about the artwork becomes more equalized among the authors because students who may be reluctant to speak their opinions (due to shyness or fear of sounding unintelligent) are able to post their ideas or questions in a more neutral environment (Overby, 2009). Overby notes a particularly constructivist application to blogging, “Blogging allowed us to link relevant outside information that related to our art making. Students were able to connect influences from news articles, movies, and events in the art world to their work in the classroom” (p. 23). According to Overby (2009), the use of a blog as a tool within the art classroom has the potential to enhance student learning and facilitate the teaching and
understanding of the visual arts. A Web 2.0 technology which shares the same easy publishing capability as a blog is a wiki.

**Wikis**

Wiki is short for the Hawaiian word wiki-wiki which means “quick” (Richardson, 2010). In essence a wiki is a collaborative Web space where anyone can add on and edit what has already been published (Richardson, 2010). Parker & Chao (2007) state that wikis can be used as a source of information and knowledge, as well as a tool for collaborative authoring used to construct knowledge. Richardson (2010) says that wikis have the capability to be password protected for instance to allow only members of the school to access them and edit the content. He noted that the most widely known wiki found on the Web is Wikipedia.org (2010). Wikipedia is attempting to store the “sum of human knowledge” by allowing users from all over the world to add on, edit, or omit information pages (Richardson, 2010). With this understanding, it is easy to translate wiki use to be an effective tool for student learning.

In theorizing learning in a collaborative social setting, Parker & Chao (2007) wrote,

> Wikis allow learners to participate in collaboratively building resources. An essential part of reflective learning is that learners should be encouraged to reflect on their knowledge and make it explicit. Wikis allow this reflection to be done collaboratively, moving closer to a fully social constructivist mode of learning (p. 59).

In recognizing the collaborative nature of wikis, Richardson (2010) suggested that a class could create an online textbook. The instructor and the students could contribute to the
text, helping them to reflect upon and internalize the knowledge taught (Richardson, 2010). He stated, “A co-construction of this type could make for a much more personalized text, one specific to your particular class” (p. 61). According to Parker & Chao (2007), wiki’s can be used for writing assignments within the classroom in that students post work, teachers read and make revisions, and the students correct mistakes, all on the same document. In discussing project based group work, Parker & Chao (2007) stated that wikis allow students to meet virtually at their convenience, stay in touch with the other members of their group who are geographically dispersed, and document the group’s process.

Buffington (2008) discussed the possible application of a wiki to the visual arts curriculum, describing an assignment in which a class works together to create a wiki page based on the interpretation of an artwork that could have multiple meanings. She explained that the use of the Web would benefit the discovery of multiple meanings since the students could read about many possible interpretations and then develop their own (2008). She wrote, “This type of assignment would allow students to learn about the controversies within the art world while they use a wiki to collaboratively develop an understanding about a work of art” (2008, p. 311). Where wikis allow students to publish text, Podcasting allows publishing in a new format.

**Podcasts**

Richardson (2010) defines Podcasting as the creation and distribution of amateur radio. The word Podcast is a combination of the words “iPod” and “broadcast” and was created from the idea of audio blogging (Buffington, 2010). The tools needed to create a Podcast are a digital audio recorder that can create an MP3 file, sound-editing software,
some space on a server to host the file (a blog), and something to say (Buffington, 2010; Richardson, 2010). Buffington (2010) stated that Podcasts are found and available for users to download through various blogs and Websites. Users can listen to Podcasts on their computers, portable digital music players, or cell phones. Buffington (2010) noted, “Users can listen to the content of the Podcast in a linear fashion, or navigate through it and listen to segments, return to the previous segments, or skip sections all together” (p. 12). Research shows that Podcasting provides many opportunities to enhance student learning in education.

Pasnik (2007) believes that the multimedia aspects of Podcasts are beneficial to students and discussed studies that allow students access to primary source materials related to historical events through digital recordings available as Podcasts. The studies state that when students have access to primary source materials when trying to understand history they “pose questions, observe details, and speculate about context” (p. 3). Pasnik (2007) in discussion of using iPods in education makes note that the use of Podcasting taps into multiple intelligences by allowing aural learners to listen to new course content. Teachers can integrate Podcasts into the teaching of the visual arts in a variety of ways as noted below.

In exploring potential visual arts classroom ideas, Buffington (2010) suggested that “teachers can use Podcasts with their students as a means of introducing an artist to the students” (p. 15). She explained that instead of the teacher telling the students about the artist, playing an interview with an artist via Podcast can be a meaningful way to introduce new concepts or ideas (2010). Buffington (2008) explained the implications of students creating their own Podcasts, noting that students could create a Podcast which
demonstrates their understanding of a certain art concept or art making technique (2008). Creating a Podcast would be beneficial to the students in helping them remember the specific technique or could be used to help others learn (Buffington, 2008). Podcasts can also aid in facilitating classroom critiques (Buffington, 2008). Buffington (2008) stated that “students could create their own Podcasts in which they model art criticism about their own artwork” (p. 40). Finally, where Podcasts deal with the creation, publication and sharing of audio files, Web 2.0 technology, Flickr, allows the publication and sharing of images.

**Flickr**

Flickr is a photo sharing Website that allows users to post their digital photography images, comment on them, make annotations on specific areas of images, and have ongoing discussions about the images (Buffington, 2008; Richardson, 2010). Richardson (2010) stated Flickr allows users to become part of a community that contributes images of similar topics for one to consume. Richardson (2010) explained that the annotation feature “allows you to add notes to parts of the image by simply dragging a box across an area and typing text into a form. Afterward, when you drag your mouse across the picture, the boxes and annotations pop up” (p.104). Buffington (2008) and Richardson (2010) suggested that this annotation feature of Flickr can be used for extended discussions of works of art and can be posted under any particular photo. The use of Flickr is a beneficial tool within the visual arts classroom to aid in the discussion, publication, and sharing of images.
Conclusion

In this review of research, Jarmillo (1996), and McMahon (1997) found that constructivist teaching strategies informed by Vygotsky’s sociocultural theory supports the use of Web 2.0 and digital technologies within education. Throughout the field many researchers advocate for the use of digital technologies within education, yet the use of Web 2.0 technology is still a new and emerging discourse. Many researchers who advocate for the use of Web 2.0 technology within education write about similar and simple uses for the technology. Also many of the ideas presented about the use of Web 2.0 are discussed by practicing teachers through opinions rather than significant research studies. Although some may think that lack of studies may suggest the limitations of the Web 2.0 technology, I believe that the lack of studies simply points to the fact that the use of Web 2.0 technology is still a new and emerging learning tool within education that demands further research. Finding limited studies on the use of Web 2.0 technologies within visual arts education validated the need for further research on this topic. My research addressed the benefits of Web 2.0 technologies in the visual arts classroom and how their use may enhance student learning, and effect student motivation and engagement.
Methods and Procedures

Introduction

In life one’s experiences greatly influence what kind of person one becomes. Similarly, one’s learning experiences have a profound impact on what type of teacher one ultimately becomes. By observing my brother’s high school years, recalling my own experiences throughout school, and examining my own personal interests, I have recognized the importance of technology to youth in today’s society. It is this realization that shapes my desire to help students connect to visual arts content and always be up to date with this rapidly changing field. Today high school students are intrinsically motivated by Web 2.0 technologies that allow them to create, edit, and publish new information on the Internet. This includes technologies such as blogs, Wikis, Podcasts, Flickr, YouTube, and Facebook. In order to connect to my future students’ interests, and keep my teaching relevant, I need to find out about using Web 2.0 technology to enhance my students’ learning.

Now that I am a teacher, I am not as confident in using Web 2.0 technology to its fullest capacity in a classroom setting. Despite having found many researchers (Roland, 2009; Buffington, 2008; Richardson, 2010) who advocate for the use of Web 2.0 technologies in the art classroom, how they successfully integrate these technologies into their curriculum to improve student learning in art remained unclear. Due to this gap in knowledge, a research project exploring how art teachers are using Web 2.0 technologies became necessary.

Through team teaching in a high school visual arts classroom and implementing Web 2.0 technology, I hoped to reveal the benefits of Web 2.0 technologies, and how
these technologies may enhance student learning. I also desire to help other art teachers learn about new technologies to implement in the future.

**Methodology of Study**

I conducted my research as a qualitative study that focuses on how Web 2.0 technologies are reshaping art education practices. Creswell (2009) wrote, “Qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem” (p. 4). Therefore qualitative research allowed me to study the problem of just how art educators can implement Web 2.0 technology in the visual arts. Creswell (2009) also stated, “Qualitative research involves emerging questions and procedures, data typically collected in the participant’s setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data” (p. 4). I planned to implement several lessons that teach students about art and ideas. The lessons engaged the students by using Web 2.0 technologies including Tumblr and YouTube. By conducting interviews, administering questionnaires, and document analysis I gathered data to answer my research questions. Although Creswell (2009) stated that data is typically collected in the participant’s setting, I collected the majority of my data through the Internet using email, SurveyMonkey.com, Tumblr, and Facebook. Since the essence of Web 2.0 technology is online, I was be able to use the Internet to collect data for document analysis.

The Internet is continuously and radically changing the methodologies of qualitative research (Marshall, & Rossman, 2011). According to Marshall and Rossman (2011), “When the Internet is conceptualized as a tool, researchers may conduct and distribute e-mail or Web-based surveys, interview participants either synchronously in
chat rooms or asynchronously via e-mails, create discussion boards and group blogs, or suggest online journaling for participants (p. 25).” Additionally, Marshall and Rossman (2011) stated, “The Internet provides a disembodied site where social identities (gender, social class, sexual orientation, etc.) are hidden. Thus emerges the possibility of studying the construction of identity solely through text” (p. 182). Considering that the use of Web 2.0 technologies are documented via the Internet, the Internet data collection methods have become vital to my research project.

**Site of the Study**

The information for my site of the study was gathered from Greatschools.org and directly from the school district. Located in Western New York, Arrowhead High serves grades 9 through 12 and is rated one of the top 20 public school districts in the county. The Arrowhead Central School District embraces approximately 84 square miles across six towns. The towns offer a unique blend of suburban and rural living that combines residential and agricultural areas. It is located approximately fourteen miles southeast of the second largest city in New York State. The district has a population of 22,000 and serves about 2,900 students in six schools. The majority of the school population of students, approximately 98 percent, is Caucasian. The remaining two percent consists of less than one percent of African American, Hispanic, and Asian students.

Arrowhead’s main campus encompasses a High School, Middle School, and Intermediate School. The Primary Schools are located in the surrounding towns. The art teacher at Arrowhead High is one of five art teachers in the district and the only full time art teacher in the building. She teaches four art courses including Studio in Art, Creative Crafts, Drawing and Painting, and Advanced Art. Her classroom is located in the Art and
Technology wing, tucked away from the main hallways. Leading up to her classroom are several frames hanging in the hallway. The frames to the right display artwork from previous advanced art students, and the frames on the left display artwork from her current students, pictures of awards her students have won, and photographs of what is currently happening in the art room.

When you enter, the first thing you notice is the warm pink tinted walls that overflow with framed artwork. Under closer inspection, you see that inside the numerous frames are photos of artwork from students who have since graduated. Also on this wall are two bulletin boards that she uses to post her current students’ artwork or information for lesson presentations. On another wall is a large mural with a beach scene painted by a previous advanced art class. In the corner where the gallery wall and the mural wall meet is a tall firing kiln. The third wall in the classroom has a chalkboard and the door for the art supply closet. The final wall has a row of windows looking out to the auxiliary gym only several feet away.

In the center of the room are two rows of tall art tables with slanted tops. The tables and chairs are so bulky that the teacher admits when the classroom is full of students it is difficult to navigate through the rows. In the counter on the gallery wall are two sinks that allow for an easy cleanup. Student artwork storage cabinets are located in the back right corner of the room and the teacher’s desk and computer are located in the back left corner.

As far as technology goes, the art department has their own cart of 14 personal laptops that stay in the room at all times. The laptops have Internet access through the school’s wireless Internet network. The art teacher does not have her own projector for
her classroom computer, but teachers are allowed to sign them out from the library for the
day. Finally, there is a television hanging from the ceiling equipped with a VHS and
DVD player.

Participants

The participants in this study were the students in Arrowhead High’s Advanced
Art class. The student participants consisted of two males and eight females, ranging
from grades 11 and 12. My study included the secondary level art teacher participant who
is the full time art teacher at Arrowhead High. I chose to study high school students
because I feel that they are the generation that most utilizes Web 2.0 technologies in their
daily lives. I was also interested in this age range because I chose to conduct my research
through a social constructivist lens. In choosing a social constructivist lens, I hoped to
discover how students constructed knowledge from each other through the use of Web
2.0 technologies. I wanted to see how the interactions through social media Web sites
were beneficial to learning within the visual arts.

The site of this study was a convenience sample. I have worked at Arrowhead
High as a substitute teacher over the past two years. I have worked to build a good report
with the students based on respect. They felt comfortable with me entering their
classroom as both a team teacher and researcher. This school was also selected for my
study because they did not use Web 2.0 technology in the art classroom. I chose this
sample in hopes that it will reveal the most information about how Web 2.0 technologies
can benefit student learning in the art classroom.
Role of Researcher

I felt that I had multiple roles as a researcher throughout the course of the study. I took on the role of a participant observer; Merriam (2009) stated, “Participant observation is a schizophrenic activity in that the researcher usually participates but not to the extent of becoming totally absorbed in the activity” (p. 126). I took a team teaching role in Arrowhead High’s Advanced Art classes by implementing lessons that integrate Web 2.0 technology alongside of the classroom teacher’s regular curriculum. I wanted to help the students learn how artwork has many rich layers of meaning, and help them create meaning in their own artwork through these lessons. I planned to teach them about inspiring ideas by using the Web 2.0 technologies and thereby discover how using Web 2.0 may benefit this learning. Merriam (2009) also wrote that “In reality, researchers are rarely total participants or total observers. There is often a mix of roles wherein one might begin as a full participant and then withdraw into more of a researcher stance” (p. 125). After implementing the lessons, I switched roles into the researcher to see how using Web 2.0 technologies affects student learning and to observe the students’ reactions. By recording the benefits of Web 2.0 technologies within this study, through analyzing student’s blogs, questionnaires and interviews, I hoped that others may learn from the experiences. Additionally, I documented my research activity with journal entries to serve as a chronology of events that take place and a reflection of conversations I had with the students. Finally, I analyzed and interpreted the social interactions that occurred on the student blogs.
Data Collection Methods

The methodology that best suits this study is participant observation of the advanced art class at Arrowhead High. When a researcher’s role is a participant observer, Merriam (2009) stated, “The researcher’s observer activities, which are known to the group, are subordinate to the researcher’s role as a participant (p. 124). I had an active participant role in team teaching activities. Seeing that I also planned to use the Internet to obtain data it is important to understand that the Internet is loosely defined as a way to communicate, a tool to connect across physical borders, and a space that is socially constructed (Marshall, & Rossman, 2011). Marshall and Rossman (2011) stated, “Therefore, this medium is seen as both a tool and a site for qualitative research developed from the observation that social life in contemporary society communicates, interacts, and lives more online” (p. 25). According to Marshall & Rossman, analyzing student use of a classroom blog is a valid source for collecting qualitative data.

The advantages of using the Internet for qualitative studies is that it allows researchers to collect data from remote areas of the world, have day-to-day communication, and speak with people who may not be able to participate in face-to-face interviews because of physical barriers (Marshall, & Rossman, 2011). Internet interactions were beneficial to my study because I was not able to be present in the classroom every time the class meets. I taught my lessons once or twice a week over an 8-week period, meeting with the students 10 times in total. I believe that using the Internet as a method of data collection is a natural evolution of the study of Web 2.0 technologies.
In order to assure the validity of data collected, a researcher can triangulate the
data using multiple data collection methods (Merriam, 2009.) I used questionnaires,
interviews, and a research journal to collect data in this study. According to Merriam
(2009), “Triangulation using multiple sources of data means comparing and cross-
checking data collected through (for instance) observations at different times… or
interview data collected from people with different perspectives (p. 216).” Therefore, I
used several instruments of data collection to form a single conclusion.

I administered questionnaires to students with pre-determined questions in order
to assess their thoughts and knowledge of the use of Web 2.0 technology in the visual arts
classroom. Although no formal surveys are used, I used less formal questionnaires as a
tool for data collection. A Web service called Survey Monkey distributed the
questionnaires to the participants. Survey Monkey allows the user to access the questions
via the Internet and type their responses. Once completed the questionnaires send
automatically to my e-mail address.

I followed up with several semi-structured interviews online via e-mail
communication methods. Merriam (2009) stated,

in the semi-structured interview either all the questions are more flexibly worded
or the interview is a mix of more and less structured questions. Usually specific
information is desired from all the respondents, in which case there is a more
structured section to the interview. (p. 90)

Using semi-structured interview questions allowed me to ask the participants general
questions about their participation in my study, and expound upon their answers by
responding with more in depth questions. With the semi structured interview technique,
the goal is to reveal the participant’s unique experience with Web 2.0 and how it affects their learning. I interviewed five students who are selected by their quality of responses. One student with a low quality response, two with medium quality responses, and two with high quality responses.

The largest part of the interview did not have a pre-determined course in order to allow the researcher to respond to the individual situation, to the emerging worldview of the respondent, and to new ideas on the topic (Merriam, 2009). The interviews began with some semi-structured questions and asked more probing questions as new information arose.

Finally, the last instrument of data collection was an analysis of student use and interactions through their Tumblr blogs. Through teaching the students about how artists use ideas to create multifaceted layers of meaning behind their artwork, I implemented a series of eight lessons. The students used the blogging website Tumblr to interact with their classmates and myself, post reflections on in-class assignments, answer questions about the in-class assignments, post images of their artwork, and take part in online critiques. I created a teacher blog on Tumblr to post all of the student’s assignments throughout our time working together. The Internet supports interactions among people through various forms of Web 2.0 technology which Merriam (2009) explains, “These interactions, still somewhat ill-defined within our society, are of obvious interest to qualitative researchers. In addition to being a focus of study themselves, these Internet interactions can be sources of data relating to other studies” (p. 156). I attempted to discover how students used the blogs and analyzed how it affects their learning in the visual arts.
Throughout the entire data collection process, I kept an online reflective log. This log documented a chronology of events, recorded thoughts on interviews and questionnaires, important findings within the student blog analysis, and made connections among all of the data.

**Ethical issues**

In conducting Internet research there are several things one must consider to maintain proper ethical conduct. Research ethics such as privacy, identity, authenticity, and informed consent are all issues to consider while conducting research on the Internet (Marshall, & Rossman, 2011). Marshall and Rossman (2011) stated, “Researchers and participants alike are able to create their own identities that may differ from who they say they really are” (p. 26). Being aware of this issue, I did my best to provide an honest portrayal of myself throughout all communication with participants to encourage them to do the same.

To fulfill my ethical responsibilities, I developed a letter of consent that informed participants of all aspects of the study, from data collection to the final product. I informed the participants that data may be collected from the interactions on their blogs to avoid what Marshall and Rossman (2011) pointed out as unethical collection of data from publicly accessible information. Participants and their parents signed a consent form that informs them of all necessary information surrounding the study and acknowledges that I will protect the participants’ rights during data collection (Creswell, 2009). Assent forms and permission slips for the participants can be found in Appendix D, Appendix E, and Appendix F.
Seeing that the research and communication with participants was partially conducted via the Internet, I created an e-mail that was used solely for conducting this research. This e-mail account was made accessible to the IRB, my project advisor, and anyone who needed to check the ethics of my study. This e-mail will remain confidential to the public in order to keep the participation anonymous.

In compliance with the requirements of Buffalo State College, permission for this study has been formally requested in writing and approved by the Institutional Review Board (IRB). The IRB reviewed and approved my proposal and plans for this research.

**Reciprocity**

This study provided many benefits to the student and teacher participants. The participants benefited because I attempted to spread awareness about the benefits of Web 2.0 technologies in the visual arts classroom. I hoped to help the art teacher at Arrowhead High better understand how to incorporate technology within her classroom. I hoped to help the students take their art making to a higher level by teaching them about art and ideas. I planned to display my findings on my teacher blog after the completion of my study so that all participants can access it. This also allows teachers who discover my blog to utilize my findings within their own classrooms. This study may benefit many art teachers by providing them with examples of how Web 2.0 technologies can be used in the visual arts classroom. Art teachers may use this resource to learn new ways to incorporate Web 2.0 in their own classrooms.

**Confidentiality**

The site of the study as well as its participants will remain anonymous by using pseudonyms in the final report. No information with subject identifiers will be released at
any point during or after the study. All data will be retained at a secure location within my home for a minimum of three years following the completion of my study. Specific coding was developed for the data collected so that outside parties are not privy to student identity.

**Data Analysis**

Having implemented multiple data collection tools, I planned to begin by organizing my research material and arranging it by the different instruments used to collect the data (Creswell, 2009). According to Creswell (2009), “A first step is to obtain a general sense of the information and to reflect on its overall meaning” (p. 186). I then read and reviewed my questionnaire answers, e-mail interviews, and notes written in my research log as I analyzed the student blogs. As I reviewed the data on a daily basis I will made additional notes in my research log. I looked for any themes and patterns found within each instrument. Then I identified categories or emerging themes that arose from my research questions. Creswell (2009) noted, “Coding involves taking the text data or pictures gathered during data collection, segmenting sentences (or paragraphs) or images into categories, and labeling those categories with a term, often a term based in the actual language of the participant” (p. 186). After uncovering the different themes, I took all of my collected data and began to organize it into word documents by the different themes that emerged. In Chapter 4 of this document I grouped the individual coded selections of data and analyzed their similarities and differences. Once the analysis was complete, I explained the data’s implications to visual arts education in Chapter 5.
Closing

Using a social constructivist lens, I analyzed the data from my findings in order to explore just how Web 2.0 technologies can be used in visual arts high school classrooms. By implementing a qualitative research strategy, the plan was to examine how and to what extent Web 2.0 technologies benefit the high school visual art classroom. The site of the study was Arrowhead High school and the participants were the full time art teacher and her advanced art students. I took a participant observer role in my study, both implementing lessons that integrate Web 2.0 technology and collecting data. I used multiple data sources, such as questionnaires, semi-structured interviews, as well as the analysis of student blogs to determine how Web 2.0 technology benefits learning. I was certain to address ethical issues within my study by being aware of how the use of the Internet may affect the student’s participation. The study displayed reciprocity, in that I hoped to help the participants learn about Web 2.0 technology and share my findings with other art educators attempting to implement Web 2.0 in their classrooms. In my final report, all of the participants in the study remained anonymous to address issues of confidentiality. Analysis of all data provided insights and outcomes of this study in Chapters 4 and 5.
Findings

Introduction

When approaching the school grounds it is hard not to notice the vast wide open fields filled with green corn stalks, a real testament to the importance of agriculture to some of the families whose children attend Arrowhead High. After entering the building, a hallway leading towards the art room has several signs hanging from the ceiling. The signs are bright red with white letters, representative of the school colors. The signs say “Striving to be the Best” which inspires the students to succeed and doubles as the school motto. Arrowhead is where I attended high school so the building is safe and familiar to me.

The art room has not changed since I sat in the very seats that the students sit in today. The tall slanted art desks are not ideal for the art supplies that easily roll off and fall on the floors. I still question why there are Sesame Street characters posed like the Mona Lisa and Botticelli’s *The Birth of Venus* painted on the sides of the desks, and their appropriateness for students at the high school level. I find myself wondering if these students feel they are as outdated as I once did. Yet, returning to the room after studying art history, I can now at least appreciate the paintings for the nod to the artists that the characters provide.

The walls are overflowing with artwork from many past students. Two large-scale acrylic paintings steal the focus of one wall. The first depicts a tribute to 9/11 and the second reveals a portrait of John Lennon wearing sunglasses with Yoko Ono reflected in the lenses; both are masterfully painted. Under close examination, the signature is that of
the art teacher, providing the students who enter the room with reassurance that they are in very capable hands.

The students who enter the Advanced Art classroom exude a sense of comfort with their surroundings, display confidence in their artistic ability, and have an overall appreciation for art. I believe the comfort comes from many different aspects. All 13 of the students are upper classmen, with more than half being seniors who are looking forward to studying art in college. The students have completed all of the other art classes that Arrowhead has to offer, many of which they took together over the past three years. They have an understanding and appreciation of each other, the art classroom, and the teacher, which has created a positive atmosphere for learning. I have worked at Arrowhead over the past two years as a substitute teacher frequently subbing in the art room and building my own relationship with the students. By implementing my study in this classroom, I am fortunate to receive a warm welcome. I have gained a great respect for the individual talents of the students and they have gained a mutual respect for me as a teacher. This rapport makes the transition organic as I move from a substitute teacher to researcher and team teacher in their classroom.

The students display reactions from hesitation to excitement at the idea of increased instruction in their art room. Though they are used to their teacher’s project-based curriculum, I implemented several new assignments to introduce and examine the use of Web 2.0 technologies. Through the assignments I wanted to expose the students to a variety of contemporary artists, their artwork, and how they developed the ideas and meaning behind their work. These assignments can be seen in Appendix B. To broadcast the assignments to the students I created the Arrowhead Art and Ideas Tumblr Blog. The
welcoming post to the students and the blog layout can be found in Appendix B. I implemented lessons that exposed the students to contemporary artists. In the lessons we examined the artwork and learned about the artist’s process and how they developed the ideas behind their work. Some students showed excitement to be learning more about art, yet others have displayed some resistance. Brianna, Michelle, Molly, and Deanna seem to be bothered by the addition of more “work” that takes away from their time to create art. Although they have never showed opposition to the assignments and continue to be excited by the new technology and content, their responses in their blogs are very short and are of low quality. Harper, Blair, Lillian and Danielle seem to be very engaged by the addition of Web 2.0 technology in their classroom. Their responses display enthusiasm, are well thought out and are of medium quality. Mike, Joe, and Brooke have showed a great interest in the addition of Web 2.0 technology in the art classroom. Their responses to all assignments go above and beyond, are well crafted and give great insight to their connection to the content being taught and their ability to understand the content.

Each student created their own Tumblr blog to post responses to my assignments; the student’s blogs seem to reveal many aspects of their individual personalities. For an example of Joe’s Tumblr blog see Appendix C. One of the features of Tumblr is that the user can “follow” other blogs that interest them and “reblog” the content that they enjoy to their own blogs. The images, quotes, music, and videos that the students reblog, as well as the layout, appearance, and title they choose for their blog, seem to reveal snippets of their personalities and interests. Only two students, Molly and Danielle, had used Tumblr in their personal lives without being introduced to it in class. Both students navigate the website with ease and serve as teachers to the less technologically adept in
the class. Molly is constantly helping Michelle with her problems navigating Tumblr
while Brooke is much more reserved and tends to keep to herself in the classroom instead
of taking on the teacher role. Harper states that “technology hates me,” yet she seems to
be navigating the Website with ease and does not appear to struggle. The students were
excited to incorporate more ideas into the artwork that they create and I quickly begin to
notice how Web 2.0 technologies were able to benefit them in this effort.

Throughout the entire process of collecting data, I found myself constantly
reading over the student’s responses in their blogs, the responses to questionnaires and
interviews, and reviewing my thoughts in the reflection log. I became immersed in the
data and began to notice patterns and trends that emerged. I organized the student’s blog
responses, questionnaire responses, interviews, and artwork into individual word
documents to help reveal their individual experiences. The experiences that the students
had with Web 2.0 revealed the categories displayed in the following paragraphs. The
categories that emerged are: Students building a classroom community, students’
communication facilitated by blogs, students as teachers, students’ motivation and
engagement, Web 2.0 and student learning, and challenges. The students’ personal
journeys through utilizing Web 2.0 technologies to learn about art and ideas have
revealed the benefits and challenges of the technologies in the high school visual arts
classroom.

**Students Building a Classroom Community**

Entering the classroom wearing nothing but black, Blair navigates the tall chairs
to the laptop cart and then arrives to her seat. You can hear a clang of metal against metal
as the studs from her belt hit the chair. She sits quietly, staring blankly at the laptop
screen, waiting for the computer to turn on and let her log into her Tumblr. Her dark
clothes and vintage rock t-shirts are echoed in her makeup and pitch black hair. Her ears,
filled with numerous piercings are attentive and ready to soak up everything I have to
say. Her Tumblr blog layout has a sleek black background with cold blue text. The
headline to her blog reads “bite me.” She frequently reblogs images of people with
beautifully artistic tattoos and piercings. Blair mainly keeps to herself in-class, and only
communicates with Joe who sits in the seat across from her. On the surface, Blair appears
dark, original, independent, and unaffected by the issues of self-confidence that plague
the thoughts of many high school girls. When asked what they thought art was all about
Blair wrote, “Art to me is a way of expression. The art you create can tell stories and
show a person who you are on the inside. Art is essential for keeping life interesting.”
Her art reveals a different side that her classmates may not have taken the time to notice.

I knew I wanted to begin my time working with the students by introducing them
to the importance and power of a good idea. In the first assignment after creating their
blogs the students were introduced to the artist James Reynolds and his series titled The
Last Supper. The activity began with the students viewing the artist’s photographs that
depict various food items displayed on simple orange lunch trays. I made sure not to
provide any context to the artwork before I asked the students what they felt about the
work and what they thought it meant. Molly pointed out the artworks symmetrical
balance and bright colors. Mike commented, “I thought that the food depicted in these
works of art could be depicting the life styles of different people; different options they
had and different stages of life.” His response was impressive and insightful due to the
lack of context. Blair raised her hand and said, “I don’t like the work. I think it’s boring,
too simple, it does not interest me at all.” This was the type of honest response I had hoped to receive from the students. As soon as Blair expressed her opinion, the rest of the class realized that it was okay to agree, and chimed in with their own distaste for the images. After revealing the title of the artwork and showing the students a YouTube clip of the artist describing his work, displaying that the artwork was displaying a variety of death row inmate’s last meals, the student’s opinions of the artwork quickly changed.

They began to understand the importance of the idea behind the image. Blair wrote in her blog response, “After learning about the meaning behind the pieces I grew a better appreciation for them.” Blair’s honesty and frankness helped to guide the success of this assignment, yet I still noticed that the students avoided her in their everyday classroom conversations.

The first homework assignment I gave to the class came soon after their lesson on the importance of context in understanding art and ideas. I asked the students to think of an idea for a piece of art that has deeper meaning. I wanted to use this assignment to see how at this stage they were able to attach an idea to a piece of art. They were then instructed to make a sketch and post it on their Tumblr. In working with Blair in the past, I learned that she is a very skilled artist. She has an incredible ability to render, yet she frequently chooses imagery that appears not to convey ideas or meaning. Her favorite subject to depict is wolves. Although I almost expected that she would post an expertly drawn wolf, her response to the assignment was in the form of a self-portrait that helped her peers and me to understand another side of her.
I found that blogs provided students with new situations in which they have the opportunity to learn about their peers and discover commonalities that they may not have known they share. The next time our class met, the students were instructed to visit their classmate’s blogs and make comments on each other’s idea sketches. They were to write what they thought the idea was behind the artwork. The comments from the students on Blair’s sketch (seen in Figure 1) revealed the beginning of an understanding of the artist that I do not believe the students had before. Joe wrote, “I think this is someone struggling to fit in, but more of being rejected for having her own beliefs. I think it demonstrates this common story of trying to be yourself and different, but not being able to do that.” His response, although describing what he saw in the sketch, also included an empathetic response to her drawing. Mike’s response displayed the same empathy: “This drawing is very well done. It shows the emotion or idea of imperfect in the tears running from the girl’s eyes. It makes the viewer feel for her and wonder the story behind this
pain.” Where the boys’ responses seemed to reach out to Blair, the girls’ responses demonstrated an understanding of the issue at hand. Brooke simply wrote, “Being different and having others view you as not substandard… not accepting you.” Her answer shows less empathy than the boys but displays an understanding of the subject matter, possibly allowing her to relate to Blair in some way. All of the students’ responses displayed that they were getting to know and understand Blair on a deeper level. Their communication was indicative of building a positive relationship that in result helped to build a positive classroom community. Senior (2010) wrote, “A key feature of class blogs is the fact that they play both pedagogic and social roles. Not only enabling students to learn from both the teacher and their peers as they process assignments and so on, but also enabling them to maintain a supportive social network” (p. 143). By reviewing the student’s interactions on the blogs no one’s sketch was forgotten, and they were able to display their support for each other through this blogging activity.

The reblog feature on Tumblr began to reveal commonalities and interests that students shared as well. As they became more active in following blogs that interested them, the number of images that they posted on their blogs began to increase. When using Tumblr, the posts of the people a user follows are displayed on the “dashboard.” The dashboard acts as a home page that keeps the user updated with the most recent posts from the people they follow displayed at the top. Seeing that I made it a requirement for the students to follow each other’s blogs, I began to notice that they began to reblog images that their classmates posted. For example, Molly would post a lyric from her favorite band and Michelle would reblog that post because she also enjoys that band.
Danielle frequently posted images of “LOL Cats,” a popular blog that displays her sense of humor. The students all enjoyed them as well and would frequently reblog the images. Mike would post images of his favorite rapper Mac Miller that Brianna would then reblog. I observed that the images Mike posted started many in-class conversations with Brianna about their shared interest. The blogs allowed students to get to know each other and communicate on a social level. A student response in the post-questionnaire stated, “You might find that someone you don’t know well is someone who shares the same ideas and feelings as you and you might share common interests. It might motivate you to talk to that person.” Students communicated with everyone in the class on their blogs, which differed from their in-class relationships. The student’s post-questionnaire responses conveyed that 54.5% agreed they were more likely to communicate with others that they would not have communicated with in-class. Sharing their common interests on the blogs was a large contributor to building their sense of a classroom community.

In summary Buffington (2007) believes that the importance of class as a community, developing a rapport with students, teaching in engaging ways, and encouraging cooperation, can be achieved by using Web 2.0 technology. Student’s responses in the post-questionnaire display an agreement with Buffington’s belief. Mike wrote, “I think it allows the relationships that we have built in the class room to travel beyond just an hour a few days a week, it allows the interactions to carry on and grow.” His response displays the positive effect that Tumblr has had on the student’s interactions both inside and outside of the classroom. Referring back to Blair’s story, I asked her in an interview how she felt the blogs affected the classroom community. She responded, “Reading and seeing things from other classmates and posting my own things allowed us
to get to know each other a little bit more.” She has recognized that the interaction she had on the blogs allowed her classmates to get to know her, helping to build the classroom community. The blogs not only allowed the students to learn more about one another, but they also provided them with time to reflect. They discovered that this helped them to create well thought out answers, and feel more comfortable responding to questions in class.

**Students’ Communication is Facilitated by Blogs**

One day I stood in the hallway to greet the students in the Advanced Art class as they filed into the room. I observed as many of the students engaged in trivial conversations about their day as they retrieved a laptop and began to log into their Tumblr blogs. I exchanged “hellos” with Brooke as she entered the classroom, silently passing by her classmates to find a laptop of her own. Her dirty blonde hair was streaked with electric blue and neon pink, a clear expression of her fun and youthful personality. Brooke has a great interest in the arts and wishes to pursue a career in graphic design after high school. She is constantly determined to improve her artistic ability and responds incredibly well to criticism. She seems to absorb everything that is suggested and it shows in the outcome of her artwork. With Brooke’s enthusiasm for artistic development, one would think she would feel comfortable in a class full of artists, yet she doesn’t say a word. In contrast to her brightly colored rock band t-shirts, neon fingernail polish, and pleasant attitude, I realized that hello was the only word Brooke said that day.

In class discussions, Brooke did not share her opinions, yet I noticed quickly through examining the use of her blog that she had a lot to say. In regards to the assignment where students commented on each other’s idea sketches, Brooke made it a
point to comment on every single image posted. Her responses to my assignments are incredibly thought out and detailed. The background of her blog is a welcoming green. Written in bright white across a black stripe at the top of the page is her name and the tag line “they call me…” in a bold font. Her Tumblr reads as a trendy graphic arts magazine with her responses to my assignments as the articles. Scattered among the text of her page are multiple images of graffiti art. Her blog quickly became her voice in the class, allowing her clearly to communicate her complex and valid thoughts and ideas.

The Advanced Art class met four days in a six-day cycle. I worked with the class one day a week to teach my lessons and implement the Web 2.0 technologies. On the remaining days of the week that the students had class, their teacher Mrs. R gave them a drawing assignment. Their assignment was to draw hands to tell a story. They were encouraged to convey the emotions or ideas as successfully as a portrait of a person’s face. Overby, (2009) stated that on blogs the discussion about the artwork becomes more equalized among the authors because students who may be reluctant to speak their opinions (due to shyness or fear of sounding unintelligent) are able to post their ideas or questions in a more neutral environment. I wanted to test this with my participants so I instructed them to take a photo of their project at its current state with their cell phones and post it to their blogs for an in-progress critique. I had asked Mrs. R in an interview before I began working with the students about the success of in-class critiques. She responded, “I think most students are self conscious about critiquing their peer’s artwork. Most of the comments are things like ‘It’s nice or it looks good’.” After the students completed the in-progress critique on their blogs I was excited to see that the responses the teacher described were not the case. I found that through using the blogs the students
really overcame their fears and constructed very helpful, well thought out responses. In reflecting on the assignment Brooke wrote in her post-questionnaire,

   I would be more likely to critique another student’s artwork through comments on a blog rather than an in-person critique because I am a more introverted person and it’s sometimes awkward when you have so many people looking at your art when you’re standing right there. I think it would also be easier to tell someone what they could do better without making them feel weird or obligated to say something about your art.

This began to give me insight on why Brooke was so quiet in-class. In reviewing the post-questionnaire about 63% of the students felt that they would be more likely to critique another student’s artwork through comments on their blog rather than an in-person class critique. The students who would rather have an in-class critique said that it was because they were comfortable communicating with their friends in-class. Of those who preferred the blogs, the majority commented on how the blogs allowed them more time to formulate a clear response. When asked in the post-questionnaire if the blogs made it easier to think and talk about their own art making process, Brooke wrote, “I would be more likely to think and talk about my art in a blog because I am extremely uncomfortable with any kind of presentation especially an on the spot explanation with no time to really organize my thoughts. With the blogs it’s easy to organize and say what you really want people to know.” In uncovering Brooke’s thoughts about blogs and the importance of the time to reflect, I found her answers were echoed in the other students’ responses. Mike wrote, “I think I am more likely to do it over a blog because typing it out, I have time to think about and articulate better what I want to communicate. It can be
a more structured layout of what I am thinking. Also, after I type something out, I can read back over it and see if what I said is actually what I am trying to communicate.” These students feel that the blogs allow them to clearly think of a response and express exactly what they wanted to say without the fear of making a mistake.

In interviewing Brooke, I wanted to fully understand why she was so quiet in-class. When asked if she felt more comfortable participating in-class assignments on Tumblr rather than in-class discussions she said, “Yes because in the class there’s more seniors and I don't know anyone really well and I find it easier to compose good sentences by writing them down and re-working them rather than trying to remember something in your head.” The blogs provided the 16-year-old with the comfort she needed to succeed. Once comfortable communicating with classmates on the blogs, the students were more apt to take advantage of opportunities to learn from another.

Students as teachers

Molly can only be described as one of a kind. She enters the classroom quietly, and often engages me in pleasant conversations about her artwork. One day she handed me a business card for her father’s new design company. She told me that her father is an artist and recently quit his job to work full time selling his art. She described some of his interior designs as whimsical and unique and that his favorite things to create are artistic stairway banister installations. I thought it was interesting that in describing her father’s artwork she could have very well been describing herself. When Molly sits down next to her good friend Michelle, it is as if she comes to life. Molly no longer worries about displaying maturity to her teacher; she reveals that she is a teenager among her friends. At times Molly talks to Michelle in a voice that can only be described as the hybrid of a
young child and an alien. Their banter often serves as a comic relief to the class. As previously mentioned, Molly was one of only two students who had used Tumblr before I introduced it for this study. As the students logged onto their Tumblrs, they noticed that Molly had posted many images. Michelle exclaimed, “How do you find so many awesome photos?” Molly replied, “I follow a lot of different people’s blogs and they post the images. I then reblog them to my own site like this.” She proceeded to show her friend. This was an interesting example of social constructivism: peers learning from their peers to gain new knowledge. Vygotsky stated, “What a child is able to do in collaboration today, he will able to do independently tomorrow” (Vygotsky, p. 220).

After Molly’s mini lesson, I began to notice that more students had followed blogs other than those from students in our class, and the number of images reblogged to their Tumblrs increased dramatically.

Some assignments provided very direct opportunities for the students to teach each other, such as the in-progress critique. Going back to my discussion about in-class critiques with Mrs. R she had said, “Generally there is no constructive criticism. If this is going to be beneficial to the class, I find it has to be teacher driven asking the students specific questions dealing with design, ideas expressed, etc.” Keeping this in mind when I assigned the critique I told the students to post a question they had about their artwork alongside of their picture. Brianna posted her artwork that can be seen in Figure 2. The question she posed to the class was “How could I make my hands look smoother and better blended?”
The students immediately began to offer suggestions that were helpful and what could be considered constructive criticism. Several immediately pointed out that she could use more contrast in the hands, darkening some areas. Harper, who was also doing a project on black paper wrote this “I understand your frustration with the black paper as I heard you say to Mrs. R. I have to throw a layer of black down and then cake on white to help out. To make your white pop (such as on the hands), go around your finished areas with the Black 557-HB hard, it makes it look really clean.” It appears as if Brianna took Harper’s advice given seeing the black charcoal in the “after” image of Figure 2 on the right. Molly had her own advice to add to the online discussion. Copied exactly as she wrote on her blog,

When i’m blending i always use my pinky finger rather than a q tip because everything seems to turn out smoother. and when your doing the crease lines on

Figure 2. Brianna’s hand drawing. The image on the left is her drawing before critique, and the image on the right is after critique.
the hands, take a stick of black charcoal and lay it down on scrap paper then use a tortilllian and go over it so it picks up the black on it, then draw in the creases with the tortilllian. it makes it look more realistic and its easier than using a pencil.

Molly’s advice was just as helpful as Harper’s. I was excited to see the quality of the student’s responses. When sitting down with Mrs. R to show her the results of the activity, she was very impressed. When asked in our post interview about what she thought about the student’s success with the critiques she said, “I could not believe the quality of the students responses on their blogs. Not only did they move past their surface level responses, but they provided each other with practical advice from their own experiences. Now what can I do to get them to do this in-class?” I was happy to see the success of the Web 2.0 technology and how it was benefiting the student’s learning.

Other assignments provided the students with the opportunity to teach their classmates indirectly through exposing them to new artists and artwork. Roland (2009) discussed how Web 2.0 is about having students participate in communities of creativity and knowledge sharing, and noted, “Doing so creates a richer, more diverse classroom environment within which students actively learn from each other as well as on their own” (p. 4). For example in one assignment, I asked the students to research a piece of art that inspires their own work concerning the ideas, style, and subject matter. I instructed them to write a paragraph describing the piece as well as post an image of that artwork and the artist’s name. With the wealth of new information that the students were posting to their blogs, the students could then examine what each other posted and learn new things. Through their posting artists and artwork that inspired them to this public space, the students were in actuality teaching each other about new artists. The blogs tied the
student’s learning experiences together. Students could read everything that their classmates learn and write in reflection, which helped to aid their own understanding of things they learned.

Students also indirectly became teachers through the quality of their responses. According to Jaramillo (1996), individuals interact with one another in social situations to discuss the meaning of new concepts and through this act of communication the individual then makes their own interpretations and creates new constructions of knowledge. In my post interview with Brooke when asked what she had learned from the interaction with her peers, she said, “Sometimes I did read what others wrote when I wasn't sure how to communicate what I thought I saw in an artwork.” Doing so then helped her to construct her own knowledge and formulate a better response to a piece of art. In viewing the excellent quality of some of the student’s responses, it is clear that these students demonstrated what a proper response looked like. Quality responses resulted in an indirect teaching of their peers. In my interview with Joe he was very clear when asked if he learned from his peers. He said

Yes, I feel like reading my other classmates responses to the assignments opened up my mind even more and helped me see things that I didn't quite grasp or understand. Being able to read or listen to other people's responses gave me an opportunity to see what they thought on the subject. So I personally think that I have learned from my peers from their responses. Other things I learned from them were when they would critique my art and comment on my photo. They gave helpful hints to me and gave me a chance to fix and learn from my mistakes. I hope my peers also learned from me and my input on Tumblr and in the class
room too. If we were to continue this learning throughout the year, we would continue to help each other grow in art and be very beneficial to one another. Many students were very successful in learning from each other through the assignments and were posting very high quality responses, yet other responses were of much lower quality. For example in a response to the critique assignment one student had written, “You are so talented!” This short response, although kind, neither helps their peer improve nor teaches them new art knowledge. The students who took the time to develop well thought out answers and comments seemed to be the students most likely to take on the role of the teacher in class. Just as readily as students were becoming teachers, they were equally as ready to learn through using Web 2.0 technology. In discovering information through this new teaching medium, the students displayed an enthusiasm and excitement to learn.

**Student’s Motivation and Engagement**

Google Art Project is a new Web technology that allows its users virtually to travel to art galleries around the world. It also allows its users to view artwork like never before by zooming in so close that you can see every brushstroke that the artist used. To introduce the students to the Website, I showed them two YouTube videos. The first displayed how the site is used, and the second explained how the site was made. The students showed excitement in seeing the Google team riding bikes with cameras on them, and seeing the extreme camera set ups used to take the high definition photos. I allowed the students to explore the site, visit several galleries, and discover new artwork. When they were finished, they were to write a reflection of the website and include their
thoughts of how it could be used for art classes, what they liked or didn’t like, and post a new piece of art they discovered in their virtual travels.

The students seemed to be very excited to learn about this new technology. They were amazed to see how far they could zoom in and how you could actually see the artist’s brushstrokes. One comment from Blair was, “I never knew how messy some artists actually paint, I always try to make everything perfect.” We then discussed how these were called loose brushstrokes and it gives an overall more “painterly” effect to the finished artwork. Danielle stated that, “If I was Vincent Van Gogh, I would be ticked off that all these people were seeing my artwork for free.” I encouraged her to write her thoughts in her review. Upon seeing if she had committed her ideas to her blog, I found that she expanded on her initial opinion by adding, “Overall I enjoyed this experience and it is remarkable what technology is able to do these days and provide a good experience to people who can visit places like the Louvre and never even step foot in Paris. The Louvre is my favorite gallery because I have been there before and it is much easier to find my way online than it was when I was actually there.” I found this comment interesting because she realized the global implications of Web technologies and reflected on it in her blog.

Joe was amazed by the detail that he saw in a single painting that had over 15 figures. He zoomed in on each of the faces, and excitedly shared every new face he discovered with Blair by lifting his laptop and turning it in her direction. He was so excited by the technology that he declared that he would be certain to visit the Web site again in the future. The students were actively engaged with this new technology and it motivated them to learn due to its hands on and visually appealing nature.
Through teaching the students where various artists got their ideas, I attempted to show them a YouTube clip of the artist talking about their work. I had a special experience when showing the students a YouTube video of surrealist artist Greg “Craola” Simkins. The video showed the artist working on a very large-scale Surrealist painting. He had books scattered all around his work area including a children’s ABC animal book open to a panda. The video showed the artist applying layer after layer of paint with great skill. An abstracted panda whose head morphed into a killer whale began to emerge alongside many other hybrid animals. I turned away from the video to look at the student’s reactions. All of their eyes were glued to the screen. Some were grinning; some had the same look of concentration as the artist in the video. I had only planned to show about three minutes of the clip and asked if I should skip to the end to see the finished piece. They all shook their heads no and wanted to watch all of the artist’s process. I complied with their wishes.

We then watched a second YouTube video that featured an interview with Craola. Mike’s response to the video highlights the positive effects YouTube has on the student’s motivation. He wrote in his blog, “YouTube allows us as viewers of this art to appreciate the skill and the precision it took to create this, as we saw him making a work. Also, in the interview we watched we were able to see the emotion in his answers, as opposed to just words in a magazine or a website.” In reading Mike’s response, the videos had a positive effect on how he learned.

The following week when I had entered the classroom, I noticed Lillian was already there. She expressed a great interest in our lesson from last week. She told me that she went home and went on Greg “Craola” Simkin’s artist Website. She was so
inspired by his artwork and his artistic process that she said she wanted to create artwork
that was inspired by him. I felt excited because through watching him paint in the
YouTube video, she wanted to learn how to paint like him. I was happy that the Web 2.0
technology helped to make a special connection between a student and an artist’s work
that might not have developed if we had just viewed images.

One student highlighted what they learned through using YouTube in the post-
questionnaire by saying,

I have learned that YouTube can be used for so much more than just funny clips
and music videos. It can be used for research and as a first person reference of
really hearing a person and getting their opinions. One instance that really stood
out to me was when we learned about the graffiti artists.

This student made the connection that YouTube can be used as a first person source of
information, which helped to engage them in the content.

When asked in the post-questionnaire if the use of Tumblr and YouTube helped to
motivate them to learn about art the students all had positive things to say. Mike wrote,

I think that using these two Websites have enhanced my motivation and
engagement in learning art in that I was able to explore things for myself and
actually hear from the artists themselves, not just reading an article about them, or
reading a quote. This was real. This was them.

Hearing the artist first hand was helpful in motivating Mike to learn. Brooke wrote,

I feel the use of YouTube really affected my motivation because I was able to see
the processes and outcomes of other artist's work. I also think that the
technologies effect engagement in learning art material because a lot of the videos
we saw were the artists actually speaking of their own inspiration and how they
got where they are.

Just like Mike, Brooke was motivated by the first hand commentary by the artist. The
students felt that learning about the artists and how they got their ideas inspired them to
develop their own ideas. The use of Web 2.0 technology was motivational in helping the
students learn about the ideas in art. In noting that Web 2.0 motivates students to learn I
was also interested in seeing if using the technology improved the students understanding
of art.

Web 2.0 and Student Learning

In order to see how successful Web 2.0 technologies were in enhancing student
learning, I wanted to document the growth in student responses from before my
assignments and after. I gave the students both a pre- and post-questionnaire where I
asked them what they thought about ideas and meaning within art. Surprisingly only four
of the eleven students displayed a dramatic change that demonstrated their growth and
understanding of concepts. The four student’s responses are documented in the table that
follows.

<table>
<thead>
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<th>Table 1</th>
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<tbody>
<tr>
<td>What do you think about ideas and meaning within art?</td>
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<table>
<thead>
<tr>
<th>Student Name</th>
<th>Pre-questionnaire</th>
<th>Post-questionnaire</th>
</tr>
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<tbody>
<tr>
<td>Brooke</td>
<td>I don’t always try to get meaning in my artwork.</td>
<td>That in order to create a nice, well put together piece of artwork, you need to think of an idea, emotion, or something else, to convey throughout the piece. That sometimes you need</td>
</tr>
<tr>
<td>Harper</td>
<td>I never have incorporated meaning in my art, usually my art comprises of something I think is ‘pretty’ or I just like.</td>
<td>I have learned that artists are often inspired by the activities occurring in the time period they live in as well as past times that proved so important in the future. I have also learned that you can create art with basically any material.</td>
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</tr>
<tr>
<td>Mike</td>
<td>When creating art i like to find meaning in my own life. I create things that are important to me and use things that i can relate to for inspiration</td>
<td>I have learned that behind every work of art there is an idea. There is inspiration. There is a story. There is a process that the artist went through to bring the piece of artwork before you the way you see it.</td>
</tr>
<tr>
<td>Joe</td>
<td>I think meaning in art comes naturally for me and sort of unconsciously incorporates it into my artwork.</td>
<td>I have learned what inspires artists, how to create my own artist statement, how to determine the meaning behind art, and many other useful things that help me better my understanding of art.</td>
</tr>
</tbody>
</table>

The table displays where the students originally gave little thought to the origin of their ideas, they now have a greater understanding of the multiple places that artists use as the inspiration for their ideas. The remaining students displayed little to no change in their answers from before and after the study. With more students having no change it cannot be concluded whether Web 2.0 enhanced student learning. Research over a longer period would be necessary to see whether Web 2.0 enhances student learning.
In further assessing the student’s growth, I wanted to analyze the student’s culminating assignment. To conclude our work together I instructed the students to create an artist’s statement. I provided them with a framework yet encouraged them to write their ideas as though they were to use the artist’s statement as a resource for the works of art they created for the rest of the school year. The students’ ideas originally were very centered on self and surface level. The following is a table that plots what the students were inspired by before we began working together and is gathered from the pre-questionnaire.

<table>
<thead>
<tr>
<th>Student Name</th>
<th>Family</th>
<th>Emotions/ How I feel</th>
<th>Favorite things</th>
<th>No ideas in artwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molly</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brianna</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harper</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brooke</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Joe</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mike</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Danielle</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Deanna</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Lillian</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Blair</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

76
Brooke displayed tremendous growth from her initial response of not including ideas in her artwork. Brooke has improved her thought process by making connections to her art and the world today. Copied directly from her blog she wrote,

I really want to create art that makes people think and also art that may connect to the events of today. I really like Shepard Fairey as an example of that kind of artist. His art is graffiti as well as pieces that don’t “deface” others property. I also think that Banksy is a really interesting artist. His indoor and outdoor art makes you look for the part of the piece that stands out. My most favorite piece by him is of an African American boy who obviously lives in poverty. I like the piece because it shows pain and also how more fortunate people overlook suffering.

Brooke now displays an interest in examining other artist’s artwork and ideas. She has gone from not knowing how to incorporate ideas to having ideas that she has a desire to explore.

Harper also displayed growth in her statement. Coming from saying that she did not display any ideas or meaning in her artwork, she wrote,

I am interested in creating still life’s and silhouetted (easy) portraits: more so to focus on the place in which they are at and what are they doing rather than the person themselves. I think family really inspires me, and some of the stories about my family and friends lives. An idea that I may want to explore is stupidity, or hardships. Not really sure. I think others might see how much peers influence one’s being.
Harper is showing that she can draw inspiration from the people in her life. She has learned how to look past the surface and start looking within to have inspiration. The next step for Harper is to think of imagery that would let her display those themes or ideas.

Although Blair originally stated that the ideas for her artwork came from her emotions, her ideas in the artist statement display clarity, growth, and focus. She wrote, My art usually always portrays dark images. A lot of this imagery comes from my state of mind and emotions through depression and anger. Sometimes I portray love in my art too, but that always has a dark side as well… Then around 8th grade my ideas and interests grew into a darker angrier side than I had shown before. Some may contribute to the person I am, some to the things I was suddenly introduced to, and also the negative changes that were happening in my life.

The ideas she wrote in her artist statement display a maturity and provide a multitude of different avenues that she is able to access to create her artwork.

Like Blair, Joe originally stated that his ideas for artwork come from his emotions. His writing in his artist statement builds upon that initial idea. He wrote, My work is based off of my own life experiences and my reflections on my past. I do my work to entertain others and get them thinking. It is supposed to make them feel a certain way, which usually reflects my feeling. The viewer is supposed to see my feelings and emotion in my artwork. The reason behind my artwork is for the viewer to be able to understand me better.
Joe has a very clear understanding of why he chooses to make art. The ideas that he discusses in his artist statement can also be seen in his response to Mrs. R’s hand assignment. This artwork can be seen in Figure 3.

![Figure 3. Bring me to life. This is an image of Joe’s final hand drawing.](image)

His artwork is a self-portrait and depicts his own hand drawing a figure. The artist is slowly bringing the figure to life through the act of drawing. He begins with the skeletal structure; adds a layer of sinuous muscle, and finishes with the flesh. Drawing is what gives the figure life, reflecting how the act of creating is an important part of Joe’s life.

To my surprise the remaining artist’s statements did not display significant enhancement of student learning. Lillian wrote, “I try to pick things that mean something to me, like my boyfriend or my favorite flower- orchids, my favorite pair of shoes, my favorite car- viper, basically things that capture my attention and I love.” Her artist’s statement reflected the same ideas as she discussed in the pre-questionnaire, not displaying any change or growth since before the study.

Danielle’s statement reflected many of the same ideas as Lillian. She wrote,
I do the work that I do based upon what I like. I usually choose my subjects according to things that interest me or things that inspire me. Through my artwork I hope to share a little piece of me and the things that I feel as I am creating the artwork. My goal is to enjoy the work that I do, and when I am finished that I am pleased with the product. I just look to have fun and create wonderful things along the way.

Danielle’s statement, like Lillian, shows no change from her answer in the pre-questionnaire. Her statement displays that her artwork is centered on her favorite things and demonstrates no understanding of the places artists can get their ideas.

The majority of the students were not able to articulate what they learned in the written artist’s statement, yet some displayed significant growth. This shows that although Web 2.0 technologies enhanced learning for some students, this seemed not to be the case for all students. In using Web 2.0 technology as a teaching tool, I encountered many difficulties in the initial stages of implementation.

**Challenges**

From the beginning, I was very excited to implement Web 2.0 technology in the visual arts classroom, yet during the first two weeks, I remember feeling very discouraged. After doing so much planning and preparation, I still ran into multiple technical problems. I found myself questioning whether the addition of Web 2.0 technologies was benefiting the students or if it was a hindrance to their growth. The very first day that I entered the classroom, the students were unable to access Tumblr. I quickly came to discover that the school’s safety firewall is constantly updated. Any Website that is accessed on the server is reviewed and then possibly blocked in a time...
span of 24 hours. Through working with Arrowhead’s technology coordinator, we were able to gain access to the Web site.

The following week while the students were instructed to create their Tumblr blogs, several computers began to freeze due to lack of updated software and memory. Unfortunately, the problems caused students to become frustrated. In order to help the class move forward, I told the students with the problem computers to take turns on the computers that were working. I quickly began to realize that a teacher’s ability to think quickly and adapt to various situations was incredibly important to the success of the lessons.

Luckily, I had brought up my technology blunders in a conversation with a peer who was also attempting to implement Tumblr within her classes. She let me know that she ran into the same problems as I did. She discovered that for some reason Internet explorer does not support Tumblr, causing the computers to freeze, and that the Internet browser Firefox solved her problems. Knowing this I let my student’s know and we had far less problems for the remainder of the study. This lead me to realize that as well as I thought I knew the technology, there is always something new I could learn. The importance of a knowledgeable network of peers, whether through online communities or in person, became very clear.

In preparation for the Greg Simkins’ lesson, I went to the school’s library to rent a projection cart to show the students a YouTube video. When I asked the librarian for a cart she unfortunately did not have any more carts to give out. I had to resort to gathering the students around the teacher’s computer to show them the videos. Later in the class period I was attempting to show the students Greg Simkins’ Web site including his artist
statement only to find that the Website was blocked. I questioned with so many blocks on a school’s technology, whether teachers can fulfill the high expectations from state standards to teach students to be Web literate. How can teachers help students navigate all the information that is available when they cannot even access it. The Website blocks are stopping potentially important learning experiences. With many artists’ Websites being blocked, information that could benefit the student’s education is unavailable.

Being faced with so many difficulties I have come to terms with the idea that integrating new technologies in the classroom setting does not come without challenges. Prensky (2006) wrote about two challenges to implementing new technologies. The second and more challenging obstacle to overcome is teacher opposition to using new technologies and methods, reflecting that teachers and schools are resistant to change (Prensky, 2006). When first discovering this data for the review of literature, I had trouble understanding why teachers were resistant to change. Through all of my struggles, I began to understand why. With so many factors working against my best efforts, I found myself questioning if it would just be easier for students to write in journals. I empathize with teachers resistant to change because it has been difficult to implement the use of new technology smoothly. A teacher using new technologies should be well versed in the technologies they are using to be able to help the students with any problems that may arise.

The challenges we faced were not limited to my technological blunders, the students seemed to be challenged by the new technologies as well. There was an interesting divide between the student’s comfort levels when working with Tumblr. Some students have used the Website before, or were very tech savvy and had no problems
creating their blog. Other students were very frustrated by their lack of computer
expertise or their computers freezing so many times that they didn’t even get the chance
to try the new technology in the beginning. Over time all of the issues were able to be
resolved and I began to see fewer problems as the study continued. By about the third
week the students had adapted to the new technology, and I had become comfortable with
this new change in this new way of teaching.

The student’s range of responses to my assignments was their way of articulating
their frustration with the added instruction in their art room. I knew this might be a
problem since I was entering a class with a curriculum that was very project based.
Although I was met with little to no resistance verbally from the students, some would
not complete assignments on their blogs or wrote short non-descriptive one-sentence
answers. I define high, medium, and low quality responses in the paragraphs following

Table 3.

<table>
<thead>
<tr>
<th>Student Name</th>
<th>High quality</th>
<th>Medium quality</th>
<th>Low quality</th>
<th>Skipped Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michelle</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Molly</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brianna</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Harper</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Brooke</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joe</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mike</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danielle</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Deanna</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Lillian</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
In the beginning of the study I told the students that they would receive 10 points for every assignment they completed. During the last week, the students viewed their grades. After discovering the low grade they received, all of the students who skipped assignments went back to complete them. Another interesting note is that in hindsight the students who skipped assignments were also those that faced the most technological troubles, whether it was with computers freezing or laptops not working.

Of the students with the lowest quality responses, two still responded positively to say that they benefited from the use of the technologies. When asked in the post-questionnaire if they thought Web 2.0 technologies helped them to become more interested in art, one of the low quality response students wrote, “In a way, yes. It’s opened my eyes to new and interesting art that I never knew about before.” Two of the students with low quality responses answered positively to all of their questions regarding their learning and growth in the post-questionnaire. Only one of the students with low quality responses displayed a complete disinterest in the use of the technology. In response to the same question, she wrote, “No I don’t feel any different about how I feel about art than before.” In fact, this student’s responses to questions in the post-questionnaire displayed no value or enjoyment throughout the course of the study. I feel that the low quality of responses from the three students can be directly related to their being accustomed to taking an art class solely for creating art. Nine of the eleven students displayed an enjoyment and found value in the use of the Web 2.0 technologies. Even though I was challenged in initially implementing Web 2.0 technology in the classroom, through preparedness and patience the benefits seemed to overcome the negatives.
Despite being able to recognize the challenges and aversions to Web 2.0 technology, I find the number of benefits is still substantial. By creating blogs the students had the chance to communicate on a new level. Students were able to get to know more about their classmates, which helped to build a positive classroom community. Students discovered that it was easier for them to communicate on the blogs because it provided a much-needed time to reflect. At times taking away the face-to-face response helped to make the students more comfortable, and able to respond to questions that were asked. Students had the opportunity to become teachers and demonstrated that an important aspect of social constructivism is learning from one another. The students actively took on this role and helped each other grow. Students also showed that they were motivated and engaged to learn by using Web 2.0 technologies. They were excited to learn from the artist in YouTube videos rather than just viewing their artwork. When I asked students about their learning and growth, their responses indicated that Web 2.0 helped some, but not all, students learn. In Chapter 5, I discuss the study’s larger implications and interpret the findings. I will also provide recommendations for further studies in the area of using Web 2.0 technology in the high school visual arts classroom.
Conclusions

In beginning this study, I set out to discover the benefits of using Web 2.0 technologies in a high school visual arts classroom. My goal was to reveal how a visual arts teacher could incorporate Web 2.0 technologies and how the technologies could be used to enhance student learning. In reviewing Chapter 4, I thought of what larger implications this study had in the field of art education. By analyzing the findings, the categories from Chapter 4 collectively began to emerge into the following themes: Many students gained enjoyment and value through using Web 2.0 technologies in art class, social interaction benefited student learning, and Web 2.0 provides teachers with the tools needed to help students succeed. What I have discovered is that incorporating Web 2.0 technologies in the visual arts classroom benefits the students by increasing their enjoyment of the technologies, improving social interaction with their peers, and exposing them to new information in a method that has value and meaning in their personal lives.

Students Gain Enjoyment and Value Through Web 2.0 technologies

In working with high school aged students, I believed that utilizing Web 2.0 technologies in the classroom setting would be exciting and motivating. My pre-questionnaire revealed that the majority of the students enjoyed using Web 2.0 technologies outside of the classroom and agreed that the use of the technologies was important to them. Seeing the value that the students found in using Web 2.0 technologies outside of school, it only made sense to see if that value might be found in the classroom setting.
I found that the students who used Web 2.0 technologies were able to build a positive classroom community. Reflecting back, having the students create blogs that gave them a venue to interact socially with their peers allowed them to grow closer together. The students discovered commonalities among their peers that they did not know existed. Building a positive classroom community where the students were able to socially interact and learn from each other helped them to gain value in their learning. Therefore, I claim that the students enjoyed the technologies as learning tools for art.

I discovered that most of the students were highly motivated and engaged by the use of the Web 2.0 technologies and their motivation was directly linked to the value they found in using the technology in the classroom. In an interview with Joe I asked why he thought we used Web 2.0 technologies in the art class. He responded,

I think that the use of the Web 2.0 technologies furthered our understanding of art, what we were being taught, and how we better perceived what the lesson was. It helped us pay better attention because of the liveliness and color as opposed to reading out of a book or listening to what was being read. The technologies helped us with what was being taught by using visual and audio. This sensory learning helps us to learn faster, easier, and more effectively.

His response demonstrated his engagement through Web 2.0 technology. It also displayed how the technology had a positive effect on his learning. The students who were engaged by the technology helped create a cycle of motivation. The students were motivated to learn because they enjoyed the technology, which then motivated them to understand an art concept, and finally motivating them to internalize the concept through self-reflection. When asked if he valued this method of learning Joe responded,
I valued this kind of teaching because it engages the learner easily. Being engaged and interested in the subject, I felt like it was easier to learn about. Take for example Joshua Harris; if someone were telling me about this inflatable subway art, I wouldn't of had a clear picture of what it was and how neat it really looks as opposed to actually watching the video about his work. This teaching holds a very high value because if we were to use the same style to other classrooms, we would also be more engaged. This proves that the style of teaching is useful because it can be applied elsewhere.

Joe was able to find value in this type of learning because it engaged and interested him.

Molly was a student who seemed to teach others readily in the classroom. She used Tumblr in her personal life and enjoyed it, yet the majority of her responses did not extend past one or two sentences. In an interview conducted with Molly, when asked about her enjoyment of using Tumblr in our classroom she responded, “I like Tumblr outside of class because I can just do what I want and I don't have to do assignments.” Although the pre-questionnaire revealed that 100% of the students enjoyed using Web 2.0 technologies, simply enjoying the technology outside of class was not always enough to help motivate the students to use that tool to learn within the classroom. In my interviews with five of the students, all five stated they found medium to great value in this form of learning. Since the students found value and were engaged in this type of learning, teachers can use results of this study to continue to discover the ways Web 2.0 technologies can benefit student learning in the classroom setting. In the following section; I discuss how technology helped facilitate student learning through social interaction.
Social Interaction Benefits Student Learning

When the initial challenges from technology caused me to question whether or not using Web 2.0 technologies was worth the trouble, I remember thinking that I could simply have the students write reflections in journals. In hindsight, I realize that I would have been depriving them of numerous social interactions that greatly benefited their learning.

The student’s Tumblr blogs gave them the opportunity to publish their ideas, thoughts, interests, reflections, and artwork with ease. The act of broadcasting all aspects of the student’s learning benefited the entire class. Broadcasting benefited the individual student because they had the chance to reflect on their learning. The broadcasting benefited the entire class because it allowed students to see each other’s thought processes and learn from how their classmates responded to assignments. The interaction with their peers and broadcasting outside of the classroom may help students see the relevance of their artwork beyond simply working for a grade (Buffington, 2008). In an interview I conducted with Blair, I asked what she valued from using Web 2.0 technologies and she stated, “I valued this teaching because I was exposed to different ideas through Tumblr which allowed me to think about my own art in different perspectives than usual.” The ideas she encountered through peer interaction allowed her to think about her own ideas and affected the way she thought about her own art.

Roland (2009) discussed how Web 2.0 is about having students participate in communities of creativity and knowledge sharing, and noted, “Doing so creates a richer, more diverse classroom environment within which students actively learn from each other as well as on their own” (p. 4). The students not only learned from socially
interacting with their peers, but the use of Web 2.0 technologies allowed the students to construct their own knowledge by navigating the blogs, as Jaramillo (1996) indicated. Through Tumblr the students continuously learned from each other and received feedback from their peers which helped them grow. As discussed in Chapter 4 the technology also provided them with several opportunities to take on a teacher role. Students who had a greater understanding of the technology aided their classmates. Students who had a strong understanding of the concepts and ideas presented in the class again served as teachers. The students who posted artists and artwork in their blogs indirectly were teaching their peers again by exposing them to new material. Along with providing students with social interactions, Web 2.0 technologies are valuable tools that can help students thrive in the 21st century.

**Web 2.0 Provides Teachers with the Tools Needed to Help Students Succeed.**

I found myself attending one of Arrowhead Central’s staff development days that had a seminar on introducing the new common core standards. The teachers were to divide into their departments and read the new standards and code which standards they believed they were already doing, the standards that they were doing but are enhanced, and the new standards. I sensed a lot of distress in the five art teachers that sat in the room with me. Many of the new standards focused on student’s writing in depth about a subject and was something that the teachers had not done before. One teacher’s statement was, “Well the arts are very visual; I feel that we focus more on the process.” Another teacher added, “We only have ten weeks, how can we find the time to add writing?” Mrs. R then looked at me and said, “Well Nick has been getting my entire class to write about art using their blogs.” It was a perfect solution to many of their concerns about adhering
to the new common core standards. I then continued to explain how the activities we complete in our blogs actually cover many aspects of the standards when we analyze and interpret art, and research new artists. I was excited to see that the new teaching medium with which I am experimenting was proving to be a tool that helps fulfill future teaching requirements that will be expected of me as an art teacher.

Roland (2009) believes that the “increased use of these new technologies will not in itself lead to improved art learning; rather, technology is a catalyst that can provide new ways to enhance and in some cases transform art learning if it is appropriately engaged through challenging curriculum goals and sound pedagogical practices” (p. 2). I feel that this is exactly what we achieved by using Web 2.0 technologies to teach the students about ideas and meaning. The technology became the tool that helped me engage the students in new and complex learning. Using YouTube videos as an enhancement of my curriculum, I took the students out into the world to experience primary sources of information. YouTube allowed the students to see contemporary artists’ processes and listen to them discuss how they developed their ideas and meaning behind their work. YouTube was an invaluable research tool for the students and it greatly benefited their learning.

The students’ Tumblr sites also had potential to serve as documentation of their learning. The blogs serve as a digital portfolio, in which they archived not only images of their artwork but also a comprehensive documentation of their thought processes and reflections. Digital portfolios can then be shared with the world outside of the classroom (Richardson, 2010). Principals could potentially view the blogs to assess teacher effectiveness and parents could view the blogs to gain an understanding of what their
students are learning in schools. Web 2.0 technologies provide students with tools that help them to be successful in today’s technology-driven world. After implementing Web 2.0 technologies in this study I began to reflect on ways that may help teachers implement the technology in their own classroom.

**Reflections**

Throughout the study, Web 2.0 was a tool readily used by some students, yet resisted by others. Therefore, it is one more tool teachers can use to tap into the various ways that students can learn best. I used the blogs to teach a variety of different aspects of the art curriculum. I discovered that the use of the blogs often facilitated my teaching. One of the first things I realized was how blogs can help teachers assess students’ learning. It becomes easy to observe student success because the blogs organize the student’s work in one accessible location. We used the blogs to write reflections on artists and artwork, and to post images of the students’ finished artworks. Therefore, the blogs can conveniently document the students’ learning and growth over a long period of time.

In reflection on how I deliver instructions to the students, I can recall a specific assignment that is important to note. One day after the students wrote a reflection about an artist’s work in their blogs, I gave the students the brief instruction to read over their classmates’ posts and make a comment. In reading their responses I discovered that students wrote things like “I agree, great response” and “You really know your stuff.” I realized that being clear about what you want the students to say in an assignment is very important, otherwise you will get similar generic short answers. What I actually wanted was for them to react to each other’s ideas by adding more of their own knowledge and interpretation; something I now realize how important the language is to instruction and
student success. A teacher cannot just assume the student’s know what makes a “good” blog post.

When deciding to use Web 2.0 technologies in the classroom it is important that the teacher fully understands how technologies work. Try to imagine that teaching with Web 2.0 technology is like introducing students to a new art medium. As an art teacher exposing students to a new art medium the teacher must first have a good understanding of how to use the medium. The teacher should get their hands dirty and jump right in. The only way to figure out how to use the medium is to try it. Experiment with the art medium and be prepared to explain to the students how that medium works and can be used to produce a piece of art. To introduce a new medium to students, a teacher can gather them around and demonstrate the necessary techniques. The teacher shows their students what the possibilities are and what they can expect from the material. In this same way, a teacher can learn to use Web 2.0 and implement technology in their classroom. A teacher should never assume that the students know how to use a new technology. Both teacher and students will benefit from the use of the technology if the teacher clearly states and demonstrates what one wants their students to achieve.

**Recommendations**

The data I have collected in this study comes from a very small sample of advanced art students. If given the chance I would be interested in seeing how Web 2.0 technologies would benefit the learning of students in an introductory level art course. In conducting this study at an introductory level, I am interested in seeing how the difference of student’s age, maturity and their interest in the arts would affect the outcome.
The students selected as the participants of this study all came from stable economic families and only represented a small section of the population. It would be interesting to see how students who do not have Internet access at home and are less familiar with Web 2.0 technologies would react to the technology’s use within the classroom.

Knowing that my study had a small sample of participants, a next step would be to expand upon the number of classes that are studied. With more students participating in the study, a clearer depiction of whether or not Web 2.0 technologies benefit student learning would be evident.

Discovering the social benefits of Web 2.0 technologies, a further study of the social interactions between students, their peers, and their teachers would help to understand the complexities of online interactions. A study of this nature would help to add credibility to the use of Web 2.0 technologies in the classroom setting.

Through the completion of my study I believe I was successful in implementing Web 2.0 technologies in the high school visual arts classroom. The study provided students with the experience of using Web 2.0 technologies to learn about art concepts. The study helped to discover how Web 2.0 technologies can be used to teach, motivate, and engage students in their learning. Through further experimentation and research, more uses of the technology within the classroom setting can be discovered that will further benefit student learning.

**Conclusion**

I feel that through conducting this study I was able to gain a greater understanding of how to implement Web 2.0 technologies in the visual arts classroom. The study
displayed how students can benefit from enjoying the tools that teachers use to teach. This study provides teachers with practical information that would help them to implement Web 2.0 technologies in their own classroom. I discussed how Web 2.0 technologies were used to engage, motivate, and enhance high school students’ learning in the visual arts. I shared instances where students felt they benefited from using Web 2.0 technologies. Social constructivism states that by collaborating with more capable others, the student is able to achieve more than if they were to work independently (Vygotsky, 1987). This study demonstrated that Web 2.0 facilitated their communication and social interactions thereby enhancing their education. Teachers can use this study to help them understand how they can use Web 2.0 technologies in visual arts classrooms.
References


Problem Statement
Although many researchers advocate for the use of Web 2.0 technologies in the art classroom, just how art teachers successfully integrate Web 2.0 technologies into their curriculum to improve student learning in art remains unclear.

Research Questions
1. What are the benefits of using Web 2.0 in the high school visual arts classroom?
2. How can Web 2.0 technology be used to enhance student learning in the visual arts?
3. How can Web 2.0 technology be used to improve student motivation or engagement?
4. How can I use Web 2.0 technology for curriculum, planning and search?
5. What are the student's social benefits of incorporating Web 2.0 technologies into the visual arts classroom?
6. What value do students and teachers find in incorporating Web 2.0 technologies in the visual arts classroom?

Review of Literature
1. Constructivism and social constructivist theory
2. Web 2.0 history and uses
3. Benefits of Web 2.0
4. Web 2.0 and its application to the Visual Arts

Data Analysis
1. Students building a classroom community
2. Students communication is facilitated through using blogs
3. Students as teachers
4. Student enjoyment and value of Web 2.0
5. Challenges
Welcome! (2011-08-27 01:25)

Hello everyone! This blog will be maintained by Mr. Napierala and used for the Arrowhead art department’s journey to discover that art has ideas. Over the next two months we will be completing a variety of assignments to help you find out what type of ideas you would like to explore in your own art making. Great artworks hold ideas that give your art meaning. Media, technique, and skills are the tools that enable you to communicate those ideas. This is similar to when you write your ideas your tools are your words! When you begin to understand that behind every piece of art is a well thought out
concept with layers of meaning, you may find that your own art making improves, and your appreciation of art may grow!

This blog is the place you can visit to view your assignments. You can ask any questions you may have throughout our time working together by clicking on the ask page to the right. If you have any questions you would like privately answered you can email me at ArrowheadArtandIdeas@Gmail.com

Throughout this semester we will be working together to discover new aspects of making art that you may not have known before. We will work on a variety of different assignments including; Critiquing your own artwork, keeping a digital art portfolio, discovering the ideas of various contemporary artists, taking a virtual tour of an art gallery online, and create your own artist statement all while utilizing a variety of Web 2.0 technologies.

Your assignments will be graded individually and be added up to equal a project grade value of 100 pts. It will be easy to get a perfect score as long as you complete all the assignments in a timely manner and to the best of your ability. The only thing I ask of you is to try your best, keep an open mind, learn from each other, learn from our assignments, and have fun!

Assignment #1 (2011-08-27 01:27)
1. Create your very own Tumblr Blog by visiting www.Tumblr.com. When you create a username you may choose what you wish but make sure that the title of your blog or within your “About me” you include your First name and last initial.
2. Choose a theme for your Tumblr and personalize the blog so that it represents you! (when choosing a theme if you scroll down you will reach the free themes)
3. Follow Mr. Napierala by visiting Arrowheadartandideas.tumblr.com and clicking +follow in the upper right corner.
4. Set up Discus comments http://disqus.com/dashboard/ (follow the instructions on this site)
5. Move on to Assignment #2!

Assignment #2 (2011-08-27 01:27)
-Please visit this website and complete the survey: http://www.surveymonkey.com/s/38BJJKR
- Move on to Assignment #3!

Assignment #3 (2011-08-27 01:30)
- Create your first post! In this post please write a response to the quote in the picture below. Remember there are no right or wrong answers seeing that it is your opinion.
Your response should include the following.
- What do you think the author is trying to say?
- Do you agree or disagree and why?
- What do you think art is all about?
- Post an image that you feel represents your ideas on art.
Assignment #4 (2011-08-27 08:10)
1. Visit all of your classmates blogs which are listed under “blogs I follow” to the right and follow them.
2. Make three comments on Assignment #1 on three of your classmate’s blogs. (Three different blogs)
3. Continue to comment on each other’s blogs!

Asks and Replies (2011-09-14 23:34)
Hey everyone, just a quick note. Go into your Tumblr settings (it is on the right hand side of the screen after you click on your blog name that’s to the right of where it says dashboard) and click the box that says, “allow replies from people you follow” and the box that says “let people ask questions”. Checking these will allow us to communicate using our blogs. It will also allow me to give you feedback on your assignments.
Remember to follow all of our classmate’s blogs and try to comment on their assignments!
Assignment #5 (2011-09-20 15:09)
Watch video about how they made Google art project, a new Web 2.0 technology:
http://www.youtube.com/watch?v=aYXdEUB0VgQ&feature=player_embedded
And how to use Google art project:
http://www.youtube.com/watch?v=GThNZH5Q1yY&feature=player_embedded
Using Google art project take a virtual field trip a few of the different galleries.(my favorite is the MOMA) After viewing the artwork write a review of Google art project. Think of including the following:
-What do you think people can learn by using Google Art Project?
-What are the benefits of Google Art Project?
-What are the downsides to Google Art Project?
-Did you enjoy the experience?
-What was your favorite gallery and artwork? Why!

Homework #1 (Start in class) (2011-09-20 15:22)
Good art has many rich layers of meaning. Think of an idea for a piece of art that has deeper meaning. Make a sketch of that piece of art and post on your Tumblr. If you need help to think of an interesting idea you can be inspired from ideas on the illustration Friday website (although their ideas are very surface level and not always the most creative)
http://illustrationfriday.com/topicArchive_p.php
Do not work on the sketch for more than 20 minutes (unless you want to!) Take a picture of your artwork with your cell phone and send it to your email. Save the image to your desktop and then upload it as a picture post to your blog.

Assignment #6 (2011-09-27 18:35)
Part 1:
-View this you tube video on artist Greg “Craola” Simkins
http://www.youtube.com/watch?v=loFKq627cBQ (first 3 minutes)
and http://www.youtube.com/watch?v=290r9I7-nH1
Then read his artist statement at
http://www.imscared.com/bio/
Answer the following questions in a blog post
- Do you like the work and why?
- What was the main idea behind his work?
- What do the YouTube videos allow you to learn about the artist that you might not have known before.
- Where does the artist get his ideas?
- What was your opinion of my series of work and the ideas?
Part 2:
-Visit your classmate’s blogs and write a note on their artwork by posting a note. Try to interpret the idea behind their artwork.
Assignment #7 (2011-10-04 17:40)

REVIEW:

Ideas that make you think: James Reynold’s Last suppers
Ideas from imagination/fantasy: Greg “Craola” Simkins
Ideas with a Human Narrative: Mr. Napierala’s series

TODAY:
What is the artist inspired by?
What do you think about their work?
What meaning does the artwork hold???
What leads you to that conclusion?

Ideas from the past: Kara Walker’s silhouettes
http://video.pbs.org/video/1237715781/

Ideas from Social issues: Joshua Allen Harris Subway art
http://www.youtube.com/watch?v=PH6xCt2aTSO

‘I have been constructing these sculptures out of discarded shopping bags. Recently I think we have all become more aware of our human footprint and what it means for our environment. And that we all have a space in our kitchen were these bags begin to accumulate. The two ideas just seemed to fit — the subway system could inflate the unused bags giving them a new purpose and I could experiment with the wind. For me, it was just a place to explore and play. The interpretations of my work are out of my control. As artists, we initiate a dialogue which in turn creates different associations. Some people have suggested that the polar bear is an icon of global warming and that the wind is an example of a renewable energy. When the bear is animated, he looks happy, and when the resource is gone, the bear slowly dies. I find this explanation encouraging’.

Ideas from Social Issues: Last view Shepard Fairey’s artwork and conclude by watching the collaboration between Death cab for cutie and Shepard Fairey
http://www.youtube.com/watch?v=FX_HoSTKJO&feature=fwrel
http://www.youtube.com/watch?v=CVwS5mFfI&feature=artist

Assignment #8 (2011-10-13 17:49)

- Take part in an “in progress” critique. Take a picture of your current artwork regardless of how far you are using your cell phone Post this image to your blog. Write a brief description of your artwork. Explain any problems you may be having while creating the piece, ask any questions you may have that you need help with in order to complete your piece. Visit three of your friend’s blogs and comment on their artwork and try to answer their questions. Discuss things you enjoy about their work, help them with any problems they are having, give them any suggestions you may have to improve their artwork.

Part 1: What types of art are you interested in creating? What ideas fascinate you? Think about important aspects of your life that might inspire you! Write a paragraph expressing an idea that you might want to explore through art and what meaning would you want others to gain by looking at your work.

Part 2: What is your favorite medium to work with? Research three high quality pieces of art in the medium that you would choose to work with and post the artist’s name and one image of their artwork to your blog. The media is a tool that contributes to the communication of the ideas. How does the medium make the work of high quality?

Websites to research artists and artwork:
http://www.pbs.org/art21/?gclid=CIin5uzP5qsCFQXe4Aodo16sKg
http://www.artcyclopedia.com/index.html
http://moma.org/
http://images.google.com/

Assignment #9 (2011-10-18 18:54)
Please answer BOTH surveys!
http://www.surveymonkey.com/s/PTXRZ55
http://www.surveymonkey.com/s/PM28GST
PUT YOUR NAME IN THE FIRST QUESTION!!!
Part 1: Research 1 piece of art that inspires your own work (ideas, style, subject matter)
Write a paragraph for it as well as post an image of that artwork and the artists name.
Part 2: (If you have finished) Post your finished artwork to your blog and write a
reflection on the creation process (the artwork they are working on in class). Include your
initial ideas, write about your process. What you would have done differently? What did
you like about your piece? Comment on 3 of your classmate’s artworks.

Final Assignment! (2011-10-23 19:10)
Create your very own artist statement for your work through the rest of this semester.
1. To Get your Brain Going…
List individual words or short phrases that come to mind when asked these questions:
• What is your favorite art material? Why?
• How would you describe your artwork in an e-mail?
• Besides the work of other artists, what influences your artwork?
• What do you like best about being an artist?
• Why do you make art?
• What is most challenging about being an artist?
• How do you begin a piece of artwork?
• What does it mean when you say a piece of artwork “turned out really well”?
• What do you want others to feel or think when they see your artwork?
2. Artist’s Statement Frameworks:
These frameworks will help you mold the words and thoughts from above into document
form. Each paragraph should have 3 to 5 sentences. Most artists’ statements are one page.
Write in first person present tense- “I am” NOT “I was”, “I do” NOT “I did”.
Paragraph 1- Why do you do the work you do Support your statement telling the reader
more about your goals and aspirations.
Paragraph 2- Tell the reader how you make decisions before, during, and after the
artwork is created. How and why do you select materials, techniques and themes? (your
ideas to create the layers of meaning) Keep it simple and BE SPECIFIC.
Paragraph 3- Tell the reader a little more about your current work. How did this work
grow out of prior artwork or life experiences? What are you exploring, attempting or
challenging by doing this work? What ideas do you have that build layers of meaning?
Appendix C

My work is based off of my own life experiences and my reflections on my past. I do my work to entertain others and get them thinking. It is supposed to make them feel a certain way, which usually reflects my feeling. The viewer is supposed to see my feeling and emotion in my artwork. The reason behind my artwork is for the viewer to be able to understand me better.

My favorite medium to work with is graphite pencil because they can help with shading and their assigned hardness. Three high quality pieces are “African Tribe Boy”, “Baby Hands” and “Breaking Out.”

I’m interested in creating drawings mostly, but paintings are also interesting and fun to do. Some ideas that I use focus on a lot in my art are the love, my friends, and just things that explain my life. My art is mostly based on my interests or my past. I hope that the audience viewing my artwork will just have a better understanding of my life when they see my work. I would like them to think of the

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Appendix D

Assent Form

September 6, 2011

Dear Participants:

I am writing this letter to ask your permission for your son or daughter to be a part of a special art study this coming quarter. As part of my Masters project in Art Education at Buffalo State College, I wish to discover the benefits of using Web 2.0 technologies that include the use of technologies such as blogs, Facebook and YouTube, within the art classroom. I will gather information through analysis of visual works, examination of documents including artworks and written texts, interviews with teachers and students, and questionnaires. My data will be retrieved through Internet technologies whenever possible.

The goal of my research is to investigate the question, “What are the benefits of using Web 2.0 technologies in the visual arts classroom?” Teachers and students will have the opportunity to learn about conceptual art and perhaps become better informed about uses of Internet technology for educational purposes as related to visual art classes.

Fictitious names will be used throughout this study to protect your child’s privacy. Your son or daughter has the right to withdraw from this study at any time. Everything created for this research project will be completely educational and confidential. I appreciate your time and willingness to help me in my professional development. Thank you very much for helping to make this project possible.

If you are unable to reach a member of the research team and have general questions, or you have concerns or complaints about the research study, research team, or questions about your rights as a research subject, please contact Gina Game, IRB Administrator, SUNY Research Foundation/Buffalo State at (716) 878-6700 or gameg@rf.buffalostate.edu.

Please sign your name below, to give permission for the following to be included in the Master’s project document:

- I give permission for my son or daughter’s artwork to be photocopied and analyzed.
- I give permission for my son or daughter’s student blog to be analyzed.
- I give permission for my son or daughter’s interaction on the “Iroquois Art and Ideas” Facebook page to be analyzed.
- I give permission for my son or daughter to be interviewed about their experiences using technologies in art class.
- I give permission for my son or daughter to answer questionnaires about their experiences using technologies in art class.

Please print, sign and date the line below.

Student Name (Print) _______________________________________

Student Name (Sign) _______________________________________

Parent/ Guardian Name (Print) _________________________________

Parent/ Guardian Name (Sign) _________________________________

Date _________________

Sincerely,
August 28, 2011

Dear Mrs. [Name],

I am writing this letter to ask your permission for you to be a part of a special art study this coming quarter. As part of my Masters project in Art Education at Buffalo State College, Buffalo, NY, I wish to record the benefits of using Web 2.0 technologies that include the use of technologies such as blogs, Facebook and YouTube, within the art classroom. I will gather information through analysis of visual works, examination of documents including artworks and written texts, interviews with you and your students, and questionnaires. My data will be retrieved through Internet technologies whenever possible.

The goal of my research is to investigate the question, “What are the benefits of using Web 2.0 technologies in high school visual arts classrooms?” Teachers and students will have the opportunity to learn about Internet literacy and perhaps become better informed about uses of Internet technology for educational purposes as related to visual arts classes.

Fictitious names will be used throughout this study to protect you and your student’s privacy. You reserve the right to withdraw from this study at any time. Everything created for this research project will be completely educational and confidential. I appreciate your time and willingness to help me in my professional development. Thank you very much for helping to make this project possible.

If you are unable to reach a member of the research team and have general questions, or you have concerns or complaints about the research study, research team, or questions about your rights as a research subject, please contact Gina Game, IRB Administrator, SUNY Research Foundation/Buffalo State at (716) 878-6700 or gameg@rf.buffalostate.edu.

Please sign your name below, to give permission for the following to be included in the Master’s project document:

- I give permission for my student’s artwork to be photocopied and analyzed.
- I give permission for my student’s art blog to be analyzed.
- I give permission for my interaction on the “[Art and Ideas]” Facebook page to be analyzed.
- I give permission to be interviewed about my experiences using technologies in my art class.
- I give permission for my students to answer questionnaires about their experiences using technologies in art class.

Please print, sign and date the line below.

Teacher Name (Print) ________________________________

Teacher Name (Sign) ________________________________

Date _________________

Sincerely,

Nicholas R. Napierala
Appendix F

August 28, 2011
Dear Mr. [Name]

I am writing this letter to ask your permission for your art teacher, [Name], and her art classes to be a part of a special art study this coming quarter. As part of my Masters project in Art Education at Buffalo State College, Buffalo, NY, I wish to record the benefits of using Web 2.0 technologies that include the use of technologies such as blogs, Facebook and YouTube, within the art classroom. I have chosen your school due to its commitment to technology, and your art teacher’s desire to learn about Web 2.0 technology. I will gather information through analysis of visual works, examination of documents including artworks and written texts, interviews with teachers and students, and questionnaires. My data will be retrieved through Internet technologies whenever possible.

The goal of my research is to investigate the question, “What are the benefits of using Web 2.0 technologies in high school visual arts classrooms?” Teachers and students will have the opportunity to learn about conceptual art and perhaps become better informed about uses of Internet technology for educational purposes as related to visual arts classes.

Fictitious names will be used throughout this study to protect your school’s privacy. Your school has the right to withdraw from this study at any time. Everything created for this research project will be completely educational and confidential. I appreciate your time and willingness to help me in my professional development. Thank you very much for helping to make this project possible.

If you are unable to reach a member of the research team and have general questions, or you have concerns or complaints about the research study, research team, or questions about your rights as a research subject, please contact Gina Game, IRB Administrator, SUNY Research Foundation/Buffalo State at (716) 878-6700 or gameg@rf.buffalostate.edu.

Please sign your name below, to give permission for the following to be included in the Master’s project document:

- I give permission for student’s artwork to be photocopied and analyzed.
- I give permission for student’s art blog to be analyzed.
- I give permission for my teacher and student’s interaction on the “[Facebook Page]” Facebook page to be analyzed.
- I give permission for my teacher and students to be interviewed about their experiences using technologies in art class.
- I give permission for my teacher and students to answer questionnaires about their experiences using technologies in art class.

Please print, sign and date the line below.

Principal Name (Print) ________________________________________
Principal Name (Sign) ________________________________________
Date __________________

Sincerely,
Nicholas R. Napierala