

BEST PRACTICES FOR ONLINE ART EDUCATION

A Project

Presented to the

Faculty of

California State Polytechnic University, Pomona

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

in

Education

By

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2010

SIGNATURE PAGE

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ACKNOWLEDGEMENTS

I want to thank Dr. Shahnaz Lotfipour, Professor Constance Castro and Dr. Amy Gimino for assisting and directing me through my master's project. I want to extend my thanks to the entire Cal Poly University for supplying the courses from my undergraduate to my graduate studies, and for the unforgettable memories that I experienced.

Special thanks to Jon St. Amant for his advice, support and inspiration to complete an opportunity to teach fine arts to students online. To his students, I want to thank them for their hard work and I wish them the best to becoming great and inspiring artists.

Furthermore, I want to thank my best friend Phillip Gonzalez for his added support and friendship during the process I underwent to complete my masters project. Without him, I would not be able to enjoy the best things in life.

I want to thank my mother, Carol J. McTarsney, for believing in me and remaining patience and supportive during the tough times. Lastly, I want to thank my father, John B. McTarsney, who passed away before I pursued my masters. He was a courageous, inspiring and wonderful father who I know is very proud of his son. It was the combined love and vision from my parents that I was able to transform into the person that I am today. I am eternally grateful for everything that they gave to me.

ABSTRACT

This project aimed at developing an effective online art course that was centered on enhancing and supplying supplemental course work to art students. With this e-course, art students learned the art content that they were missing using online tutorials, and online asynchronous and synchronous communication tools. This project combined the frameworks of several learning modes shown to be effective for art education in conjunction with online technologies. This project utilized the sound principles of instructional design in order to create an e-course that was well organized and useful.

The e-course provided valuable information for the art student in a series of weekly lessons which were reinforced by online interactions using a message board and assessed using online quizzes and flash games. The students received immediate response using a shoutbox that was installed on a message board; thereby mimicking the traditional face-to-face interaction found in the classroom. The students presented their final project at the end of the course in person as an attempt to mirror art critiques found in traditional art classrooms.

A survey tool was used to gather information from two content experts and eighteen art students during the spring academic quarter 2010. The respondents completed the survey anonymously and the responses demonstrated a positive reaction to the overall effectiveness the art online course.

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CHAPTER 1

INTRODUCTION

Art has become a vulnerable subject in many public schools due to budget cuts and emphasis on subjects which can be easily tested (Rohrer, 2006). Because of budget cuts, teachers are finding it difficult or impossible to teach the students all of the content standards required (Freedman, 2007). In order to survive in the curriculum, many art teachers and students have to embrace learning approaches and distance technologies (Caruso, 2008; Jacquith, 2008, Richmond, 2009). This project aimed to supply supplementary course work over the internet to art students who were not receiving all of the content required by the state legislation.

Background of the Problem

In public schools in the United States, art teachers are required to teach the content standards set forth by the state's legislation, however, teaching the content is often difficult because art programs are losing the battle to survive in the curriculum (Aprill, 2006; Richmond, 2009). Art programs suffer because the subject is not easily measured by test scores (Rohrer, 2006). If a school is fortunate enough to retain their art program- certain factors, such as budget cuts or classroom overcrowding, drastically reduces the length of the course (Richmond, 2009). Furthermore, the success rate of student scores emerged as the driving force behind the distribution of state funds to school programs (Zerull, 1990). Art courses struggle in an industry where subjects battle for precious curriculum space to obtain state funds (Richmond, 2009). Because of the No

Child Left Behind (NCLB) act, art has become an endangered subject because schools cut extracurricular activities in favor of implementing courses that measure student achievement such as mathematics and language arts (Aprill, 2006).

NCLB is defined as an education reform program that is designed to improve student achievement through state wide standardized testing (Archived Introduction: No Child Left Behind, 2005). Pressure from NCLB cause school districts to focus on standardized tests to demonstrate school performance (Rohrer, 2006). Subjects involved in the arts and humanities are taking a back seat in a derangement to meet the expectations of the U.S. federal government (Rohrer, 2006). Many art teachers are on the defensive as a result of having to prove the worth of art education in public schools and struggle to find ways to keep art alive in the curriculum (Rohrer, 2006). Creativity and self-exploration are some of the main ingredients which drive the success rate of art- not test scores; as a result, it is often difficult to convince school administration that art is important because they respond more to paper reports and not to individual creative growth (Richmond, 2009).

Since art is often cut from the curriculum, the content standards are not fulfilled (Mishook & Kornhaber, 2006; Robert, 2004). Art teachers are required to teach the content standards as directed by the state's legislation which develops student's creativity and self-expression (Aprill, 2006; Content Standards: Standards & Frameworks, 2001). Students' creativity and self-expression often suffers if art is taken out of the curriculum (Aprill, 2006; Caruso, 2008). Even though research shows that it is vital to include art in the curriculum, art teachers face the possibility of losing their course (Aprill, 2006; Richmond, 2009; Rohrer, 2006). In order to bring worth back to art education and to help

make art more compatible with test scores- learning approaches and distance technologies can be used (Aprill, 2006; King-Hammond, 2007; Olejarz, 1996).

Art education can be delivered online and technology can facilitate assessment opportunities (Aprill, 2006; Olejarz, 1996). But before for art education can exist online and used in the classroom, school administrators and parents must embrace online art education as a viable and reliable resource which can satisfy the requirements of NCLB and content standards (Buffington, 2008; Freedman, 2007; Jaquith, 2008; Lu, 2008 Richmond, 2009).

Statement of the Problem

In today's public schools, many art teachers face the problem of not supplying enough learning materials and courses to satisfy the content standards set forth by the state legislation (Aprill, 2006; Richmond, 2009; Robert, 2004). Art is often cut from the curriculum because it is not a subject which can be easily tested (Mishook & Kornhaber, 2006; Richmond, 2009; Robert, 2004; Rohrer, 2006). However, the impact of not learning art can have drastic results for the students for years to come (Aprill, 2006). If the problem is not fixed, then the students will lose out on most creative problem solving and learning skills (Caruso, 2008). Supplementary course offerings in the form of distance educational technologies can aid in the solution of the problem (Koos & Smith-Skank, 1997; Marshall, 2006; Mayo, 2007; Richmond, 2009).

Needs Assessment

An art teacher at a middle school in Southern California was faced with the problem of not supplying enough learning materials to satisfy the content standards. The art teacher could not find enough time to teach all of the content standards for his 6th-8th grade students because each grade level was limited to a maximum length of course time per year due to budget cuts from the NCLB. The sixth grade students were allowed to have one semester (nine weeks), while the seventh and eighth grade students were allowed to have one quarter (eighteen weeks) of course work. The students were not learning everything that was required of them to learn in a year's worth of art instruction because they were not obtaining a year's worth of art instruction. Instead, the art teacher selected the most important areas of art instruction and hoped that there was enough time to cover the rest of the content areas before the cycle rotates. Sometimes, the art teacher could resume where he left off the next year and touched on what was not covered before. However, when new students arrived into his class from other schools and they were already behind on the content. The art teacher had to play catch-up on some lessons and concepts in order to bring all of the students up to the same level (McTarsney, personal communication, September 9, 2009).

One way the art teacher has found time to compensate for the lost of course work was through his art club which ran for the entire second semester; however, even with the art club in place the art teacher could not reach all of the content standards because he had to play catch up with his students. Activities were delivered through the art club but there was too much content to cover. As a result, the art teacher needed additional supplemental activities that could be executed in conjunction with his initial lesson plans

in order to cover everything that was required by the state's content standards (McTarsney, personal communication, September 9, 2009).

A question the art teacher constantly grappled with was: how can he teach everything that needs to be covered in the timeframe that he is given? Since there was more emphasis on subjects that can be tested and funds are allocated towards subjects that can affect the school's overall performance- the realization that more time can be distributed for the art class seemed bleak (McTarsney, personal communication, September 9, 2009). However, there are ways to produce supplemental course work which can be effective and cheaper alternatives than traditional classrooms (Richmond, 2009). The most popular and effective way a course can be supplemented is through a distance online environment since it can also occur at anytime at any place (Koos & Smith-Skank, 1997). But was it possible to use a distance course as a delivery method for art instruction? And could the art teacher use a distance course to deliver the missing art content due to the NCLB cutting course time? The barrier is not just the NCLB legislation but the perception of the art teacher of what and how to use distance-learning to enhance student learning (Guilfoyle, 2006).

A pilot online art course was developed and applied to see if it was worth further research and development (see Appendix A). The pilot course was taken by 7th grade art students at a middle school and the lesson plan focused on the principles and value of color theory. The pilot course incorporated flash video tutorials on how to mix the primary colors: red, yellow and blue. The video tutorials were delivered online and were accessible throughout the website anywhere and anytime. After the instruction, the art students were assessed through an online flash quiz which tallied their scores and

outputted the results onscreen. The results of the online quiz revealed that the art students understood the content and over 80% of the students received a perfect score. Two independent observers (teachers) observed the pilot online website and learning process and reported that the students enjoyed the tutorials and most of them learned new concepts and terms.

In order to see if the pilot course was worth further development into a full online course, a one page paper survey was distributed to the students at the end of the pilot course (see Appendix B). The same survey was completed by school's principal and art teacher. The surveys included open-ended questions/answers, such as: what (if anything) did you learn new about the color wheel after taking the tutorial?

Results from the surveys were overwhelming positive. Out of the 28 forms completed and handed back- 21 indicated that their learning was extended by the tutorial. The overall result of the student surveys revealed that there was moderate need for flash video tutorials in the classroom and there was great need for online courses which could teach electives such as art. In addition, the surveys revealed that the online course attracted students who normally turn away from supplemental course work. The results of the teacher survey revealed that the students wish to take additional electives not available to them and that the art website was effective in presenting the materials and instructions but the organization was above average in performance. The results from student and teacher surveys both suggest that students wish to learn even more about art but school time was a major limiting factor; and the website was effective in presenting the material through flash video tutorials and quizzes, however, the design of the website was confusing and the students had some difficulty navigating. Students were challenged

with questions concerning specific color terms such as: tertiary and complimentary color schemes and how to mix colors effectively because they received very little content knowledge about the subject due to limited classroom time. The website was successful in that the video tutorials showed how to mix paints and the quizzes connected with the lesson plans- all of which could be retaken many times over through the internet until the student was satisfied with their performance. Based on these findings it was determined that it was worth additional research and development to produce a full-scale online art course for supplementary work.

Purpose of the Project

The purpose of this project was to create an online art course site at a middle school in Southern California to provide supplemental course work to 6th-8th grade art students. The need for additional supplemental art work at a middle school has been increasing dramatically due to limited time and budget factors. Students are missing out on everything that the state standards are requiring because of these issues. Since there is limited space, budget, facility and time- it is often difficult to assign more time periods for the student. The project featured the use of a message board, flash games, video tutorials and flash quizzes for delivery of educational material.

Assumptions

The following assumptions were made while developing the online learning environment. First, it was assumed by that students have prior knowledge of art concepts

and techniques and are capable of operating key computer devices and programs (keyboard, mouse and the internet) to successfully complete the e-course. It was also assumed that students were willing to participate in an e-course along with other studies that may lead to extra credit upon completion, and that the teacher was willing to support the e-course project and helped promote the project to his students. Next, it was assumed that the parents allowed their children to participate in an e-course activity. And finally, it was assumed that the students had access to computers outside campus to complete their lessons online under their own timeframe.

Limitations

Several factors impacted the effectiveness of this project in meeting its objectives. First, certain programs such as adobe dreamweaver, photoshop and flash were required to developing, updating and maintaining the e-course art site over time. Second, connection speed had to be fast enough in order to download flash video content without substantial downtime. Third, students were required to have access to a Pentium Processor computer with a 300MHz or better clock speed, in order to view the site effectively. Next, up-to-date web browsers capable of viewing the site with the latest Adobe Flash plugin, were required to view the flash videos and quizzes. And finally, an email address was needed in order to register and login to the message board and to communicate with the instructor and classmates.

Delimitations

The project was designed for the art students of a middle school in Southern, California. The study and development of the project focused on those who wished to learn more about art as an elective. Students were not the only population that participated in the project. Two content expert teachers also participated in the project through guidance and support. For instance, the art teacher played a critical role as a subject matter expert and provided direction for the project's curriculum.

Definition of Terms

Bread Crumb Navigation:

Bread-Crumb Navigation is a web navigation for web pages that breaks the site into links of categories and sub-categories in order to provide a sequential order allowing major chunks of information easily viewable and organized for users (Webopedia, 2009).

Browser:

A browser is a software program application that can find and display web pages graphically by interpreting the code of HTML pages. Multimedia applications are also displayed using a browser (Webopedia, 2009).

E-Learning:

E-learning is the method of learning through electronic applications and processes (Webopedia, 2009).

Hyper Text Markup Language (HTML):

HTML is the authoring language used to create documents for the World Wide Web by defining the structure of a web page (Webopedia, 2009)

Information Feedback:

Feed back in the form of an answer to a question or an assignment grade and comments (Graham, Cagiltay, Lim, Craner, & Duffy, 2001).

Javascript:

Javascript is programming language that can control the behaviors of a web page. Javascript was developed by Netscape to design interactive sites (Webopedia, 2009).

No Child Left Behind (NCLB):

NCLB is an education reform program that is designed to improve student achievement through state wide standardized testing. The effectiveness of schools determines how much funding they receive. Furthermore, the program provides parents with more information about their child's progress and allows parents to

choose which schools they want their child to attend (U.S. Department of Education, 2005).

Virtual Learning Environment (VLE):

“Virtual Learning Environment is computer-based and it involves sharing of information between other students and tutors” (Leese, 2009, p.1).

Web-Course Tools (WebCT):

“Web Course Tools (WebCT) is a secure Internet-based course management system that provides instructors and students with a range of synchronous and asynchronous tools including email, chat (real-time text communication), quizzes, whiteboard (real-time writing and drawing on material)” (Johnson & Bratt, 2009, p.1).

Wikis:

Wikis are defined as “a collaborative Web site whose content can be edited by anyone who has access to it” (Global Education & Learning Community, 2008, p.1). There are many differences between blogs and wikis in that wikis act like blogs as editable information that can either be private or public. Wikis act as collaborative websites that contain many different pages that can be edited by its user regardless if the user is the original author. The information is posted and displayed in chronological order which is different from the reverse chronological

order found from blogs. Wikis can be used by teachers as private spaces for collaboration with students and parents. A wiki is a convenient tool for face-to-face interaction as it is often difficult to schedule a time and place for educators to meet with parents, students, teachers and faculty members (Schweder & Wissick, 2009).

CHAPTER 2

REVIEW OF THE LITERATURE

This review of literature begins with the current trends in art and distance education, followed by content standards that are required to be taught in an art class. Next, effective distance education practices on art education were examined. Finally, essential technologies for online art courses were discussed. This review of literature explored the factors that created a successful on-line art course. The purpose was to provide context and the requirements necessary to create an on-line course that could competently educate art students.

What Are the Current Trends in Art Education?

There are some growing trends emerging in art education. For one, art teachers are finding ways to integrate art into other curriculums as a way to show that art education may be valuable (Mayo, 2007; Rohrer, 2006). Generic public K-12 schools focus on subjects which are judged by state standardized testing and this can lead to a disconnection with the student's lives and interests (Graham M. A., 2007). Teachers are encouraged to cover the material quickly and wrap things up in time for the testing which leaves a noticable gap in the student's academic and developmental life (Graham M. A., 2007). In order to fill that gap and for art to survive in the curriculum, some art teachers are encouraged by school administrators to integrate art education into subjects such as math, English and science; but is art education worth saving (Mayo, 2007)? According to research conducted by Rohrer (2006), "students who excel in the arts also excel in the

academic realm; art teachers also have to prove their worth on standardized tests (p.1).” It is important for the student to learn art because it develops self-awareness and creativity which leads to effective problem solving skills (Caruso, 2008).

But is integrating art in other subjects as effective as a traditional art class?

Mishook & Kornhaber (2006), National Arts Education Association (1992), Mayo (2007) and Robert (2004) all strongly agree that integrating art in other subjects is not as effective as teaching art in an art class. Art teachers need to utilize effective distance learning practices and assessment tools designed for art instead of relying on integrating arts in other subjects (Mayo, 2007). NAEA (1992), the leading national advocate for art education, points out that students may receive some art education through subject integration but it is not the same since a math, English or science teachers lack the same content knowledge as an art teacher. The only way for an art student to receive the proper art content is to teach them in a full art course by an art teacher (Mayo, 2007).

Another trend is many educators still view distance education as an alternative tool for face-to-face instruction instead of a new approach for instruction (Kuriloff, 2005). Kuriloff adds that time and space are considered as assets in many educators’ eyes but they view computer-based instruction as nothing more than an alternative delivery system for traditional pedagogy instead of a newer tool for using pedagogy. However, experience shows that there is a negative aspect to traditional constraints of face-to-face interaction and to extend and exceed the constraints of time and space through online courses has the potential to enhance learning and teaching (Kuriloff, 2005). Art students are unwilling to learn meticulous formal skills found in traditional art courses, such as art history, because they are more interested in courses which integrate art and distance

technology (Howards, 2007). Art students are excited and willing to learn art with new distance technologies but educators need to embrace distance education more in order to adapt to these changes (Buffington, 2008). However in order to embrace distance education successfully, art teachers need to incorporate content standards and learning styles into their distance education courses (King-Hammond, 2007)

What Art Content Needs To Be Taught?

Art teachers in the United States are required to teach the content standards set forth by the state's legislation (Aprill, 2006). By integrating state standards into the curriculum, art teachers can demonstrate art's importance (Rohrer, 2006). The need to create art standards came from the disagreements from educators and stakeholders who largely could not agree on the content (Robert, 2004). In addition, art content taught in schools lacked uniformity which was attributed to several factors such as: differences in local resources, staffing, needs and values of the community and the experience of the teacher- all of which provided a reason to stabilize the curriculum. (Robert, 2004). Eventually, standards were developed as a result of the Senate Bill 1390 which states that all visual and performing art should be made available to all students (Content Standards: Standards & Frameworks, 2001).

Content standards are designed to encourage students to produce the highest level of achievement possible in each grade level while focusing on defining knowledge, concepts and skills (Aprill, 2006). In order to develop successful art curriculums, ambitious guides and frameworks were developed by state departments of education (Robert, 2004). One widely used framework is the Content Standards: Standards and

Frameworks manual which explains that visual and performing arts enable students to explore ideas, culture and subject matter which cultivate problem solving, teamwork, communication, creative thinking and knowledge of technology (Content Standards: Standards & Frameworks, 2001; Marshall, 2006). The content standards include various components that the student needs to master by the end of each grade level (California State Board of Education, 2008).

Art teachers are required to address these key content groups in one grade year starting from kindergarten up to grade eight (California State Board of Education, 2008, p1; Marshall, 2006):

- Artistic perception: Students react to works of art and respond to objects in nature and in the environment through expressive use of visual vocabulary.
- Creative expression: Students use a variety of media to express meaning and intent in original artwork.
- Historical and cultural context: Students examine and observe the role and development of arts in history and culture in order to perceive the diversity of visual arts and artists.
- Aesthetic valuing: Students derive meaning from works of art by analyzing and assessing the elements of art, design and aesthetic qualities.
- Connections, relationships and applications: Students apply artistic knowledge across other subject areas. Skills are developed for creative problem solving, communication and management of time to be used for future careers.

The delivery of standards-based art education is left to the teacher and to the school administration- however, the standards do not dictate how a curriculum is delivered. Instead the standards inspire a wide variety of teaching strategies (Content Standards: Standards & Frameworks, 2001).

The policies and standards created by legislation guide the art content that is required to be taught in the art class; moreover, the emphasis is on art assessment (Aprill, 2006). The standards that are created by the No Child Left Behind Act have drastically changed the art curriculum to include more assessment (Freedman, 2007). Many schools changed their curriculum to include art assessment or art integration into subjects that can be tested such as math and science, but it is difficult to score creativity even if the public calls for more accountability since art is not a subject that can be judged easily by test scores (Mishook & Kornhaber, 2006; Robert, 2004). Art teachers are told by administration to help students improve subject test scores, which further increases pressure to the art teacher to teach content that not only satisfies the art curriculum and standards but also to raise test scores (Freedman, 2007). In order to help students to improve test scores in art education, effective learning styles and technology must be used (Mayo, 2007; Marshall, 2006).

What Are Effective Distance Education Practices For Art Education?

Online art education is still new but many art educators have developed effective practices to meet the challenges of distance art education (Buffington, 2008; King-Hammond, 2007). But first, what are the challenges? One challenge is the validity of online assessment (Bassoppo-Mayo, 2006). The administering of assessment

intruments for online courses becomes a problem because the student works anyomously and academic dishonesty can occur (Bassoppo-Mayo, 2006). For instance, students can have someone else take quizzes for them or use text books when they are not suppose to (Bassoppo-Mayo, 2006). A second challenge to distance education are the needs of the students (King-Hammond, 2007). In a recent study, students who participated in three web based courses listed their top four needs in an online learning environment: technical help, flexible and understanding instructors, advance course information and sample assignments (Mupinga, Nora, & Yaw, 2006). The findings show that it is also important and essential to establish a feeling of place in an online art class since students are accustom to face-to-face environments (Smith, 2008). If you do not establish an environment that feels comfortable and productive for the students then they feel out of place and the learning process becomes difficult (Smith, 2008).

The previously stated challenges lead to the critical question: In what way can art educators use distance technology that addresses assessment and student needs in an online art class? The use of technology alone will not produce an effective online art course (King-Hammond, 2007; Popper, 1993). It is essential for the art teacher to combine a learning style with effective use of technology to meet the challenges (Mayo, 2007; Marshall, 2006).

What Are Effective Instructional Approaches for Art Education?

To maximize a students' learning experience an instructor must develop a sensitivity towards learning approaches, needs and expectations- in addition to understanding the online learning environment (King-Hammond, 2007; Mupinga, Nora,

& Yaw, 2006). Learning approaches are vital to online learning environments because they add value, learner control and motivation (Kuriloff, 2005). In order to determine the most effective learning approach for online art education, several popular and widely-used approaches were researched. The results of the research revealed that constructivism, student-centered and choice-based learning connected with students with effective results for online and technology driven art courses.

Constructive Approach One widely used learning approach for art learning is constructivism. Davidson-Shivers and Rasmussen (2006) define constructivism as “the idea that learners construct meaning based on their own experiences and through a social negotiation of that meaning during learning” (p. 45). Constructivism can be made up of authentic tasks that mirror an actual work setting or experience (Davidon-Shivers & Rasmussen, 2006).

An example of constructivism when used for art education can be seen with the qualitative case study conducted by Hesser (2009). A conceptual framework was created for the course that value student-centered learning over agendas that gravitate towards academics. The case study took place at a suburban High School with a class of 32 students in grades 10-12. The results of the case study revealed that a greater sense of responsibility and learning developed. At the end of the unit, self-assessment of student work was used to further satisfy a student-centered strategy. The students evaluated their own work with the teacher in private one-on-one meetings and the students gave a proposal for their final grade. The teacher reported that the students were honest and hard on themselves; and the students learned a great deal about art making by remaining

truthful of their own development. Overall the student grades were sincere and reflective of their work.

Student-Centered Approach. The next widely used learning approach for art learning is student-centered instruction. Learning technologies that are integrated and infused into a student-centered art learning environment can improve student art learning at the same time provide an ideal opportunity for school reform (Brooks & Brooks, 1999; Milbrandt, Felts, Richards, & Abghari, 2004; Vygotsky, & Kozulin, 1986). Student-centered practices motivate open-ended thinking and learning in young students as well as maximize their potential to produce inspiring works of art in a facilitated discussion that can encourage individual expression (Yenawine, 1998).

Student-learning practices for art education have been observed by Gregory (2009) with great success. Gregory has been teaching art for twenty years and realized that:

“Educators must make a profound shift in the ways they think about classroom practice to enact real education reforms. We must make a 180-degree shift from teacher-directed to student-centered learning approaches” (p.1)

Gregory explains that in order for art students to develop creative and critical thinking skills in technology and social medias, the art teacher must release control and allow students to explore these technologies at their own pace and creativity. This in turn, will empower art students to think like a real artist in that they are free to explore real world problems (Gregory, 2009). Artwork that is created through student-centered

learning produces results that are rich in creativity since the student artist can tap into their existing stores of knowledge and express themselves thoughtfully (Yenawine, 1998).

Choice-Based Approach. While there are many learning styles to choose from, choice-based learning has shown to be the most effective approach for art education because it combines components of both constructivism and student-centered learning practices and allows the student to act as a real artist (Aprill, 2006). Schools should be a place for experiments, growth and social change which may be accomplished through freedom of choice (Baker, 2008). Most art teachers are looking for ways to foster active art learning for their students because art making is reflective of one's choices and preferences. Choice based programs are perfect because it gives students room to grow intellectually and socially (Duma & Silverstein, 2008). A choice-based program can enable students to work as a real artist with real art problems and choices (Hathaway, 2008).

In traditional art learning environments, the teacher is the center of discussion providing slides and examples of other artists' work which does not always produce the most effective results for the students. On the contrary, in a choice-based course, the student is the center of discussion and artistic growth can flourish because they can learn from their own art making (Careau, 2008).

Choice-based art education is essential to address in an art curriculum since it encourages students to pursue their interests which spawn from the influence of visual culture, and even more, a choice-based learning style can satisfy content standards (Jaquith, 2008). The curriculum allows students to decide and experience how to think

and feel like a real artist by pursuing interests, passions and expertise (Gaw, 2006). Intellectual and creative growth is achievable through a flexible choice-based art curriculum which spawns from within the student's own intellectual framework (Gaw, 2006). Students are able to choose what to learn and how long to learn it before moving off to something else (Savage, 2008). The goal is not to allow students to recreate the style of other artists but to expose students to art forms and culture (Mayer, 2008).

Choice-based learning is a practice which places the student in an environment which is identical to a real art studio (Baker, 2008). However, online learning is not a typical art studio, but what is similar are the problems and choices the students encounter (Olejarz, 1996). In a choice-based face-to-face environment, the art teacher gives the students free reign to choose the subject and materials they want to work on and how to work on it (Gaw, 2006). In a choice based online environment, the above is also true but prepared online (Villeneuve, 1997). The art teacher prepares lesson plans; games and tutorials for the student to work with at their own pace and time (Donahue-Wallace, 2004). The online environment is much more flexible and freer than a face-to-face environment because you need to attend in person at a given place and time (Davidon-Shivers & Rasmussen, 2006). Choice-based learning is a perfect compliment for an art online course because students can not only choose when and how to attend the course but when and how to work with the lesson plans (Jaquith, 2008).

In order to develop an effective choice-based online course, the content needs to be delivered through techniques and concepts with demo lessons and peer coaching (Jaquith, 2008). The lesson plan should include an analytical component which stimulates student thinking (Mayer, 2008). An analytical component can be a video lesson that

teaches the student about digital art and the student reflects on what they seen through message board postings (Savage, 2008).

The curriculum format exists in three parts and occurs simultaneously. In the first part, a series of lessons are developed under a teacher-centered structure which connects with state standards. The second part is the student-centered curriculum which exists in a setting that is facilitated by the teacher for the student. The third part is the experimental phase where risks, surprises and discoveries are produced (Gaw, 2006). At the end of the class, students share their artwork and ideas in a group setting (Jaquith, 2008).

An example of choice-based learning can be seen in the online art course conducted by Donahue-Wallace in 2004. The online art course used a message board and various interactive tools such as: video tutorials, chat rooms and flash animations. The course was created as an art appreciation course for art history which used the latest online technologies. Donahue-Wallace prepared a message board for the students to post their choice-driven reflections and experiences, but the video tutorials drove the content. The art teacher assumed the role of moderator and engaged in postings by answering student inquiries and provided additional content as needed. In addition, flash animation in the form of games was used to excite the students and allow them to apply their knowledge with potential value. For example, a sculpture game contained a series of questions that the student would fill out. At the end of the game, the flash file produced a simulated sculpture based on the student's choices. The course was reported to have effective results on the students. This shows that it is plausible to use many forms of media in conjunction with a message board to simulate a choice-driven art online environment.

What Distance Technologies Are Relevant For Art Education?

In conjunction with effective distance education practices for art education, only certain distance technologies were found to be effective:

Podcasting

Podcasting is the distribution of multimedia files across the internet in the form of videos and audio files for playback on personal computers or mobile devices (Buffington, 2008). Podcasting is relevant for art education because it can deliver art content and instructions to anyplace, anyone and anytime (Pasnik, 2007). The broadcast of content is in the form of radio-style programs with different episodes on a daily, weekly or monthly basis (Buffington, 2008). Podcasting when used for art education can empower art teachers to conduct and develop videos for a particular artist, commentary or to learn about artistic techniques (Pasnik, 2007).

An example of an effective use of podcasting for an art class is the website created for the San Francisco Museum of Modern Art (SFMOMA) reported by Roland in 2006. The website delivered podcasts on a monthly basis that presented interviews and discussions by exhibiting artists, art historians and gallery curators. The results of the podcasts in the art classroom were extremely high and well received by many schools that referred to the website for their own classroom discussions. Roland reports that the podcasts have the potential to excite students and unlocked new techniques and concepts. Roland adds that art teachers can create podcasts by utilizing video creation software such as: Apple iMovie or Windows Movie Maker to reach the same results for their own class.

Virtual Learning Environment

Virtual learning environments (VLN) is a program that simulates a space that enables the user to exist entirely online (Li-Fen, 2008). VLNs are relevant for art education because they create a social space where participants can interact with one another and with the environment (Dillenbourg, Schneider, & Synteta, 2002). The user is able to build, modify and test ideas while actively engaging in hands on art practices in VLNs (Roussou, 2004). Furthermore, the hands on approach found in VLNs encourage children to experiment, imagine and become inspired to discover and to learn (Roussou, 2004).

An example of an effective use of VLN for an art course was conducted by Li-Fen in 2008. The course was created as a virtual Café – complete with a place to relax and to chat. The Café included four art galleries and a meeting place which served as the location for featured exhibitions. The test subjects included: nine adult volunteers, four art education participants and five participants with different disciplines. The art Café was effective because the online environment created high enthusiasm for art exploration and expression to aesthetic visual information. Li-Fen points out that art educators can use VLE's to enhance and engage students in art while allowing them to talk about art and visual culture.

E-Portfolios

Goldsmith (2007) defines an E-portfolio as a software program delivered online that allows students to store and demonstrate their achievements with their instructor,

classmates, future employers, friends and family. E-Portfolios are relevant for art education because the software can collect and organize student work that demonstrates their overall performance (Gaw, 2006). Furthermore, e-portfolios are assessment tools that can aid in understanding how well a student is learning which helps in producing worth for art education in the classroom environment where test scores are very important to the survival of the curriculum (Lin, Yang, Hung, & Wang, 2006). Three basic characteristics define E-Portfolios as a reliable assessment tool for art education: 1) The ability to collect materials over time, 2) The ability to organize and select the materials, 3) The ability to add additional content and information to the original body of work (Gaw, 2006).

An example of an effective use of e-portfolios in the classroom is by Katy Hammack, a 3rd grade teacher. The teacher instructed students to gather digital files and stories, pictures and artwork to develop their e-portfolio throughout the year and reflected on their experiences. The students were excited about the project and even personalized the homepage of their e-portfolio with text, photos and decorations. At the end of the year, the students developed a critical eye for observation and were conscientious about the quality of their work. The teacher reports that the e-portfolio is an effective vehicle for regular feedback. As the students gather content for their e-portfolio and reflect on their experiences through writing, the teacher is able to see learning take place as it is happening and are able to better identify areas that need additional attention (Kolk, 2009). An e-portfolio is a central element of art assessment which becomes a profound tool to show the development of the student artist (Gaw, 2006).

Course Management System (CMS) And Bulletin Boards

Kuriloff (2005) defines Course Management Systems as software which is used to publish posts to a message board, and archive student work and to communicate with the rest of the class and instructor. CMS and bulletin boards are relevant for art education because it can store and organize student work in one place and is accessible at anytime and anywhere (Akins, Check, & Riley, 2004). A CMS can provide an environment where students can interact, exchange ideas and document their achievements (Buffington, 2008).

An example of an effective CMS used in art education was a course offered by Vasillov (2001) using Blackboard. Vasillov's purpose for the course was "to teach an art history elective to novice learners and to do this asynchronously and online" (p. 9). Blackboard gave novice learners access to primary archival resources allowing learners to explore many forms of art by artists anytime and anywhere. Vasillov explains that the CMS was effective as an art history course because content was always available and pedagogy remained consistent. In addition, the software showed provided effective assessment tool by archiving student achievements similar to an e-portfolio.

Another effective use of a CMS was a bulletin board created by Akins, Check, & Riley (2004). The lesson plan called for the students to use the internet in search of information and making art. As the students explored the internet for information, they used the bulletin board to reflect on their findings which drove analytical discussions in the form of replies. Another important component of the course was a guest artist who shared their experiences and work through the bulletin board and html pages. Afterward,

the students raised questions for the artists on the bulletin board which fostered motivation and knowledge. One benefit of the online discussion board was the personal one-on-one conversations with the artist since the artist could respond to students' posts in detail. The participation was reported to have increased to about 10 times the usual frequency than of a traditional art class. Furthermore, the traditional barriers of time and space were removed between the artist and the student through the bulletin board postings.

Why Should Online Art Education Be Embraced?

Art education online should be embraced because it is cost efficient and there are many opportunities to using technology as a means of art assessment (Aprill, 2006; Olejarz, 1996). Since K-12 schools worry about their testing performance, many programs that are not assessed are cut such as art (Richmond, 2009). As a result, students are not able to learn about art which can develop their critical thinking skills and nurture their creativity (Caruso, 2008). While it is hard to imagine art being cut from the curriculum, the online environment can bring art back to the students (Jaquith, 2008). Richmond (2009) points out that an online course helps keep art education alive in an environment where art is struggling for curriculum space. It is unthinkable to imagine a society without some creative expression and thought; and if art is removed from the classroom then creativity suffers (Aprill, 2006). Not only is there high demand to study art through new technologies from art students, there are many studies which indicate that art can be assessed more accurately and effectively online (Buffington, 2008; Freedman, 2007; Lu, 2008).

Research strongly suggests that art education should be embraced for its ability to match or even exceed face-to-face art instruction (Weida, 2007). In a traditional face-to-face art course, the teacher is often the center of attention and the instruction is executed verbally to the students- any form of testing is executed through critiques (Aprill, 2006). Even though students do learn in a traditional art course, there is a lack of effective testing instruments for art in K-12 schools which can gauge student performance that can satisfy the NCLB legislation (Richmond, 2009). Art is a subject which cannot be easily measured by the NCLB testing requirements because art is a creative expression of ones experiences which has no place on a scantron (Aprill, 2006). Ontop of that, the art teacher must compete with academic courses which affect the student's test scores (Mayo, 2007). However, there are many tools available for online art assessment, such as e-portfolios, which does not exist in a face-to-face environment and can satisfy the requirements from NCLB (Aprill, 2006; Gaw, 2006; Olejarz, 1996). Online art courses can fill the assessment gap which makes it a valuable option for art teachers (Li-Fen, 2008).

Embracing an online art course can reach beyond the temporal and spatial constraints of the class, and as a result can often add a richer and deeper perspective as students respond when they are informed and inspired (Bender, 2003; Kuriloff, 2005). Since the information age has changed the landscape of education, art must be able to respond and adapt to the changes in order to survive (Mayer, 2008). A growing belief among art educators shows that computer-mediated distance learning modules can and have enhanced traditionally-taught art courses and the art teacher must not only be aware but incorporate technology into their instruction (Olejarz, 1996). Art courses can be delivered on the web by using message boards, video tutorials and other asynchronous

technologies (Koos & Smith-Skank, 1997). These technologies closely resemble, if not more, to the effectiveness of face-to-face art instruction because students receive the same demonstrations by interacting online anytime and anywhere (Koos & Smith-Skank, 1997). An increasing number of online art courses are developed each year for K-12 schools in an attempt to revitalize the subject and to save it from being removed from the curriculum (Richmond, 2009). Many art teachers and administrators agree it is important to embrace online art education because it is an effective alternative to face-to-face learning and can be used as an effective assessment tool which satisfies the requirements set forth by the state's legislation.

Summary

The review of literature revealed many findings which determine the effectiveness of a successful on-line art course. The first major finding was the current trends in art education. Art educators are encouraged to integrate art into other subjects, such as: math and English, in order to show that art is valuable (Mayo, 2007; Rohrer, 2006). However, the findings show that integrating art into other subjects is not the most effective way to teach art to students since teaching art requires content knowledge (Mayo, 2007; Mishook & Kornhaber, 2006; NAEA, 1992; Robert, 2004). Instead, art teachers should integrate distance learning to show the value of art (Mayo, 2007).

Another trend showed that many educators view distance education as nothing but an alternative tool for face-to-face instruction instead of a valuable approach for instruction (Kuriloff, 2005). However, the findings showed that art students are more interested in courses which can integrate art and distance technologies (Howards, 2007).

In addition, distance technologies can break the barriers of time and space which can enhance learning and teaching (Kuriloff, 2005).

The literature also uncovered the content standards that art teachers need to teach in their classroom. Art teachers are required by state legislation to teach content standards to order to obtain the highest level of achievement possible in each grade level while focusing on defining knowledge, concepts and skills (Aprill, 2006). The content standards that are required include: artistic perception; creative expression; historical and cultural context; aesthetic valuing; and connections, relationships and applications (California State Board of Education, 2008, p.1; Marshall, 2006).

The literature highlights the need for assessment in art education. The NCLB has changed the public school system to include more assessment in the classroom (Freedman, 2007). Art teachers are pressured by administration to improve the student's test scores through assessment; however it is difficult to test creativity (Freedman, 2007; Mishook & Kornhaber, 2006; Robert, 2004). Mayo (2007) and Marshall (2006) both state that in order to help students improve test scores in art education, effective learning approaches and technology must be used.

Several effective instructional approaches for art online education were revealed by the literature. The first instructional approach mentioned was the constructive approach. Constructivism is an approach which allows art teachers to build on the knowledge of the students through authentic tasks which mirror actual work setting or experiences (Davidson-Shivers & Rasmussen, 2006). When used in an art setting,

constructivism allows the students to develop greater sense of responsibility and knowledge (Hesser, 2009).

The next approach was student-centered instruction. In a student-centered learning environment, the student is at the center of the instruction which motivates open-ended thinking and learning (Yenawine, 1998). An art student can develop creative and critical thinking skills in technology and social medias through student-centered learning (Gregory, 2009).

The last approach uncovered was choice-based learning. Choice-based learning integrates components of both constructivism and student-centered learning practices and allows the students to act as real artists by engaging in tasks designed for creative problem solving (Aprill, 2006). Content standards are satisfied through choice-based learning through its ability to encourage students to pursue their personal interests spawned from the influence of visual culture (Jaquith, 2008).

There were also several distance technologies uncovered in the literature which were found to be effective for online art education. The technologies found to be effective included: podcasting, virtual learning environment, e-portfolios and course management system and bulletin boards. Each of these technologies was shown to be effective for online education by mirroring the visual experience of the face-to-face environment (Kuriloff, 2005).

Online art education is possible through learning approaches and distance technologies, but is art education worth embracing? The literature revealed that students are in need of art education in order to develop their creative thinking skills (Caruso,

2008). But because art education is cut from the curriculum, due to the demands of NCLB, students are not receiving the skills needed (Richmond, 2009). Online art education can bring art back to the students (Jacquith, 2008). By embracing art through an on online art course, the content standards can be achieved and students can gain creative skills and develop an awareness of visual culture (Bender, 2003; Kuriloff, 2005).

CHAPTER 3

METHODOLOGY

The purpose of this project was to create an online art course site at a middle school in Southern California to provide supplemental course work to 6th-8th grade art students. The project featured the use of a message board, flash games, video tutorials and flash quizzes for delivery of distance educational materials to middle school art students.

This chapter presents content development of the project which includes: the content standards, lesson modules and activities. Then the next section will cover the course and program development which includes: course design, screen design, form and function, accessibility, software used, navigation and interactive components of the website. The last section is the field testing procedures and it includes: recruitment and characteristics of subject groups; procedures for permission forms, course introduction, weekly lessons; online interaction; final project presentation and survey forms.

Content Development

Content Standards

The online course site addressed the content standards for art in the areas of aesthetic valuing and creative expression through choice-driven lesson plans and activities (California State Board of Education, 2008). Aesthetic valuing instruction was delivered through a variety of web pages along with pictures and historic content. In addition, each weekly module utilized a ‘see more’ button which provided video clips

that focused on the visual arts in past and present cultures found in the world. Aesthetic valuing instruction was also present in the flash games and in the discussion board lesson plans. Creative expression was represented in a variety of online tools used to develop the artistic process. These tools were: video tutorials, discussion board, online flash gallery, oekaki (paint) board, paint sprayer flash game, coloring book flash game and detail finder flash game. Lastly, quizzes and a final project, which was the completion of a self-portrait in a style of one's choosing, served as assessment tools to document the student's achievements and growth which aligned with California State Content Standards (California State Board of Education, 2008, p1; Marshall, 2006).

Lesson Modules and Activities

A variety of tasks and activities were selected for the students based upon the researcher's personal artistic experience along with guidance from the middle school's art teacher (McTarsney, personal communication, November 23, 2009). The online course was created to prepare the students to complete a successful self-portrait using an art style through lesson modules that housed tutorials, examples and quizzes (Donahue-Wallace, 2004). The instruction, found in the lesson modules, leading up to the self-portrait was divided into three areas and labeled by each week when the instruction was introduced and unlocked as follows: week 1: art history, week 2: figure drawing and week 3: color theory. The order in which the instruction was delivered was based on the researcher and art teacher's personal experience in developing self-portraits (McTarsney, personal communication, November 23, 2009). The art history was provided first to prepare the students to choose the style. From there, the students learned how to construct the human

form; and finally the students learned how to use color to enhance their self-portraits. Each lesson module was unlocked online for the week that the lesson was introduced by simply disallowing the student from viewing the web page. The instruction was linear in order to guide the student into constructing an effective self-portrait.

Along with the lesson plans, a message board was used to document student growth. The students were required to respond to at least three different students with constructive criticism and questions each week. This allowed the students to analyze, assess and derive meaning from their own art choices which satisfied aesthetic valuing (California State Board of Education, 2008). In addition, a blog system was used on the message board as an optional component. The students used the blog as a storage device to upload art images, share website links and to blog about their personal art discoveries which expanded on their aesthetic valuing and creative expression.

Flash quizzes were used as an assessment tool and found in each weekly module. The content for the flash quizzes came from the video tutorials and included user feedback. Each quiz could be retaken many times which allowed the student to re-read or to re-watch the lesson in order to improve their scores.

Several activities were used to enhance creative expression and aesthetic valuing. The first activity was the oekaki board which used a java applet that could create images by painting or drawing- along with the ability to post to each creation similar to a message board (Wikimedia Foundation, 2010). The other activities were three flash games which reinforced the lesson modules. The first flash game was a paint spray game created by the researcher using Actionscript 3.0 and Adobe Flash that allowed the student

to paint using a simulated paint brush. This allowed the student to explore the functionality of a paint brush and nurture creative expression. The second flash game was the detail detective game created by SFMOMA and available freely to educators (San Francisco Museum of Modern Art, 2009). The detail detective game reinforced aesthetic valuing by instructing the user to find and identify detail in the artwork loaded onscreen. The last game activity was a link to a flash coloring book provided by the University of Colorado and free for educational use (University of Colorado, 2008). Black-and-white simulations of real artworks were included in the flash coloring book for the student to paint on to allow expansion of self-exploration and creative expression.

Course and Program Development

Course Design

The course design used a learner-centered design approach which provided a wide range of options for the students to explore in their online learning process (Robin Smith, 2008). The course was designed with freedom of expression in mind. However, to ensure that the students practiced the netiquettes online, the researcher moderated the behavior and activity of the students on a daily basis through the online website. The learner-centered design portions of the project were based off of the design framework developed by Robin Smith (2008) which included the following:

- Self-selected: Allowed the student to choose when to complete the online course work and provided a psychological advantage in that they were mentally prepared to work on the course materials.

- Time: Students were free to choose when to work on the lesson plans and activities. Students were given the ability to choose the time that they can work at their best.
- Place: Students were free to choose where they can concentrate and complete their work with convenience in mind.
- Pace: Students were free to set their own pace which allowed them to move through the lesson plans and activities slowly or quickly depending on their pre-existing knowledge and understanding.
- Around-the-clock-access: The online course was available to the students at all times.

The course was designed to allow the student to work on their self-portrait with materials available to them from the art class. The self-portrait was designed to fulfill aesthetic valuing and creative expression by basing it around an art style and executed through the student's own creative process (California State Board of Education, 2008, p1; Marshall, 2006).

Screen Design

The screen design focused on the aesthetic and usability of the website (Kearsley, 2000). The principles that the website included were: appropriate page numbers and font selections, careful placement of visual elements, reduction of screen overcrowding, effective organization of information using titles and headings and appropriate color combinations for all text and visual compositions (Kearsley, 2000). The colors and images used for the layout were essential to add credibility to the site and to provide

interesting visuals for the audience. To accomplish this, a split-complimentary color scheme (yellow, orange, red and blue) was selected from the site's own online tutorials to produce a very strong color contrast throughout the entire website. The reason was to demonstrate how to use the color lessons effectively and to develop a tangible and functional product. The images selected throughout the website's main design were original so that it did not violate any copyright infringement laws (Aprill, 2006). Any images or tutorials used that were not created by the researcher was carefully selected with fair use (California State Board of Education, 2008). For example, images of fine artwork were either scanned from an art history textbook or selected from public domain off the internet (Janson & Janson, 1997; Wikimedia Foundation, 2010). Stock photography was also purchased and used for the website (Istockphoto, 2010).

Form and Function

The principles of form and function used came from the Kearsley (2000) and included the following: system acknowledgement of the user, pace selection by the user, an undo function to allow the user to correct mistakes, interactive forms for pointing and typing, and default selections. In order to satisfy the criteria for system acknowledgement, the e-course utilized flash quizzes and a message board that gave instant feedback to the user. Instant feedback was also present in the form of a shoutbox modification script which was an integral part of the message board.

Pace selection was present throughout the website which allowed the user to choose how long they desired to view the lesson modules before engaging the quiz and discussion board postings. This enabled the user to engage the lesson plans and activities

at their own pace which allowed the ability to skip sections or revisit them as needed (Kearsley, 2000).

An undo function was utilized in the flash quizzes which allowed the user to undo their decisions before submission. The oekaki board, which is a discussion board with the ability to submit drawings through a drawing applet, also utilized an undo function which allowed the user to re-draw their drawings infinite times (Wikimedia Foundation, 2010). The user also had the ability to delete their drawings on the oekaki board.

Interactive forms for pointing and typing was present in several locations. One location was the main discussion board. The discussion board contained a private messaging system (PM) which allowed all of the registered users the ability to email one another, a shoutbox for instant feedback, a blog system for personal documentation and finally the message board itself for reflective postings. Another location which utilized an interactive form was the oekaki board. Each time a user posted a completed drawing- a form was available for another user to leave a reply thus providing feedback.

Default selections were present in the message board system, oekaki board, quizzes, flash games and tutorials. Once the user registered to the message board, a default profile account was instantly created which housed their email address and username. The user had the ability to choose to customize their account or to revert back to default values by the click of an undo button located in their account control panel.

The oekaki board shared a similar setup as the message board in that once the user registered to the board- an account was instantly created with default selections. The flash quizzes utilized a 'rewind' button which allowed the user to return to default values and

to retake the quizzes. Lastly, each flash game and tutorial was launched using a button that was created using Ajax scripting.

Accessibility

The art website followed the guidelines covered by the CAST's website for universal design for learning to apply appropriate validation design and accessibility (Center for Applied Special Technology, 2009). The project also used several navigation features and screen design elements for students who required alternative ways to access the information (Kearsley, 2000). The goal was to allow for more than one way to access the information stored on the art website for accessibility reasons. On each webpage was a link to a site map which displayed the entire structure of the art site in static html. The site map page contained a direct link to each of the video tutorials, message boards and activities.

Appropriate colors/enlargement of text elements were carefully created to make the site visually appealing at the same time easy to navigate. The overall color scheme for the site was bright and vibrant- utilizing a split-complimentary color scheme to attract the eye and to provide text with clarity.

The lesson modules were displayed on the homepage with accessibility in mind. Week 1, week 2 and week 3 lesson modules were displayed as huge images using a flash script that automatically rotated the images in a carousel. When the user clicked on the image of the module- the module expanded outward and can be seen clearly. Upon entry of any of the modules, the next page displayed a uniform page with big red buttons with

contrasting yellow text. The tutorial links were created as hide/show javascript elements which allowed only one link to be active on screen while the other links were not displayed. This helped direct the user to focus on one tutorial at a time. If the user clicked on another tutorial link, the previous link closed and was hidden. Each tutorial link was an image that displayed the subject of the tutorial. For example, in week 2 module the navigation page displayed these links: “Tutorial 1,” “Tutorial 2,” “Tutorial 3.” If a user clicked on “Tutorial 1” then a drop down box appeared with the words: “How to Draw the Human Form.” The buttons were designed to allow students with vision impairments to view each link as clearly as possible. Once access to a tutorial was achieved, then a flash file loaded automatically with visual and verbal instructions.

Validation html “ALT” tags were incorporated into the site which can be read by a screen reader for people who are visually impaired (Kearsley, 2000). Each image, button and link was coded with an ALT tag throughout the site to conform to validation requirements for websites.

Software Used

The e-course website was constructed using standard web development programs in the industry which were: Adobe Photoshop, Illustrator, Dreamweaver, Flash and Captivate. Adobe Photoshop and Illustrator programs were used to develop the overall layout design for the e-course and optimization of images (Kearsley, 2000). Adobe Dreamweaver program was used to construct the coding and apply the layout from Photoshop into a functional web page. Adobe flash program was used in conjunction with Dreamweaver to create interactive components for the students. The rationale behind

using flash was to allow the student to interact with the website and to complete on-line quizzes. Adobe Captivate was used to develop the online tutorials. Each tutorial tested the student's experience and content knowledge of each lesson. Graphic design principals based on personal and professional experiences was used in the layout construction to provide a professional 'look and feel' for the art students (Kearsley, 2000). The intent was to make the students feel comfortable and confident in using the website.

Navigation

A simple navigation is the key to any website design (Kearsley, 2000). Website pages are a collection of many files containing valuable content and the user must know how to navigate between them quickly and effectively (Webopedia, 2009). The users must at all times know where they are on the site otherwise the users will be disorientated (Kearsley, 2000). A non-linear navigation format was used to allow the user to choose where they wanted to go from the start- bypassing unnecessary pages and other runarounds (Webopedia, 2009).

A static navigation bar located at the top of each page provided a non-linear functionality. This was to ensure that the user could easily recognize the navigation bar and navigate through the site with ease. To reduce clutter of major categories, a javascript drop-down menu was installed on the navigation bar. For users with disabilities and for browsers which have their images turned off, a simple text menu was positioned at the footer (bottom) of every web page along with a link to the site map.

Interactive Components

Video Tutorials. Video tutorials were included throughout the website in many key locations: homepage, lesson modules and paint flash game (see Figure 3.1). The video tutorials were created using a variety of programs such as Adobe Captivate, Premiere and After Effects; and the video tapping was taken from a mini-video camcorder. Some video tutorials were also feed directly from youtube.com and from SFMOMA websites (YouTube, 2010; San Francisco Museum of Modern Art, 2009) All of the video was embed into a flash file and displayed from the website using a popup Ajax script.



Figure 3.1: Details of Video Tutorials.

Message Board Design and Function. The message board selected and installed on the website was a phpBB3.0 board which can be downloaded free from:

<http://www.phpbb.com/>. The main purpose of the message board was to facilitate asynchronous communication and documentation of student progress. The message board

also included a shout box and a blog system which were not included in the initial files. These two additional features were downloaded from <http://php.com> and installed on the message board using the instructions included in the downloaded files. Lastly, an announcement iframe html script was installed on the front page of the message board to feed announcements and updates so that the students knew what to do and when.

The message board was designed to mirror the layout of the website so that there was visual consistency throughout (see Figure 3.1). The same static navigation bar was used on the message board to ensure complete maneuverability throughout the site.

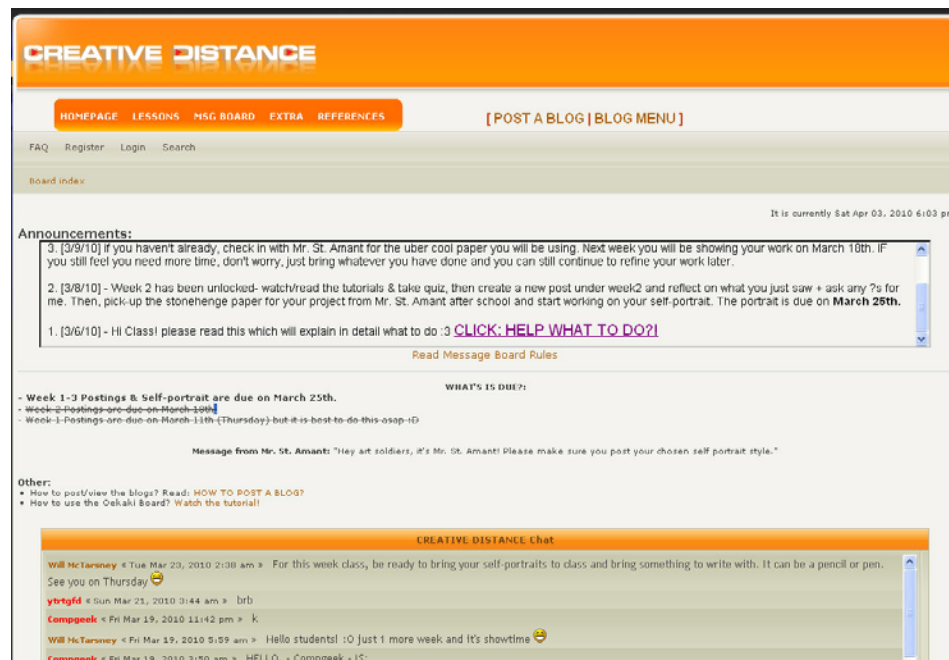


Figure 3.2: Details of Message Board Form and Function.

Oekaki Board. One of the optional activities available for the user on the website was the oekaki board (see Figure 3.3). According to Wikipedia, an Oekaki board is web software that combines a message board with a drawing program to store and post drawings (Wikimedia Foundation, 2010). The inspiration to use an oekaki board came

from the course that was developed by Donahue-Wallace in 2004. The oekaki board was downloaded free from <http://www.ninechime.com/products> and installed on the website using a MYSQL Database.

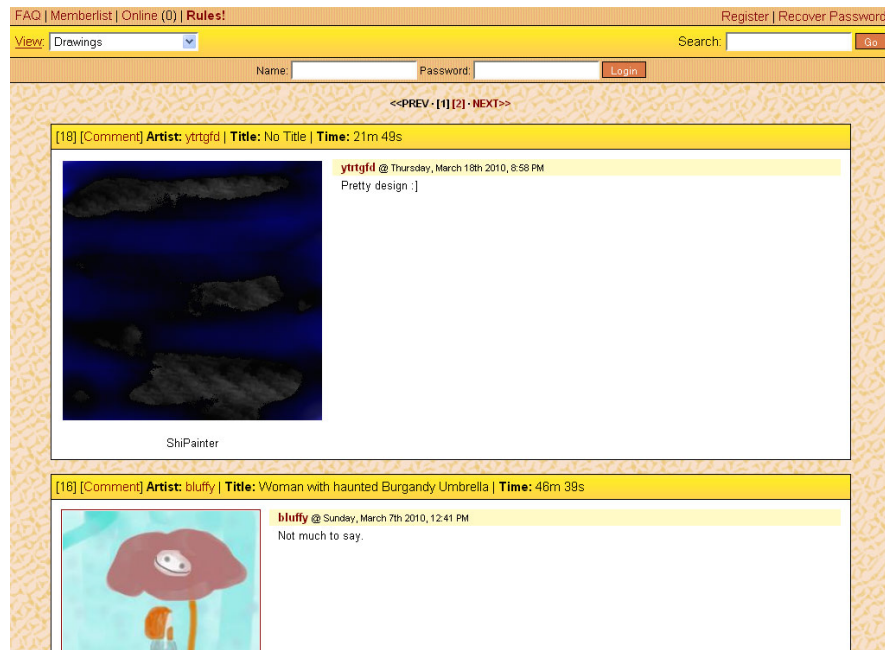


Figure 3.3: Details of Oekaki Board Form and Function.

Flash Games. Three flash games were used for the project to reinforce aesthetic valuing and creative expression (see Figure 3.4). The first flash game was a flash paint program that allowed the student to use their mouse as a paintbrush and constructed using ActionScript 3.0. A series of controls allowed the user to adjust the brush's thickness, size and color. A series of slides were displayed in the background with instructions asking for the user to select appropriate colors based on the question. For example, slide one instructed for the user to paint a purple square on top of a yellow square to demonstrate a complimentary color scheme. At the end of the slides, the user was given the opportunity to paint whatever they desired using the painting tools. The paint program

also included a button to a video clip, taken from youtube.co, and feed directly into the flash file using ActionScript 3.0 scripting.

The second flash game was a link to a flash game provided by the San Francisco Museum of Modern Art (San Francisco Museum of Modern Art, 2009). The detail detective flash game was available for educator and student use freely provided that proper citations and credit was displayed. The detail detective game loaded artwork to the right hand side of the flash screen and the user had to click on an area of the artwork that matched a small thumbnail of the detail from the left hand side of the screen.

The third flash game was a coloring book which allowed the student to paint and explore pre-existing artworks. The coloring book was a direct link to the University of Colorado's website (University of Colorado, 2008). The flash program loaded many artworks in outline form and the user could then paint in the shapes with any color that they choose. This functionality allowed the user to experiment with color.

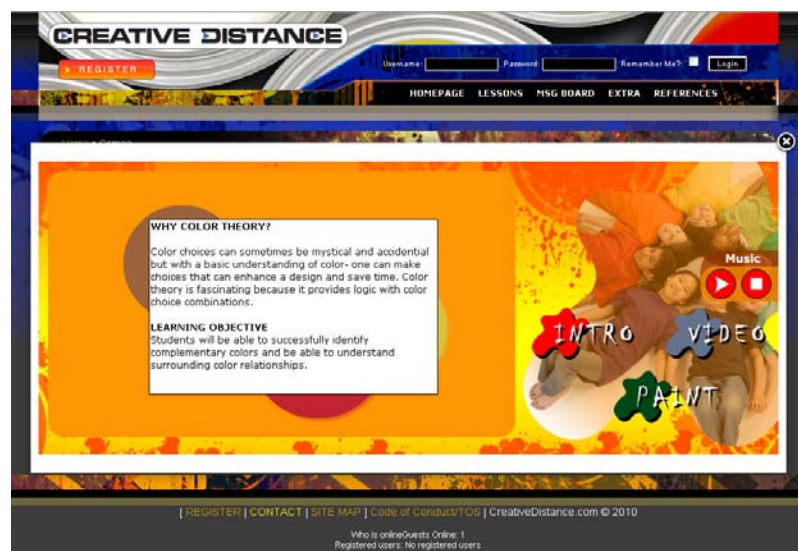


Figure 3.4: Details of Flash Games.

Online Flash Gallery. An online flash gallery was installed and available inside the week 1 learning module to provide a fun and interactive experience that mirrors an art museum (see Figure 3.5). To accomplish this, a pre-made flash gallery was purchased online at: <http://activeden.net/item/xml-fine-art-gallery/23341> and modified to be used on the website with self-portrait images and a video clip taken from the SFMOMA website (San Francisco Museum of Modern Art, 2009). The software allowed the student to visit a simulated art gallery and view paintings as enlargements.

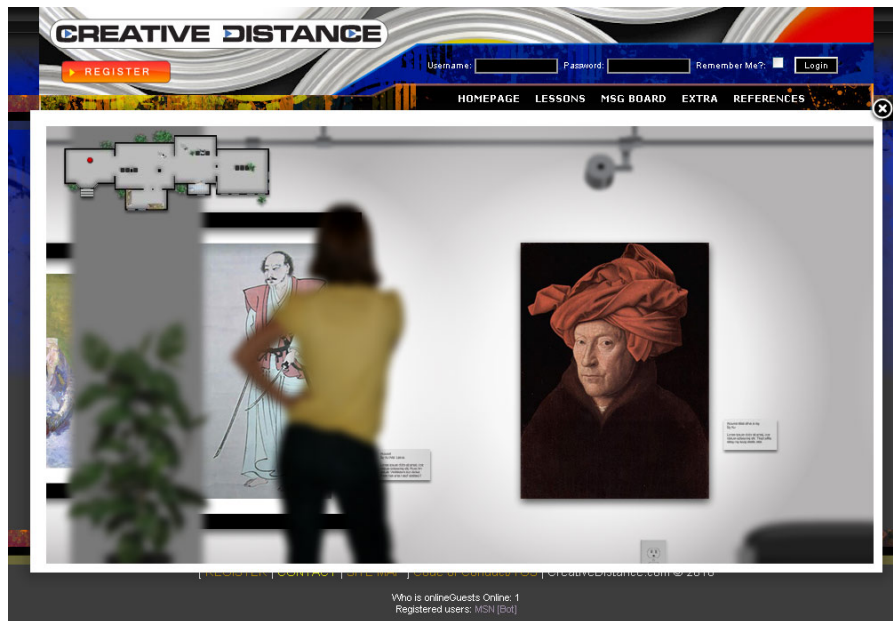


Figure 3.5: Details of Flash Gallery.

Field Testing Procedures

Recruitment and Characteristics of Subject Groups

The art e-course was administered to art students ranging from 11-14 years of age at a middle school in Southern California during regular full-time school hours. A total of 30 art students were contacted by the researcher and art teacher in-person and in the art

class prior to the introduction day outlining the characteristics and features of the course but only 27 students were given permission and attended. The total number of approved participants was 2 teachers and 27 art students.

The art teacher was identified through a need assessment survey conducted in the previous year by the researcher. The art teacher, who assisted in the project, only interacted with the students by providing the introduction letter and consent forms. The art teacher also participated in an expert content survey.

While another teacher at the same school was identified through an instructional design course that the researcher attended. The teacher only participated with the expert content survey and not with the students. The two teachers possessed knowledge of computer technologies but only the art teacher possessed knowledge of fine art. The teachers were full-time employees who teach students at the middle school.

The art students who participated were dedicated to learning more about art and possessed a wide array of creative skills. Some students had prior knowledge of the course lessons while others did not. All of the students attended the art club as an after school activity.

The goal was to help the art students gain additional knowledge of basic art principles such as: color theory, how to draw the human form and art aesthetics related to art history. The students were exposed to typical art terms and concepts which were used to critically assess their own art work. There was no compensation of any kind and there were no control or comparison groups.

Procedures for Administrating the Permission Forms

One week before the administrating of the e-course, the researcher and art teacher addressed the class and presented an introduction to the course by explaining what the project entailed and its goals. A debriefing statement was also included in the introduction letter and outlined the potential risks involved such as: message board postings and images deemed inappropriate by the parents. This was vital to protecting against or minimizing the potential risks. A series of documents was hand-delivered to any art student who was interested in taking the optional e-course (see Appendices D, E & F). The documents were: introduction letter to students and parents/guardians with permission slip attached with a link to the website for pre-screening, course syllabus outlining the purpose of the course and the informed consent form. It was made clear on the consent form that there was no compensation or award for completing or not completing the e-course.

If the parents/guardians and student(s) decided and agreed to participate in the e-course, they signing the permission slip and consent forms. The permission slip and consent forms were collected on the first day of the next week by the art teacher and stored in a locked filing cabinet at the middle school before the researcher arrived in-person to deliver the official introduction of the course. Only the art teacher had access to the forms. Those who did not have permission did not participate and they were not be coerced into taking any content related to the e-course. The art teacher then supplied additional instructions to the approved students (url to website; requirements such as email address; and materials). The researcher was not present during the collection of the

permission and consent forms, however the researcher was present on the introduction day.

Procedures for Administering Course Introduction

The students who were given permission continued with the course with further instructions. The art teacher took track of who was allowed to attend by calling out the names from the approved consent form. Then from there, the students who were approved formed a line outside of the classroom in order to walk to the library's computer lab. The students who were not given permission resumed with the art teacher's initial course plans and were not allowed to obtain the url to the website, register to the message board or attend the introduction presentation.

The course was then formally presented in the computer lab by the researcher on the first day of the online course with a brief overview of the course offerings (see Appendix F). The researcher began by reading out loud the information from the introduction letter, consent forms and online disclaimers (see Appendices D & E). Then the researcher had the students sign up to the message boards with their valid email address. Next, the researcher explained how to engage in the weekly lessons and provided a demonstration of key components of the website such as: online gallery, shout box and flash games. It was then explained that the goal of the course was to develop a self-portrait on the final day and the materials to complete the project was free. Lastly, questions from the students were also answered by the researcher and the art teacher regarding the course and expectations. At the end of the introduction, the students were granted lab time on campus to view the website and to work on their lesson assignments.

Procedures for Unlocking Weekly Lessons

Each week, for a total of 3 consecutive weeks, the lesson plans were unlocked and available for the students and accessible only through the course website. The students were informed of the unlocking of the weekly lessons from an announcement post on the front-page of the message board and from an announcement made on the shoutbox. Furthermore, the homepage was updated with the correct week unlocked.

Once a lesson was available, the student clicked on the module for that week and followed the onscreen instructions. Each weekly module asked the students to view the video tutorials and to post on the discussion board and include their reflections on what they saw and experienced. Each session included links to various resources for additional, optional content. Concurrent with the onscreen lesson plans- the students planned, develop for their final project.

Procedures for Online Interaction

The researcher took on the role of an active participant utilizing the techniques from both constructivism and choice-driven learning covered in the literature to ensure that the students stayed on task and obtained additional knowledge (Aprill, 2006; Davidon-Shivers & Rasmussen, 2006; Donahue-Wallace, 2004; Hathaway, 2008; Hesser, 2009). Once a student posted on the message or oekaki board, the researcher responded with additional encouragement and provided additional links or content to expand the conversation. Furthermore, the researcher answered questions instantly using the shout box and provided updates/reminders using the shout box so that the students knew what

to do and when. A total of 12 students on the message board and a total of 6 students on the oekaki board were engaged by the researcher through online interaction. An unknown number of shout posts was also posted by the researcher to answer student questions in a synchronous environment.

Online behavior was moderated by the researcher by providing a full disclaimer on the website and message board. The disclaimer was strictly adhered too and was applied to all online interactions such as: oekaki board, message board and shout box.

Final Project Presentation

The total number of students that attended the final project meeting on the 3rd week was 18 students. The researcher visited the class as an observer and the art students presented their final project to the rest of the class in a casual format by placing their project on their desks. Some questions were asked by the researcher to the students such as the nature of their art style and goals. The purpose was to make the critiquing process as natural as possible- which mirrored choice-based learning approach and to enhance the student's perception of the content standards that were covered by the e-course (California State Board of Education, 2008; Hathaway, 2008).

Feedback Survey Forms and Conclusions

Feedback surveys were hand-delivered in-person by the researcher at the end of the course to 2 teachers (see Appendix G) and to the 18 remaining art students (see Appendix H). The surveys were arranged into parts with related questions. The survey for the teachers focused on their reactions/suggestions for improving the course: lesson

plans, tutorials, board postings and flash games. The survey for the art students focused on their reactions/suggestions for improving the course: lesson plans, tutorials, board postings and flash games; and overall satisfaction with the course.

The feedback survey forms were collected by the researcher at the end of the final day and used to construct the final results of the project. The surveys did not contain any names and the data was de-identified. No names or code numbers was written on the survey sheet, discussion board, blog, private messaging system (included in the message board), paint board or chat box.

The consent forms was collected by the researcher from the art teacher at the end of the course and stored in a manila envelope before being destroyed upon the completion of the course and study.

CHAPTER 4

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The research that was reviewed explored certain factors that can create a successful on-line art course tied to the purpose of the study. The purpose of the study was to supply supplemental course work to 6th to 8th grade students at a middle school in Southern California. State legislation requires art teachers to teach the content standards but teaching the required content has shown to be difficult because art programs are cut in favor for programs which can be tested using scoring methods (Aprill, 2006; Richmond, 2009). Understanding how to create art programs which can teach the content standards while providing a means to test students can be a daunting challenge for art teachers (Rohrer, 2006). Thus, the need for a way to help art teachers of the visual arts effectively incorporate distance technology in the curriculum was the driving force behind this project.

Research was conducted to aid in finding a possible solution to the problems. The areas of study were: the current trends found in art education, state content standards required, effective distance education practices, effective instructional approaches, relevant distance technologies and the rationale behind why online art education should be embraced. The research provided the tools necessary to develop the e-course. The methods used for the completion of the project included: content development, course and program development and field-testing procedures.

The first major trend researched showed that art teachers are finding ways to integrate art into other curriculums in order to show that art education is valuable (Mayo, 2007; Rohrer, 2006). Some art teachers are applauded by school administrators to integrate art into other subjects such as math, English and science; but some questions arise: is art worth saving and is integrating art into the curriculum as effective as a normal art class (Mayo, 2007)? Art is worth saving because it is important for students to learn self-awareness and creativity which develops effective problem solving skills (Caruso, 2008). However, the research also shows that integrating art into other subjects is not as effective as a full art course (Mishook & Kornhaber, 2006; National Arts Education Association, 1992; Mayo, 2007; Robert, 2004). Instead, it was recommended that art teachers integrate distance learning and assessment tools designed for art teaching (Mayo, 2007; National Arts Education Association, 1992).

Another trend is the perception of distance education as an alternative tool to face-to-face instruction rather than a new approach for art instruction (Kuriloff, 2005). Many educators view distance education as assets but they also view distance education as nothing more than an alternative delivery system for pedagogy instead of a newer tool for using pedagogy (Kuriloff, 2005). On the other hand, the chance to extend and exceed the constraints of the traditional classroom could lead to enhanced learning and teaching (Kuriloff, 2005). Most art students want to embrace distance education rather than learn meticulous formal skills found in traditional art courses, but educators need to embrace distance education in order to adapt to the demands and interests of their students (Buffington, 2008; Howards, 2007).

The trends showed that art education is only effective in a full art course and that art students want to embrace online education. However, to be able to successfully integrate art education with distance technologies- the art teacher needs to design the online course to include content standards, learning approaches and online technologies for art education. Art teachers in the United States are required to teach the contents standards set by the state's legislation (Aprill, 2006). The key areas that the art teacher is required to teach are (California State Board of Education, 2008, p1; Marshall, 2006): artistic, perception, creative expression, historical and cultural context, aesthetic valuing and connections, relationships and applications.

The art teacher and school administrators can decide how to deliver the standards to the students since the standards are meant to inspire a wide variety of teaching strategies (Content Standards: Standards & Frameworks, 2001).

In order to formulate an effective online course, the art educator needs to develop learning approaches (Mayo, 2007; Marshall, 2006). The challenges of distance education lead to this critical question: in what way can art educators use distance technology that address assessment and student needs? King-Hammond (2007) and Popper (1993) both state that the use of technology alone is not enough to produce an effective art course. The research shows that only a few learning approaches are effective for technology driven art courses.

The first learning approach is constructivism. Constructivism is defined as an approach that builds on students' prior knowledge (Davidson-Shivers and Rasmussen,

2006). An art course that utilizes constructivism can allow art students to complete a series of familiar tasks which adds value to their personal development.

The second learning approach is student-centered learning. In a student-centered learning environment, the art student is motivated through practices and open-ended discussions which focus on their individual expression (Yenawine, 1998). Student learning can be improved through student-centered learning environments utilizing online technologies and at the same time provide an ideal opportunity for school reform (Brooks & Brooks, 1999; Milbrandt, Felts, Richards, & Abghari, 2004; Vygotsky, & Kozulin, 1986). The art teacher must release control and allow art students to explore the technologies and at their own pace which in turn develops creative skills (Gregory, 2009).

The third learning approach is choice-based learning. Choice-based learning is seen as the most effective approach for art education because it combines the components of both constructivism and student-learning and allows students to act as real artists (Aprill, 2006). Choice based learning programs are perfect for an art learning environment because it gives students room to grow intellectually and socially and allows them to solve critical art problems (Duma & Silverstein, 2008; Hathaway, 2008).

The research showed that only certain online technologies are effective for online art education. The first technology for art education is podcasting. Podcasting is the distribution of multimedia files across the internet in the form of videos and audio files for playback on personal computers or mobile devices (Buffington, 2008). The reason

why podcasting is an effective technology for art education is because podcasting allows visual distribution of learning.

The second technology that was covered was virtual learning environments (VLN). VLN is a program that simulates a space that enables the user to exist entirely online (Li-Fen, 2008). The reason why a VLN is an effective choice for art education is because the technology creates a social space where participants can interact with one another and with the environment (Dillenbourg, Schneider, & Synteta, 2002). Art students can learn by viewing art images and engaging with each other in a virtual realm (Roussou, 2004).

The third technology that was covered was E-Portfolio. E-Portfolio is software that can collect and organize student work that demonstrates their overall performances online (Gaw, 2006). Art students can upload their work to e-portfolio software and self-reflect. The teacher can also use an e-portfolio as a means of assessment (Gaw, 2006).

And lastly, the next technologies covered were course management (CMS) and bulletin boards. A course management system is online software that can be used to publish posts to a message board and archive student work and to communicate with the rest of the class and instructor (Kuriloff, 2005). The reason why CMS/bulletin board system is essential for art online education is because the software allows art learning to occur asynchronously and online (Vasillov, 2001). Art students can be treated to a wide variety of activities through a CMS and the bulletin board allows the students to engage with each other in an online art community (Riley, 2004).

Is it worth it to create an online art course to address the challenges? Art education online should be embraced because it is cost efficient and there are many opportunities to using technology as a means of art assessment (Aprill, 2006; Olejarz, 1996). Since assessment is one of the major problems facing art education- online art education can add much needed value and allow for the content standards to be fulfilled (Richmond, 2009). Not only is there high demand to use online education in art courses but many studies indicate that art can be assessed more accurately and effectively online (Buffington, 2008; Freedman, 2007; Lu, 2008). Embracing an online art course is challenging for the art teacher as well because they need to integrate effective learning approaches with technologies designed for art learning- however, the results can often add a richer and deeper perspective as students are informed and inspired (Bender, 2003; Kuriloff, 2005).

The online art course that was created for this project utilized the research and methods found to be effective in order to engage the purpose of this study. The methods used for the project included the following: content development, course and program development and field testing procedures.

Content development included the content standards and lesson modules and activities (California State Board of Education, 2008). Since the online course had to address the content standards- the course focused on the areas that the art teacher was unable to reach which was: aesthetic valuing and creative expression. Aesthetic valuing was delivered through a variety of web pages along with pictures and historic content. Creative expression was delivered through a variety of online tools such as video

tutorials, discussion board, online flash gallery, oekaki board, paint sprayer flash game, coloring book flash game and detail finder flash game. Finally, quizzes and a final project were a part of the course in order to align with the assessment requirements of the California State Content Standards.

Lesson modules and activities were chosen based on the researcher's personal artistic experience along with guidance from the middle school's art teacher (McTarsney, personal communication, November 23, 2009). The course centered on the successful completion of a self-portrait using an art style through lesson modules and each lesson module was divided into three areas and labeled by each week when the instruction was introduced: week 1: art history, week 2: figure drawing and week 3: color theory. The order of the 3 weekly lesson modules was based on the researcher and art teacher's personal experience in developing self-portraits (McTarsney, personal communication, November 23, 2009).

Along with the lesson plans, a message board was used to archive student achievement and to allow the student to self-reflect. Flash quizzes were also used as assessment tools to provide online feedback and were included in each weekly module.

Several activities were used to enhance creative expression and aesthetic valuing. The oekaki board and flash paint sprayer were used to nurture student's creativity, while the coloring book and detail finder were used to enhance aesthetic valuing (SFMOMA, 2009; University of Colorado, 2008; Wikimedia Foundation, 2010).

The course and program development included: course design, screen design, form and function, accessibility, software used, navigation and interactive components. The course design used a learner-centered design approach which provided a wide range of options for the user to choose from (California State Board of Education, 2008, Hathaway, 2008). Freedom was paramount in the course design because creativity needed to be encouraged even through the design of the website (Kearsley, 2000). However, the website and message board included rules and guidelines to ensure that the students behaved properly (Aprill, 2006). The course was also designed to allow the student to work on their self-portrait in a linear fashion and to use lab time from the school.

Screen design was carefully constructed so that the site had high aesthetics and usability (Kearsley, 2000). Careful placement of page numbers, font selections, visual elements, reduction of screen overcrowding, organization of information and visual compositions were laid out throughout the website (Kearsley, 2000).

The form and functions that were used for software included: system acknowledgement, pace selection, undo function, interactive forms and default selections (Kearsley, 2000). The quizzes, message board and flash games used these principles to provide high usability and instant feedback to the user.

Accessibility design was also used throughout the website for students who required alternative ways to access the information (Center for Applied Special Technology, 2009). To accomplish this, the site utilized a site map, appropriate colors/enlargement of text elements, lesson modules were accessible through a non-flash

page and images included “ALT” tags for students who were visually impaired and required a screen reader.

In order to accomplish the creation of the entire website- appropriate software was used. The software used was Adobe Photoshop, Illustrator, Dreamweaver, Flash and Captivate. In addition, graphic design principals were used as well in order to layout the website properly and to provide a professional ‘look and feel.’ The intent was to make the students feel comfortable and confident using the website.

Navigation was essential to the design and flow of the entire website and had to be accessible on every page (Aprill, 2006). The navigation was created as a graphical nav bar which rest at the top of each page. In addition, the nav bar utilized a drop down menu to incorporate sub sections so that there was no information overcrowding.

Next, interactive components were installed into the website to provide content and interactivity for the students. One interactive component that was used was video tutorials. Each weekly module included a video tutorial which incorporated information through visuals and sound. All of the video tutorials were created using a variety of programs such as Adobe Captivate and Adobe Flash. Message board and oekaki board were used to allow the student to interact with other students and to also post synchronously and asynchronously. The message boards were open-source software and installed on the website using a database backend. The final interactive components were the online gallery and flash games. The online gallery was installed in week 1 and showed a variety of artworks by old masters. The flash games included a variety of content that was tailored for the aesthetic valuing and creative expression.

In order to see whether or not it was possible to use utilize an e-course for supplemental art work, field testing was conducted at a middle school in Southern California ranging from grades 6th-8th. Permission slips and a consent form were delivered to 30 students and collected a week later by the art teacher. Out of the 27 students who obtained permission, only 18 students remained at the end of the course due to illnesses or inability to continue.

The website was field tested after school in the school library's computer lab and at home. Each week on each Monday the website's lesson plans were unlocked and the students viewed the tutorials, took the quizzes and wrote on the message board. Starting on the second week, the art teacher passed out paper and materials for the students to use for their self-portrait final.

Online interaction was also observed during the field testing by the researcher. Whenever the student required additional knowledge, the researcher engaged the conversation with a constructive approach (Davidon-Shivers & Rasmussen, 2006). The researcher also utilized the shout box in order to provide instant feedback to the students.

At the end of the final week, the researcher observed the student's final project and the students completed a four page survey paper. A survey paper was also passed out to two content teacher experts who were identified by the researcher. The results of the surveys were completed a week later and included in the analysis of the project in order to see if the project was successful in supplying supplementary course work to middle school students.

Conclusions

There were two surveys used for the completion of this project (see Appendices G & H). The first survey was the teacher survey and the second survey was the student survey. The purpose behind the teacher survey was to gather data about the effectiveness of the website from two teachers in the field. Likewise, the student survey was used to gather data from the test subjects on the effectiveness of the website and their learning process.

The results were arranged into two parts: teacher survey and student survey and each part were further divided into categories based on the questions asked. The teacher survey contained a total of four parts, while the student survey contained a total of three parts. Furthermore, out of the 27 students who were approved to work with the project- 18 students remained and attended the final project presentation and only 12 students submitted their completed survey.

Results of Teacher Survey

Part 1 – Personal Experiences with Online Education. The questions in the first section of the survey requested the two teachers to rate their overall knowledge and familiarity of online education and if they were to use online education in the own classroom (see Appendix G). Two open-ended questions along with one likert scale-type question and two yes/no/do not know questions were used for the survey. Part one consisted of a total of five questions.

Question 1: “Have you observed an online art course before? If yes, please briefly explain your experience.”

Possible responses: Open-ended

Responses: One of the respondents has taken an online web design course but they have not observed an online art course for a class before. The other respondent has observed an online art course before.

Question 2: “Please check the statement(s) which best represents your familiarity with online education.”

Possible responses: “1) I have used online education in my own classroom; 2) I am somewhat familiar with online education and would use it in my class; 3) I have no knowledge of online education; 4) I know what online education is but would not use it in my class.”

Responses: One of the respondents was somewhat familiar with online education and would use it in their own classroom. The other respondent has used online education in the classroom.

Question 3: “Does your school district provide professional training for teachers wishing to incorporate online education?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: One respondent selected “yes;” while the other respondent selected “yes” and indicated that their school district provides very little training.

Question 4: “Does your school provide a fully functional computer lab which is available for student use if an online class is used at your school?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents indicated that their school provides a fully functional computer lab that is available for student use.

Question 5: “What type of classroom do you teach? Would online education help reach your goals in achieving all of the content required by the state standards?”

Possible responses: Open-ended.

Responses: One respondent teaches a traditional art class and agrees that online teaching would satisfy some art standards. The other respondent teaches a computer applications course and believes that online education would help greatly in reaching the students who are not able to take the art course due to schedule conflicts.

Part 2 – Effectiveness of Website and Course Instruction. The second section of the survey requested that the respondents rate the effectiveness of the website’s navigation, form and function (see Appendix G). In addition, the respondents answered a series of open-ended and likert scale-type questions pertaining towards the effectiveness of the

lesson plans and content. Six likert scale-type questions, seven open-ended questions and five yes/no/do not know questions were used to verify potential responses Part two consisted of a total of eight-teen questions.

Question 1: “Was the art online course easy to access and to navigate?”

Possible responses: Open-ended.

Responses: One respondent stated that the website was user-friendly but had some difficulty understanding how to post blogs but eventually figured it out. The other respondent believed that the course was easy to navigate and to understand.

Question 2: “Please rate the effectiveness of the course (1 = poor ; 2= average; 3= best) in each area according to your observations.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority Responses: Week 3 received the largest success rating by the content experts. The website had high average to best rating of effectiveness (see Table 4.1).

Content	Week 1	Week 2	Week 3
Tutorials	1= average 1= best	1= average 1= best	1= best 1= best
Quizzes	1= best 1= best	1= average 1= best	1= best 1= best
Board	1= best 1= best	1= best 1= best	1= best 1= best

Table 4.1: Survey Results for Part 2, Question 2.

Question 3: “What do you suggest could have been better for the weekly lessons?”

Possible responses: Open-ended.

Responses: One respondent suggests finding some way to email or alert each student when a lesson was unlocked. The other respondent had no comment.

Question 4: “Did you find the discussion board postings effective and helpful for the students? If not, please explain what could have been better.”

Possible responses: Open-ended.

Responses: One respondent believed that the discussion boards are helpful because students are accustomed to communicating online in this fashion and that this was a familiar mode to them and therefore very useful for learning. The other respondent found that the discussion board was a very helpful tool and noticed that the students enjoyed chatting and interacting with each other.

Question 5: “Were the online tutorials less or more effective when compared to face-to-face demo lessons? Please explain.”

Possible responses: Open-ended.

Responses: One respondent felt that the tutorials were a little less effective than face-to-face instruction because in a traditional learning environment you can tweak information to adjust to the audience’s needs and have immediate checking for understanding. The other respondent found that the online tutorials were very helpful and that the tutorials can be viewed over and over.

Question 6: “Where you familiar with the blog/chat system? If you where familiar, would you use them in your own class?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents indicated that they were familiar with the blog/chat system and both respondents agreed that they would use them in their own classroom.

Question 7: “Please circle a number from 1 to 3 that best represents the effectiveness of this course as a choice-driven learning course (a course which allows the student to make choices similar to that of a real artist).”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority Responses: One responded selected 2.5 as their rating; while the other respondent selected 3 as their rating and indicated that this is from a non-artist’s perspective.

Question 8: “What suggestions do you have, if any, that could make the course more effective as a choice-driven course?”

Possible responses: Open-ended.

Responses: One respondent felt that holding contests while attracting the student’s interests could make the course more effective. The other respondent had no comment.

Question 9: “In your observations, were the games beneficial to the course?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents agreed that the games were beneficial to the course.

Question 10: “Did you know what an oekaki board was before observing this course?

Would you use an oekaki board for your own course?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents did not know what an oekaki board was before observing the course. One respondent would use an oekaki board in their own course; while the other respondent did not know if they will use an oekaki board in their own course.

Question 11: “Was unlocking each module per week effective and send the students in the right direction?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents agreed that unlocking the modules per week send the students in the right direction.

Question 12: “Would you have preferred to have the student have access to all of the content from the beginning? Please explain.”

Possible responses: Open-ended.

Responses: Both respondent disagreed with this statement and believed that a sequential approach was more appropriate. Furthermore, one of the respondents liked the idea of forbidden info that the students will have to stick around to earn.

Question 13: “Please gauge your reaction to using a discussion board as an e-portfolio to house student progress/work.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority Responses: One respondent selected “average” as a reaction to the statement; while the other respondent selected “best.”

Question 14: “Do you believe using a message board to write reflections and progress as an important part of the course? Please explain.”

Possible responses: Open-ended.

Responses: Both respondents agreed with this statement. One respondent indicated that the students do not like to feel isolated in their learning and a message board was helpful in this area. The other respondent felt that the message board allowed the students to self-reflect- which is effective for art students since they like to articulate what they are doing.

Question 15: “Please circle a number from 1 to 3 that best represents your computer knowledge.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority Responses: Both respondents selected “best” as their computer knowledge.

Question 16: “Please check the statement that best represents your knowledge of art subject matter.”

Possible responses: “1) I have proficient knowledge of art content/can teach the subject; 2) I have minimal knowledge of art content; 3) I have no knowledge of art content.”

Majority Responses: One respondent selected statement #1; while the other respondent selected statement #2.

Question 17: “Would you use online quizzes as a means of assessment for your own course?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Both respondents agreed that they would use an online quiz as a means of assessment for their own course.

Question 18: “Overall, what would you rate this course as an effective assessment tool?”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority Responses: Both respondents selected “best” indicating that the course is an effective assessment tool.

Part 3 – Effectiveness of Student Work. The third section of the survey requested that the respondents rate the effectiveness the course had with the students overall (see Appendix G). One likert scale-type and three yes/no/do not know questions were used to verify potential responses. Part three consisted of a total of four questions.

Question 1: “When observing this course did you find, if any, students were lost/needed any helping with staying on task?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Only one response was given and the respondent agreed that the students needed help staying on task.

Question 2: “Would adding more content for the students be more or less helpful?”

Possible responses: “More Helpful Less Helpful No Change”

Responses: Both respondents felt that adding more content would be more helpful.

Question 3: “Would Did you find that the discussion/reflections on the message board enhanced the student’s final project?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Only one response was given and the respondent agreed that the discussion and reflections enhanced the student’s final project by allowing them to bounce ideas off of other’s ideas.

Question 4: “Did the student(s) stay on task?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Responses: Only one response was given which stated that the students did not stay on task.

Part 4 – Conclusions. The questions in the fourth section focused on the overall effectiveness of the course and required the respondents to rate the website layout and presentation (see Appendix G). Furthermore, the respondents were asked to provide further suggestions and comment to improve the course. Two likert scale-type questions were used to verify potential responses along with three open-ended questions. Part four consisted of a total of five questions.

Question 1: “Was the website layout (please circle all which apply to you).”

Possible responses: “1) Confusing; 2) Clear/Focused; 3) Worked Well; 4) Fun/Entertaining; 5) Not Fun & Not Entertaining; 6) Did Not Work Well.”

Majority Responses: Both respondents felt that the website layout was clear; focused; worked well; and was fun and entertaining (see Table 4.2).

Confusing	Clear/Focused 2= (X)	Worked Well 2= (X)
Fun/Entertaining 2= (X)	Not Fun & Not Entertaining	Did Not Work Well

Table 4.2: Survey Results for Part 4, Question 1.
X= confirmed response.

Question 2: “What would you have improved about the website layout/presentation?”

Possible responses: Open-ended.

Responses: Both respondents enjoyed the layout’s presentation and one respondent thought it was stimulating and liked the choice of colors.

Question 3: “What did you find as the most successful aspect of the course?”

Possible responses: Open-ended.

Responses: One respondent believed that the best aspect of the course was the ability to do things more than once and learners learn best by reviewing/repeating exercises. The other respondent liked the progression and website layout.

Question 4: “Please circle a number from 1 to 3 that best represents your interest after you took the course.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Responses: Both respondents selected (3) “best” indicating that they had high interest after taking the course.

Question 5: “What suggestions/comments do you have with improving this course?”

Possible responses: Open-ended.

Responses:

- A respondent felt that all of the ingredients for a highly successful course were there, but because the students saw the course as optional- the participation rate suffered and the students were not focused. The respondent felt that an incentive such as an art contest for a prize could help motivate the students to stay on task.

Results of Student Surveys

The art club started out with a total of 30 students, however only 27 students were approved to attend the course. The art club was completely voluntary and there were no means of compensation such as grading. However, during the course of a couple of weeks into the project, the number of students declined to about half (18 students) as mentioned in the content expert's survey results due to the work load infused by other subjects at the school. At the time that the survey was taken, several students were not present due to illnesses and or prior engagements (see Appendix H). The total number of surveys received was 12 surveys.

Part 1 – Effectiveness of Lesson Plans and Website Organization. The questions in the first section of the survey requested that the respondents rate their overall experience pertaining to their interest in taking the e-course and the effectiveness of the lesson plans and website organization (see Appendix H). Furthermore, the respondents were asked to rate their overall time devoted to each week along with their progress leading up to the final self-portrait project. Seven likert scale-type questions were used to verify potential responses along with three open-ended questions and one yes/no/do not know question. Part one consisted of a total of nine questions.

Question 1: “Please circle a number from 1 to 3 that best represents your interest before you took the course.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority responses: (6) had average interest before taking the course. 50% of the respondents agreed that their interest level before engaging in the e-course was average. A very close 41.7% of the respondents reported that they had the best interest before taking the course with only 8.3% of the respondents had poor interest before taking the course (see Table 4.3).

Question 1	Frequency	Percent	Cumulative
1	1	8.3	1
2	5	41.7	0.42
3	6	50	0.5
Total	12	100.0	

Table 4.3: Student Survey Results for Part1, Question 1.

Question 2a-2g: “Please mark the box which best describes your experience:

- 2a) Website’s organization was.
- 2b) Your interaction with the website navigation.
- 2c) Your understanding of course materials/lessons.
- 2d) Your participation in the class.
- 2e) Organization of content covered.
- 2f) Your interaction on the message board/chat.
- 2g) Your satisfaction with the course outcome.”

Possible responses: “1) Positive, 2) Do not Know, 3) Negative.”

Majority responses for question 2a: (9) had positive experience, 75% of the respondents had positive experience with the overall organization of the website. Only (3) respondents, 25% of the respondents indicated that they did not know their overall experience (see Table 4.4).

Question 2a	Frequency	Percent	Cumulative
1	9	75	0.75
2	3	25	0.25
3	0	0	0.0
Total	12	100.0	

Table 4.4: Student Survey Results for Part 1, Question 2a.

Majority responses for question 2b: (9) had positive experience, 75% of the respondents had positive experience with their interaction with the website navigation. (2) did not know, 16.7% of the respondents indicated that they did not know their overall experience. (1) had negative experience, 8.3% of the respondents indicated that had negative experience with the website navigation (see Table 4.5).

Question 2b	Frequency	Percent	Cumulative
1	9	75	0.75
2	2	16.7	0.17
3	1	8.3	0.08
Total	12	100.0	

Table 4.5: Student Survey Results for Part 1, Question 2b.

Majority responses for question 2c: (9) had positive experience, 75% of the respondents had positive experience with the course materials and lessons provided each week. Only (3) respondents (25%) indicated that they did not know what their understanding was of course materials and lessons (see Table 4.6).

Question 2c	Frequency	Percent	Cumulative
1	9	75	0.75
2	3	25	0.25
3	0	0	0.0
Total	12	100.0	

Table 4.6: Student Survey Results for Part 1, Question 2c.

Majority responses for question 2d: (6) had positive experience, 50% of the respondents reported to have positive (strong) participation in the e-course. (4) did not know, 33.3% of the respondents indicated that they did not know what their participation rate was in the e-course. (2) negative experience, 16.67% of the respondents had negative (poor) participation in the e-course (see Table 4.7).

Question 2d	Frequency	Percent	Cumulative
1	6	50	0.5
2	4	33.3	0.3
3	2	16.67	0.17
Total	12	100.0	

Table 4.7: Student Survey Results for Part 1, Question 2d.

Majority responses for question 2e: (9) had positive experience, 75% of the respondents agreed that the organization of content covered gave a positive experience. (2) did not know, 16.67% of the respondents indicated that they did not know what their experience was with the organization of content. (1) negative experience, 8.3% of the respondents had negative experience with the organization of content (see Table 4.8).

Question 2e	Frequency	Percent	Cumulative
1	9	75	0.75
2	2	16.67	0.17
3	1	8.3	0.08
Total	12	100.0	

Table 4.8: Student Survey Results for Part 1, Question 2e.

Majority responses for question 2f: (7) had positive experience, 63.64% of the respondents had a positive experience with the interaction on the main message board and chat box. (3) did not know, 27.28% of the respondents indicated that they did not know what their experience was with the message board and chat box. (1) negative experience, 9.09% of the respondents had negative experience with the message board and chat box (see Table 4.9).

Question 2f	Frequency	Percent	Cumulative
1	7	63.64	0.63
2	3	27.28	0.3
3	1	9.09	0.09
Total	11	100.0	

Table 4.9: Student Survey Results for Part 1, Question 2f.

Majority responses for question 2g: (6) had positive experience, 50% of the respondents had an overall positive satisfaction with the course outcome. (4) did not know, 33.33% of the respondents indicated that they did not know what their experience was with the overall course outcome. (2) negative experience, 16.67% of the respondents had negative experience with the overall course outcome (see Table 4.10).

Question 2g	Frequency	Percent	Cumulative
1	6	50	0.5
2	4	33.33	0.3
3	2	16.67	0.17
Total	12	100.0	

Table 4.10: Student Survey Results for Part 1, Question 2g.

Question 3: “Was unlocking each weekly lesson helpful or would you have preferred to have accessed all of the lessons from the start? Please explain.”

Possible responses: Open-ended.

Majority responses: (7) reported (58.33%) to be in favor for unlocking the weekly lessons and stressed that it was a good idea to have the content available over time because it helped guide them to their final project. (3) respondents, (25%) were in favor for not unlocking the weekly lessons- they preferred to have the lessons available all at once because they were swamped with work from other classes. (1) respondent (8.33%) did not know. (1) respondent (8.33%) thought it was a smart idea to have the lessons unlocked each week (see Table 4.11).

Question 3	Frequency	Percent	Cumulative
Unlocking	7	58.33	0.59
Not Unlocking	3	25	0.25
Did Not Know	1	8.33	0.08
Smart Idea	1	8.33	0.08
Total	12	100.0	

Table 4.11: Student Survey Results for Part 1, Question 3.

Question 4: “Please rate from 1 to 3 (1 = poor ; 2= average; 3= best) that best represents the effectiveness of this course in each area.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority responses for week 1 tutorials: (8) best, 72.72% of the respondents reported that the tutorials for week 1 had the best effectiveness. (2) average, 18.18% of the respondents reported that the tutorials for week 1 had average effectiveness. (1) poor, 9.09% of the respondents reported that reported that the tutorials for week 1 had poor effectiveness (see Table 4.12).

Majority responses for week 1 quizzes: (2) best, 20% of the respondents reported that the quizzes for week 1 had the best effectiveness. (8) average, 80% of the respondents

reported that the quizzes for week 1 had average effectiveness. (0) poor, 0.0% of the respondents reported that reported that the quizzes for week 1 had poor effectiveness (see Table 4.12).

Majority responses for week 1 board postings: (5) best, 45.45% of the respondents reported that the board postings for week 1 had the best effectiveness. (6) average, 54.55% of the respondents reported that the board postings for week 1 had average effectiveness. (0) poor, 0.0% of the respondents reported that reported that the board postings for week 1 had poor effectiveness (see Table 4.12).

Week 1	Frequency	Percent	Cumulative
Tutorials	8= Best (3)	72.72	0.72
	2= Average (2)	18.18	0.18
	1= Poor (1)	9.09	0.09
	Total: 11	100.0	
Quizzes	2= Best (3)	20	0.2
	8= Average (2)	80	0.8
	0= Poor (1)	0.0	0.0
	Total: 10	100.0	
Board	5= Best (3)	45.45	0.45
	6= Average (2)	54.55	0.54
	0= Poor (1)	0.0	0.0
	Total: 11	100.0	

Table 4.12: Student Survey Results for Part 1, Question 4 (Week1).

Majority responses for week 2 tutorials: (2) best, 22.22% of the respondents reported that the tutorials for week 2 had the best effectiveness. (6) average, 66.67% of the respondents reported that the tutorials for week 2 had average effectiveness. (1) poor, 11.11% of the respondents reported that reported that the tutorials for week 2 had poor effectiveness (see Table 4.13).

Majority responses for week 2 quizzes: (3) best, 33.33% of the respondents reported that the quizzes for week 2 had the best effectiveness. (5) average, 55.56% of the respondents reported that the quizzes for week 2 had average effectiveness. (1) poor, 11.11% of the respondents reported that reported that the quizzes for week 2 had poor effectiveness (see Table 4.13).

Majority responses for week 2 board postings: (5) best, 50% of the respondents reported that the board postings for week 2 had the best effectiveness. (5) average, 50% of the respondents reported that the board postings for week 2 had average effectiveness. (0) poor, 0.0% of the respondents reported that reported that the board postings for week 2 had poor effectiveness (see Table 4.13)

Week 2	Frequency	Percent	Cumulative
Tutorials	2= Best (3)	22.22	0.22
	6= Average (2)	66.67	0.67
	1= Poor (1)	11.11	0.11
	Total: 9	100.0	
Quizzes	3= Best (3)	33.33	0.33
	5= Average (2)	55.56	0.56
	1= Poor (1)	11.11	0.11
	Total: 9	100.0	
Board	5= Best (3)	50	0.5
	5= Average (2)	50	0.5
	0= Poor (1)	0	0.0
	Total: 10	100.0	

Table 4.13: Student Survey Results for Part 1, Question 4 (Week2).

Majority responses for week 3 tutorials: (3) best, 37.5% of the respondents reported that the tutorials for week 3 had the best effectiveness. (4) average, 50% of the respondents reported that the tutorials for week 2 had average effectiveness. (1) poor,

12.5% of the respondents reported that reported that the tutorials for week 3 had poor effectiveness (see Table 4.14).

Majority responses for week 3 quizzes: (4) best, 40% of the respondents reported that the quizzes for week 3 had the best effectiveness. (6) average, 60% of the respondents reported that the quizzes for week 2 had average effectiveness. (0) poor, 0.0% of the respondents reported that reported that the quizzes for week 3 had poor effectiveness (see Table 4.14).

Majority responses for week 3 board postings: (5) best, 50% of the respondents reported that the board postings for week 3 had the best effectiveness. (5) average, 50% of the respondents reported that the board postings for week 3 had average effectiveness. (0) poor, 0.0% of the respondents reported that reported that the board postings for week 3 had poor effectiveness (see Table 4.14).

Week 3	Frequency	Percent	Cumulative
Tutorials	3= Best (3)	37.5	0.38
	4= Average (2)	50	0.5
	1= Poor (1)	12.5	0.125
	Total: 8	100.0	
Quizzes	4= Best (3)	40	0.4
	6= Average (2)	60	0.6
	0= Poor (1)	0	0.0
	Total: 10	100.0	
Board	4= Best (3)	50	0.5
	4= Average (2)	50	0.5
	0= Poor (1)	0	0.0
	Total: 8	100.0	

Table 4.14: Student Survey Results for Part 1, Question 4 (Week3).

Majority responses for other: oekaki board: (5) best, 71.4% of the respondents reported that the oekaki board had the best effectiveness. (2) average, 28.6% of the

respondents reported that the oekaki board had average effectiveness. (0) poor, 0.0% of the respondents reported that the oekaki board had poor effectiveness (see Table 4.15).

Majority responses for other: flash gallery: (6) best, 66.67% of the respondents reported that the flash gallery had the best effectiveness. (3) average, 33.33% of the respondents reported that the flash gallery had average effectiveness. (0) poor, 0.0% of the respondents reported that the flash gallery had poor effectiveness (see Table 4.15).

Majority responses for other: flash games: (2) best, 28.6% of the respondents reported that the flash games had the best effectiveness. (2) average, 28.6% of the respondents reported that the flash games had average effectiveness. (3) poor, 42.9% of the respondents reported that the flash games had poor effectiveness (see Table 4.15).

Other	Frequency	Percent	Cumulative
Oekaki Board	5= Best (3)	71.4	0.38
	2= Average (2)	28.6	0.5
	0= Poor (1)	0	0.125
	Total: 7	100.0	
Flash Gallery	6= Best (3)	66.67	0.4
	3= Average (2)	33.33	0.6
	0= Poor (1)	0	0.0
	Total: 9	100.0	
Flash Games	2= Best (3)	28.6	0.5
	2= Average (2)	28.6	0.5
	3= Poor (1)	42.9	0.0
	Total: 7	100.0	

Table 4.15: Student Survey Results for Part 1, Question 4 (Other).

Question 5: “Circle the word(s) which best describes your experience with the weekly lessons.”

Possible responses: “1) confusing; 2) clear/focused; 3) worked well; 4) fun/entertaining; 5) not fun/entertaining; 6) did not work well.”

Majority responses: (6) 27.27% of the answers given indicated that the weekly lessons were clear/focused and (6) 27.27% indicated that the lessons worked well. (2) 9.09 of the answers given indicated that the weekly lessons were confusing and (2) 9.09 indicated that the weekly lessons did not work well. (5) 22.72% of the answers given indicated that the weekly lessons where fun and entertaining, while (1) 4.55% indicated that the weekly lessons were not fun/not entertaining (see Table 4.16).

Question 5	Frequency	Percent	Cumulative
Confusing	2	9.09	0.09
Clear/Focused	6	27.27	0.27
Worked Well	6	27.27	0.27
Fun/Entertaining	5	22.72	0.23
Not Fun/Not Entertaining	1	4.55	0.45
Did Not Work Well	2	9.09	0.09
Total # of answers	22	100.0	

Table 4.16: Student Survey Results for Part 1, Question 5.

Question 6: “Did you find the discussion board postings effective and helpful in your progress? If not, please explain what could have been better.”

Possible responses: Open-ended.

Majority responses: (7) reported (58.3%) that the discussion board postings were effective and helpful. (2) reported, (16.67) that the message board and chat box needed more activity and participants. (1) respondent (8.3%) indicated that they had no time to participate on the message board. (1) respondent (8.33%) felt there was nothing wrong and had no further comment (see Table 4.17).

Question 6	Frequency	Percent	Cumulative
No Time	1	8.3	0.08
Yes (Helpful)	7	58.3	0.58
Nothing Wrong	1	8.3	0.08

Needed Activity	2	16.67	0.17
Total	12	100.0	

Table 4.17: Student Survey Results for Part 1, Question 6.

Question 7: “Circle the word(s) which best describes your comparison to this class with a regular art class.”

Possible responses: “1) confusing; 2) clear/focused; 3) worked well; 4) fun/entertaining; 5) not fun/entertaining; 6) did not work well.”

Majority responses: (6) 27.27% of the answers given indicated that the weekly lessons were clear/focused and (6) 27.27% indicated that the lessons worked well. (2) 9.09 of the answers given indicated that the weekly lessons were confusing and (2) 9.09 indicated that the weekly lessons did not work well. (5) 22.72% of the answers given indicated that the weekly lessons where fun and entertaining, while (1) 4.55% indicated that the weekly lessons were not fun/not entertaining (see Table 4.18).

Question 7	Frequency	Percent	Cumulative
Confusing	3	15	0.15
Clear/Focused	3	15	0.15
Worked Well	6	30	0.3
Fun/Entertaining	6	30	0.3
Not Fun/Not Entertaining	0	0.0	0.0
Did Not Work Well	2	10	0.1
Total # of answers	20	100.0	

Table 4.18: Student Survey Results for Part 1, Question 7.

Question 8: “Please indicate how much time you roughly spent in each section.”

Possible responses: “1) confusing; 2) clear/focused; 3) worked well; 4) fun/entertaining; 5) not fun/entertaining; 6) did not work well.”

Majority responses for time spent on week 1 tutorials: The largest amount of respondents reported for time spent for week 1 tutorials were (3) respondents (33.33%) at 10 minutes long. The combined total of time spent for week 1 tutorials was 220 minutes long (see Table 4.19).

Majority responses for time spent on week 1 quizzes: The largest amount of respondents reported for time spent for week 1 quizzes were (2) respondents (28.6%) at 5 minutes long; and (2) respondents (28.6%) at 5 minutes long. The combined total of time spent for week 1 quizzes was 104 minutes long (see Table 4.19).

Majority responses for time spent on week 1 board postings: The largest amount of respondents reported for time spent for week 1 board postings were (2) respondents (22.22%) at 60 minutes long; and (2) respondents (22.22%) at 15 minutes long; and (2) respondents (22.22%) at 10 minutes long. The combined total of time spent for week 1 board postings was 225 minutes long (see Table 4.19).

Week 1	Frequency	Percent	Cumulative
Tutorials	1= 5 mins	11.11	0.11
	3= 10 mins	33.33	0.33
	1= 15mins	11.11	0.11
	1= 20mins	11.11	0.11
	1= 30 mins	11.11	0.11
	2= 60 mins	22.22	0.22
	Total: 9 responses	100.0	
	Total: 220 mins		
Quizzes	2= 1mins	28.6	0.30
	1= 3mins	14.3	0.14
	2= 5 mins	28.6	0.30
	1= 30 mins	14.3	0.14
	1= 60 mins	14.3	0.14
	Total: 7 responses	100.0	
	Total: 104 mins		
Board	1= 5 mins	11.11	0.11
	2= 10mins	22.22	0.22
	2= 15mins	22.22	0.22
	1= 20mins	11.11	0.11
	1= 30 mins	11.11	0.11
	2= 60 mins	22.22	0.22
	Total: 9 responses	100.0	

	Total: 225 mins		
Total time for Week 1:	549 mins		

Table 4.19: Student Survey Results for Part 1, Question 8 (Week1).

Majority responses for time spent on week 2 tutorials: The largest amount of respondents reported for time spent for week 2 tutorials were (2) respondents (28.6%) at 10 minutes long. The combined total of time spent for week 2 tutorials was 144 minutes long (see Table 4.20).

Majority responses for time spent on week 2 quizzes: The largest amount of respondents reported for time spent for week 2 quizzes were (2) respondents (40%) at 2 minutes long. The combined total of time spent for week 2 quizzes was 94 minutes long (see Table 4.20).

Majority responses for time spent on week 2 board postings: The largest amount of respondents reported for time spent for week 2 board postings were (2) respondents (28.57%) at 5 minutes long. The combined total of time spent for week 2 board postings was 270 minutes long (see Table 4.20).

Week 2	Frequency	Percent	Cumulative
Tutorials	1= 5 mins	14.3	0.14
	2= 10 mins	28.6	0.29
	1= 15 mins	14.3	0.14
	1= 20mins	14.3	0.14
	1= 30 mins	14.3	0.14
	1= 54 mins	14.3	0.14
	Total: 7 responses	100.0	
	Total: 144 mins		
Quizzes	2= 2mins	40	0.4
	1= 5mins	20	0.2
	1= 25 mins	20	0.2
	1= 60 mins	20	0.2
	Total: 5 responses	100.0	
	Total: 94 mins		

Board	2= 5mins	28.57	0.29
	1= 10 mins	14.29	0.14
	1= 30mins	14.29	0.14
	1= 55mins	14.29	0.14
	1= 60 mins	14.29	0.14
	1= 120 mins	14.29	0.14
	Total: 7 responses	100.0	
Total time for Week 2:	Total: 270 mins		
	508 mins		

Table 4.20: Student Survey Results for Part 1, Question 8 (Week2).

Majority responses for time spent on week 3 tutorials: (5) respondents reported a time of 5, 10, 30, 40 or 120 minutes spent on week 3 tutorials. The combined total of time spent for week 3 tutorials was 270 minutes long (see Table 4.21).

Majority responses for time spent on week 3 quizzes: The largest amount of respondents reported for time spent for week 3 quizzes were (2) respondents (28.58%) at 20 minutes long. The combined total of time spent for week 3 quizzes was 103 minutes long (see Table 4.21).

Majority responses for time spent on week 3 board postings: The largest amount of respondents reported for time spent for week 3 board postings were (2) respondents (50%) at 5 minutes long. The combined total of time spent for week 3 board postings was 55 minutes long (see Table 4.21).

Week 3	Frequency	Percent	Cumulative
Tutorials	1= 5 mins	20	0.2
	1= 10 mins	20	0.2
	1= 30 mins	20	0.2
	1= 40 mins	20	0.2
	1= 120 mins	20	0.2
	Total: 5 responses	100.0	
	Total: 270 mins		
Quizzes	1= 5 mins	14.3	0.14
	1= 8 mins	14.3	0.14
	1= 15 mins	14.3	0.14
	1= 10 mins	14.3	0.14

	2= 20 mins 1= 25 mins Total: 7 responses Total: 103 mins	28.58 14.3 100.0	0.29 0.14
Board	2= 5 mins 1= 10 mins 1= 35 mins Total: 4 responses Total: 55 mins	50 25 25 100.0	0.5 0.25 0.25
Total time for Week 3:	428 mins		

Table 4.21: Student Survey Results for Part 1, Question 8 (Week3).

Combined responses for time spent on week 1-3 board postings: The combined responses of time in minutes from week1-3 show that week 1 contained the largest amount of time spent (549 mins) followed by week 2 (508) and week 3 (428 mins) (see Figure 4.1).

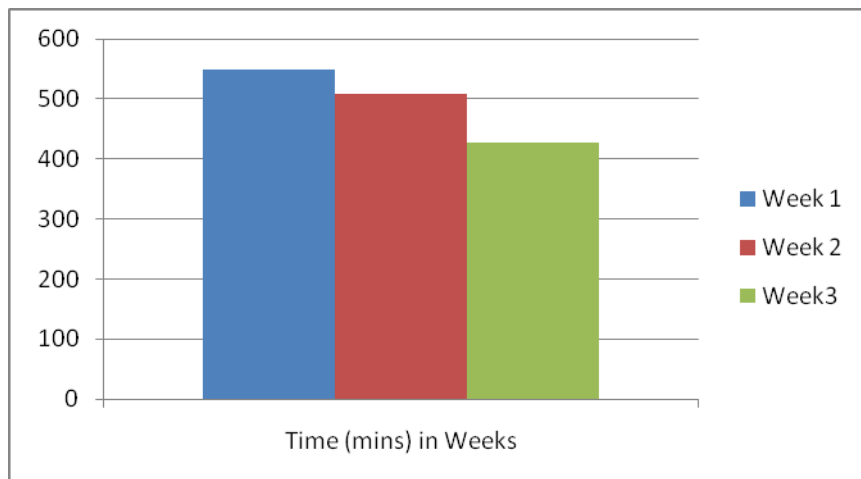


Figure 4.1: Comparison of Time Spent for Question 8 (Weeks1-3).

Question 9: “Circle the response which best describes your progress when completing your final project.”

- 9a) I had difficulty understanding the lesson/tutorials for my final project.
- 9b) There was enough time to complete my final project.

- 9c) The discussion board effectively assisted me in my final project.
- 9d) I found that the chat box was helpful for my final project (open-ended).

Possible responses: “1) Yes, 2) No.”

Majority responses for question 9a: (8) respondents disagreed with the statement and had no difficulty understanding the lesson/tutorials (see Table 4.22).

Majority responses for question 9b: (8) respondents agreed with the statement and had had enough time to complete their final project (see Table 4.22).

Majority responses for question 9c: (8) respondents agreed with the statement and had found that the discussion board effectively assisted them in their final project (see Table 4.22).

Majority responses for question 9d: (8) respondents agreed with the statement and had found that the chat box was helpful with their final project (see Table 4.22).

Questions	Frequency	Percent	Cumulative
9a	3= Yes; 8= No Total: 11	27.27; 72.73 100.0	0.27; 0.73
9b	8= Yes; 3= No Total: 11	72.73; 27.27 100.0	0.73; 0.27
9c	8= Yes; 2= No Total: 10	72.73; 18.18 100.0	0.8; 0.2
9d	8= Yes; 3= No Total: 11	72.73; 27.27 100.0	0.73; 0.27

Table 4.22: Student Survey Results for Part 1, Question 9a-9d.

Part 2 – Participation and Understanding of Course Materials. The questions in the second section of the survey contained in depth yes or no questions that illuminate their overall participation and understanding of course materials (see Appendix H). A yes or

no likert scale was used to verify potential responses along with one 3 point likert type question. Part two consisted of a total of eight questions.

Question 10: “Did you use the blog and/or view other people’s blogs?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 10: (5) respondents disagreed with the statement and did not use or view the blogs. A close (3) respondents agreed with the statement and used or viewed the blogs. (3) respondents did not know if they used or viewed the blogs (see Table 4.23).

Question 10	Frequency	Percent	Cumulative
Yes; No; D/K	3; 5; 3	27.27; 45.45; 27.27	0.27; 0.45; 0.27
Total	11	100.0	

Table 4.23: Student Survey Results for Part 2, Question 10.

Question 11: “Did you surf the internet to find out about other art styles?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 11: (6) respondents disagreed with the statement and did not surf the internet to find additional information about other art styles not covered in the course. (2) respondents did agree with the statement and surfed the internet for additional information about art styles. (3) respondents did not know if they did or did not surf the internet for additional art styles (see Table 4.24).

Question 11	Frequency	Percent	Cumulative
Yes; No; D/K	2; 6; 3	18.18; 54.54; 27.27	0.18; 0.54; 0.27
Total	11	100.0	

Table 4.24: Student Survey Results for Part 2, Question 11.

Question 12a/12b: a) “Did you spend time on the flash games? b) If yes, were the games beneficial to your progress?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 12a: (8) respondents did not spend time on the flash games. (4) respondents did spend time on the flash games (see Table 4.25).

Majority responses for question 12b: Of the respondents that said yes to question 12a, (3) respondents agreed that the flash games were beneficial to their progress, while (1) respondent did not agree that the games were beneficial to their progress. (2) respondents did not know if the flash games were beneficial or not (see Table 4.25).

Questions	Frequency	Percent	Cumulative
12a	4= Yes; 8= No; D/K= 0 Total: 12	33.33; 66.67; 0.0 100.0	0.33; 0.67; 0.0
12b	3= Yes; 1= No; D/K= 2 Total: 6	50; 16.67; 33.33 100.0	0.5; 0.167; 0.33

Table 4.25: Student Survey Results for Part 2, Question 12a-12b.

Question 13a-c:

- 13a) Did you spend time on the oekaki board?
- 13b) Did you know what an oekaki board was before taking the course?
- 13c) Was the oekaki board beneficial to your progress?

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 13a: (7) spent time on the oekaki board. (5) respondents did not spend time on the oekaki board (see Table 4.26).

Majority responses for question 13b: (7) respondents did not know what an oekaki board was before taking the course. (5) respondents did know what an oekaki board was before taking the course (see Table 4.26).

Majority responses for question 13c: (4) respondents agreed that the oekaki board was beneficial to their progress in the course. (2) respondents believed that the oekaki board was not beneficial to their progress in the course (see Table 4.26).

Questions	Frequency	Percent	Cumulative
13a	7= Yes; 5= No; D/K= 0 Total: 12	58.3; 41.67; 0.0 100.0	0.58; 0.41; 0.0
13b	5= Yes; 7= No; D/K= 0 Total: 12	41.67; 58.33; 0.0 100.0	0.42; 0.58; 0.0
13c	4= Yes; 2= No; D/K: 5 Total: 11	36.36; 18.18; 45.45 100.0	0.36; 0.18; 0.45

Table 4.26: Student Survey Results for Part 2, Question 13a-13c.

Question 14: “How close do you feel you were in matching the chosen art style for your final project?”

Possible responses: “1) Very close, 2) Uncertain, 3) Not Close.”

Majority responses for question 14: (6) respondents were uncertain if they were successful in matching their chosen art style for their final project. A close (5) respondents were very certain in matching their chosen art style for their final project. (1) respondent felt that they were not close to matching their chosen art style (see Table 4.27).

Question 14	Frequency	Percent	Cumulative
Very Close	5	45.45	0.45
Uncertain	6	54.54	0.55
Not Close	1	9.09	0.09
Total	11	100.0	

Table 4.27: Student Survey Results for Part 2, Question 14.

Question 15: “Did you try to incorporate your own style instead?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 15: (9) respondents tried to incorporate their own art style into their final project. (3) respondents did not know if they tried to incorporate their own art style into their final project (see Table 4.28).

Question 15	Frequency	Percent	Cumulative
Yes; No; D/K	9; 0; 3	75; 0.0; 25	0.75; 0.0; 0.25
Total	12	100.0	

Table 4.28: Student Survey Results for Part 2, Question 15.

Question 16: “Please circle a number from 1 to 3 that best represents your interest in taking another course like this again.”

Possible responses: “1) Poor, 2) Average, 3) Best.”

Majority responses for question 16: (6) respondents had average interest in taking another e-course again. (3) respondents had high interest in taking another e-course again. (1) respondent had very little interest in taking another e-course again (see Table 4.29).

Question	Frequency	Percent	Cumulative
Poor	1	10	0.1
Average	6	60	0.6
Best	3	30	0.3
Total	10	100.0	

Table 4.29: Student Survey Results for Part 2, Question 16.

Question 17: “Was the material helpful and available for you to use?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 17: (7) respondents felt that the material was helpful and available for them to use. (3) respondents did not know if the material was helpful. (1) respondent felt that the material was not helpful (see Table 4.30).

Question 17	Frequency	Percent	Cumulative
Yes; No; D/K	7; 1; 3	63.64; 9.09; 27.27	0.64; 0.09; 0.27
Total	11	100.0	

Table 4.30: Details Student Survey Results for Part 2, Question 17.

Part 3 – Conclusions. The questions in the third section of the survey asked the respondent to rate their computer knowledge and availability (see Appendix H). In addition, in depth questions were asked of the respondent pertaining to website layout and any suggestions or comments to improve the course. A yes/no/do not rating was used to verify potential responses along with two likert type questions. Part three consisted of a total of seven questions.

Question 18: “Please circle a number from 1 to 3 that best represents your computer knowledge.”

Possible responses: “1) Poor, 2) Average, 3) Best.”

Majority responses for question 18: (6) respondents had average computer knowledge.
(5) respondents had strong computer knowledge (see Table 4.31).

Question 18	Frequency	Percent	Cumulative
Poor	0	0.0	0
Average	6	54.55	0.55
Best	5	45.45	0.45
Total	11	100.0	

Table 4.31: Student Survey Results for Part 3, Question 18.

Question 19: “Please circle a number from 1 to 3 that best represents the ability to find and use a computer for this project.”

Possible responses: “1) Poor, 2) Average, 3) Best.”

Majority responses for question 19: (6) respondents had average ability to find and use a computer for the project. (2) respondents had great ability to find and use a computer. (1) respondent had difficulty finding and using a computer for the project (see Table 4.32).

Question 19	Frequency	Percent	Cumulative
Poor	1	11.11	0.11
Average	6	66.67	0.67
Best	2	22.22	0.22
Total	9	100.0	

Table 4.32: Student Survey Results for Part 3, Question 19.

Question 20: “Was the tutorials clear to understand/familiar and were the additional links beneficial to your progress?”

Possible responses: “1) Yes, 2) No, 3) Do not Know (D/K).”

Majority responses for question 20: (7) respondents agreed that the tutorials were clear to understand/familiar and felt that the additional links provided by the researcher was beneficial to their progress. (4) respondents did not know if they understood the tutorials and did not know if the links were beneficial to their progress (see Table 4.33).

Question 20	Frequency	Percent	Cumulative
Yes; No; D/K	7; 0; 4	63.64; 0.0; 36.36	0.64; 0.0; 0.36
Total	11	100.0	

Table 4.33: Student Survey Results for Part 3, Question 20.

Question 21: “Was the website layout:”

Possible responses: “1) confusing; 2) clear/focused; 3) worked well; 4) fun/entertaining; 5) not fun/entertaining; 6) did not work well.”

Majority responses: (7) answers indicated that the website layout was clear and focused. (6) answers indicated that the site layout worked well. (5) answers indicated that the site layout was fun and entertaining. (2) answers indicated that the site was confusion and (2) answers indicated that the site did not work well. None of the respondents indicated that the site layout was not fun or not entertaining (see Table 4.34).

Question 21	Frequency	Percent	Cumulative
Confusing	2	10	0.1
Clear/Focused	7	35	0.35
Worked Well	6	30	0.3
Fun/Entertaining	5	25	0.25
Not Fun/Not Entertaining	0	0.0	0.0
Did Not Work Well	2	10	0.1
Total # of answers	20	100.0	

Table 4.34: Student Survey Results for Part 3, Question 21.

Question 22: “Circle what you felt where the most successful elements in the course:”

Possible responses: “1) Tutorials; 2) Self-Portrait; 3) Message Board; 4) Oekaki Board; 5) Flash Games; 6) Quizzes.”

Majority responses: (8) answers indicated that the self-portrait was the most successful elements to the course. (7) answers indicated that the message board was the second most successful. (6) answers indicated that the oekaki board was the third most successful. (3) answers indicated that the tutorials were the fourth most successful. While (2) answers indicated that the flash games and quizzes (2 answers) were the least successful elements to the course (see Table 4.35).

Question 22	Frequency	Percent	Cumulative
Tutorials	3	15	0.15
Self-Portrait	8	40	0.4
Message Board	7	35	0.35
Oekaki Board	6	30	0.3
Games	2	10	0.1
Quizzes	2	10	0.1
Total # of answers	20	100.0	

Table 4.35: Student Survey Results for Part 3, Question 22.

Comparison of responses of Question 22: A comparison of the responses show that the self-portrait was the most effective element (40 responses), followed by the message board (35 responses). The least effective elements of the course were the flash games (10 responses) and the quizzes (10 responses) (see Figure 4.2).

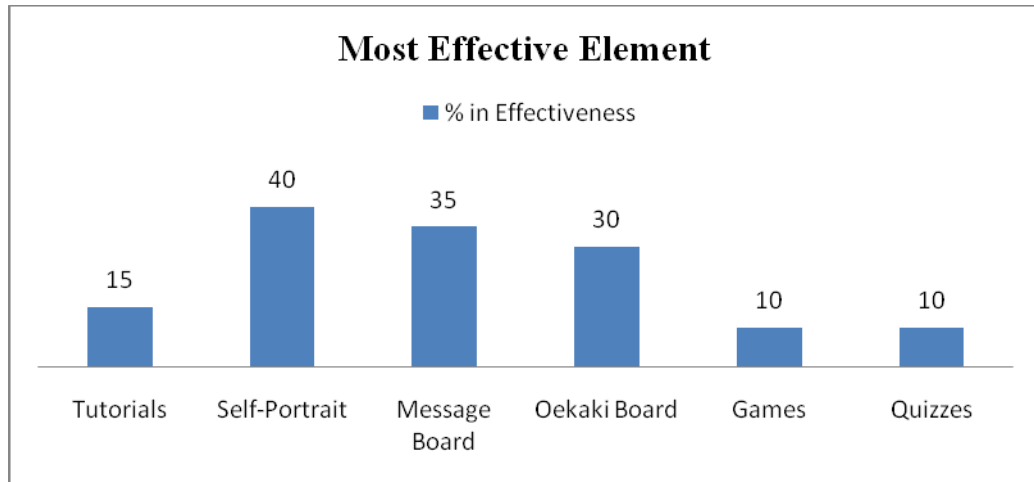


Figure 4.2: Comparison Chart of Most Effective Element for Question 22.

Question 23: “Please circle a number from 1 to 3 that best represents your interest after you took the course.”

Possible responses: “1) Poor ; 2) Average; 3) Best.”

Majority responses: (6) respondents had average interest after taking the course. (4) respondents had great interest after taking the course. (1) respondent had poor interest after taking the course (see Table 4.36).

Question 23	Frequency	Percent	Cumulative
1	1	9.09	0.09
2	6	54.55	0.55
3	4	36.36	0.91
Total	11	100.0	

Table 4.36: Student Survey Results for Part 3, Question 23.

Comparison with Question #1: When compared to question 1, the majority still has average interest in the e-course; however, the best interest declined by 25% (see Figure 4.3).



Figure 4.3: Comparison Chart of Question 1 and Question 23.

Question 24: What suggestions/comments do you have with improving this course?

Suggestions/comments by the respondents:

- Use days instead of weeks to deliver the lesson plans.
- Improve the quality of the video tutorials and quizzes and have an ability to take the quiz without having to watch the tutorials.
- Make the message board easier to use.
- Do not run the e-course during the month of March because there is less time for supplementary art work.
- Make the lessons more interesting.
- Have no final project (self-portrait).
- Provide more time to complete the lesson plans.

Recommendations

Interpretation of Data

In the first week the students showed a high interest rate in the course when it was introduced, but towards the middle of week 1 the activity on the message board and site dwindled and the students did not complete their required postings. In order to remedy the issue at hand, the researcher improved the delivery of announcements by creating an iframe html script announcement box listing what is do and when- and installed it on the front page of the message board. In addition, the researcher also changed his role from an observer to an active participant. After the researcher was able to post to students through replies on the message board, oekaki board and shout box- the students participated much more and they completed their assignments on the message board by the end of week 1.

In the second week, the students showed a moderate interest rate and activity on the message board. The students appeared to spend most of their time drawing on the oekaki board and chatted on the shout box. Several times a student was confused with what to do- and the researcher was able to deliver quick responses using the shout box. The data from student survey question 22 connects with the researcher's observations that the students enjoyed the shout box and message board most of all.

In the final week, the activity on the message board dwindled to nearly no activity. The data from question 8 connects with the researcher's observations that the students spent less time in week 3 than in the other weeks.

The self-portrait presentations were observed by the researcher in-person. The researcher noticed that all of the students had a self-portrait but only several were

considered “completed.” The students knew what art style that they selected for their project; however, the researcher felt that if the students were not swamped with so much homework from other classes- that their final self-portrait would have been more completed. These observations also connect with the student’s suggestions that they needed more time- however, student survey questions 7 and 21 clearly state that the majority of responses believed that the lessons and course were clear/focused and worked well. Student survey question 9b also states that the majority felt that they had enough time to complete their final project- thus, conflicting with the researcher’s observation and results of the self-portraits. This suggests that the course was designed with enough time but other classes took over the available time from the students. According to the suggestions in the content expert survey- all of the ingredients for a successful course were there but the students had very little time due to other subjects and their art final project suffered as a result.

Some other observations were experienced by the researcher during the course. The first observation was the behavior of the students on the message board. One incident included a student (Student [A]) which spammed the shout box with posts. The researcher immediately gave a warning through the shout box and asked Student (A) to stop spamming. The following day another different student (Student [B]) sent a private message to the researcher complaining about Student (A). Student (A) joked about releasing private information about Student (B). The researcher sent a private message warning Student (A) and contacted the art teacher. After several discussions between the researcher and art teacher- the art teacher spoke with Student (A) in person and the situation eventually resolved itself. Student (A) stopped spamming the boards and there

were no further complaints. There was no notice of this incident affecting the performance of the students overall.

Another observation noted that some students were sick during the weeks and rushed their final project towards the end. Some surveys had notes written on them stating that due to illnesses they did not view or participate on the website.

The final observation was the drastic decline of students from the introduction day. According to a conversation carried out between the researcher and art teacher- students were extremely interested in taking his art club but the number of students dropped because other clubs, such as creative writing club, attract them more and/or took over their free time. The art teacher stated that some students consider art as art recess and treated other subjects as priorities. There was no data available which supports or debunks these statements; however, half of the students remained at the end of the course.

Recommendations for Developers and Teachers

The following are recommendations for further development of this project or similar projects utilizing an on-line art course:

- Provide some incentive or compensation for the students taking the e-course to keep them interested and invested on the task such as an art contest.
- Run the e-course during a period which other subjects do not dominate the student's time.
- Provide email notifications each time the lessons are unlocked to ensure that the students know that the lessons are available.

- Have the teacher and researcher assist with the online message board, thereby reducing the sensation of loneliness for the students. Provide as much human presence as possible using online communication technologies.
- Have the art teacher remind the students as much as possible to engage in the message board.
- Make sure to create a terms of service and site rules and display them wherever online interaction is present in order to sustain order and reduce behavior problems. Make sure to introduce these rules at the beginning of the course.
- Implement an on-line survey that the students and content experts can answer at their leisure and submit using the internet- this helps to ensure survey is completed without rushing. Furthermore, students with illnesses or other obligations will not miss out on the survey if they cannot attend the final meeting.

Recommendations to Educational Multimedia Students

Recommendations are made for educational multimedia students who wish to undergo a similar project or study. First of all, the researcher strongly recommends utilizing the sound principles of instructional design in the pre-production, production and post-production stages of the project. The pilot course website was essential to the final master project in the pre-planning stage since it provided a strong foundation for layout, content and learning development. During the production stage, a strong e-course website was created in half of the time it would have taken due to the pilot website. Afterward, the surveys from both the content experts and students provided vital information as towards how to improve the site further.

One recommendation is to research a learning style that closely relates to your intended goal and discipline for the students. In the case for this project, the literature shows that choice-based learning was best used for online art education. Utilizing a learning style made it easier and more feasible to run the e-course since face-to-face interaction was absent.

Another recommendation is to develop an e-course which can attract students from the start and interested using as many online technologies as possible. The results strongly suggest that the students lost interest in the course due to several factors. One factor showed that courses in different subjects interfered and dominated the students' available time. While another factor showed that students did not participate because they felt that there was no reason to participate. A recommendation is to schedule the online course during a time when other subjects do not dominate and provide some incentive to keep the students motivated.

Finally, the researcher recommends that the teacher assist online as well. The course was designed to exclude the art teacher from any online interaction because there was a fear that choice-driven learning would be contaminated- however, it was found that the art teacher was critical in making sure that the students did the work by releasing bulletins and reminding them to participate. If the art teacher could participate in the same manner as the researcher, then there is a good chance that the students' participation and interest level would have improved.

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APPENDICES

APPENDIX A

Details of Pilot Online Art Course

PILOT ONLINE ART COURSE

COLOR WHEEL

COLOR LESSONS

PRIMARY

SECONDARY

TERTIARY



TAKE QUIZ

WHY COLOR THEORY?
Color choices can sometimes be mystical and accidental but with a basic understanding of color- one can make choices that can enhance a design and save time. Color theory is fascinating because it provides logic with color choice combinations.

LEARNING OBJECTIVE
Students will be able to successfully identify all of the possible color combinations on the color wheel and be able to create artwork with a color scheme.



[HOME](#) | [TAKE QUIZ](#) The Color Wheel - Training Project

COLOR WHEEL

This instruction teaches you about the 3 primary colors found in art/art history: **RED, YELLOW** and **BLUE**. These 3 colors are **SUBTRACTIVE** colors. Which is the behavior of light absorbed by materials.

The RYB color wheel was adopted

[HOMEPAGE](#) [TAKE QUIZ](#)



START

PRIMARY COLORS SCHEMES
Red, Yellow and Blue are a part of the Subtractive color scheme which is found in painting and many other physical color mixtures.

However, light projected from your monitor are a part of the Additive color scheme: **RED, GREEN** and **BLUE**. These colors are created directly from a light source as opposed to a physical substance like what is found in traditional painting.



Primary Colors Used in a Bathroom

[HOME](#) | [TAKE QUIZ](#) The Color Wheel - Training Project

APPENDIX B

Color Wheel Survey for Pilot Course

Color Wheel Survey for Pilot Course Website for Student and Teacher Results

1. Was the website easy to navigate? Did you view the lessons or go to the quiz first?

2. Did you learn anything new about the color wheel after taking this tutorial?

3. Please circle a number from 1 to 5 that best represents the effectiveness of this website as a color wheel tutorial for students: (1 = poor ; 3= average; 5= best)

1

2

3

4

5

4. Did you find that learning about the color wheel a beneficial experience to your understanding about Art? Please explain.

5. What suggestions or comments do you have with taking this tutorial?

APPENDIX C

Details of Course Website

COURSE WEBSITE

CREATIVE DISTANCE

[REGISTER](#)

Username: Password: Remember Me?: ☐ [Login](#)

[HOMEPAGE](#) [LESSONS](#) [MSG BOARD](#) [EXTRA](#) [REFERENCES](#)

Home

**WEEK 1: ART STYLES**

CURRENT WEEK: WEEK3 COLOR

Instructions:
Select a week from the rotating wheel -or- from the menu below and follow the lesson plan. Notice: A valid email address is needed to post on discussion and oekaki board.

[WEEK1](#) [WEEK2](#) [WEEK3](#)

Having trouble viewing flash menu? [CLICK HERE](#)

Recent Posts
[My Reflection on the website and the class](#) by Will McTarsney at Sat 20 Mar 14:04
Well we aren't there just yet.... got another week but I am ecstatic to see what you have all create...
[Comments 0](#)
[...And onion looks like neon](#), by Bluffy at Thu 18 Mar 17:26
The tutorials were actually quite beneficial, specifically the second to the fourth...

Starting Information:
[Getting Started](#) | [Introduction/Permission Slips](#) | [Consent Form](#)

Course Documentation:
[Course Syllabus](#) | [Survey Forms](#) (Presented on Last Day in Class)

[[REGISTER](#) | [CONTACT](#) | [SITE MAP](#)] [Code of Conduct/TOS](#) | CreativeDistance.com © 2010

Who is online: Guests Online: 1
Registered users: No registered users

APPENDIX D

Introduction Letter and Permission Slip

INTRODUCTION LETTER & PERMISSION SLIP

Dear Parent(s)/Guardian(s),

My name is Will McTarsney. I am a graduate student at Cal Poly Pomona in the Educational Multimedia Masters program. I am also a fine art graduate from the same college since 2002. Currently, I am formulating research for my project which will become the backbone for my online art course. The online art course is designed to teach students the content that the art teacher is lacking or unable to teach within the regular school timeframe. The content in the online art course is aligned to effective design principles and fine art theories which I researched and experienced firsthand. The student is required to visit the website regularly for a total of 3 weeks and any material needed is provided by me or by the art teacher. Each week a section of the course is unlocked- which contains lesson plans, tutorials, quizzes and board postings/reflections. All of these elements were carefully researched by credible sources.

Part of my project requires field testing. But, in order to field test, the art teacher and I require your approval since some of the content, such as the art history lessons, have imagery and concepts that are too sensitive for some. If you decide to grant permission, please fill out the form below and submit prior to the e-course offering. If you require additional information, please do not hesitate and contact the school. You may reach me at: (909) 643-5775 (M/T/TH/SAT/SUN: 4:00+pm; F: 7:00+pm) or email me at: wmctar@realmctarsney.com

Sincerely,

Will McTarsney,

Graduate Student, Cal Poly Pomona

Please Fill Out, Cut and Send Below:

I, _____ grant permission for _____
to attend the e-course art website and to complete the lessons plans, tutorials, quiz and
content therein.

APPENDIX E
Informed Consent Form

California State Polytechnic University, Pomona

Informed Consent Form for Research Involving Human Subjects

You are being invited to participate in a research study, which the Cal Poly Pomona Institutional Review Board (IRB) has reviewed and approved for conduct by the investigators named here. This form is designed to provide you - as a human subject - with information about this study. The Investigator or his/her representative will describe this study to you and answer any of your questions. You are entitled to an Experimental Research Subject's Bill of Rights and a copy of this form. If you have any questions or complaints about the informed consent process of this research study or your rights as a subject, please contact the Compliance Office within Cal Poly Pomona's Office of Research at (909) 869-4215.

- This project and survey are a part of a research study to determine the effectiveness of the online art course site. The results will be used to determine if the art course site was effective, beneficial to the subjects and to determine if there are any areas for improvement. The goal is to use the research to train and test art students who do not receive all of the art content that is required by the state. The art students will gain additional knowledge of basic art principles. The students will be exposed to typical art terms/concepts which are used to critically assess their own art work.
- This study is being conducted as part of my research on The Best Practices for Art Online Education, a project for the Masters of Education in Multimedia Education program at California State Polytechnic University, Pomona. It is done under the supervision of Dr. Shahnaz Lotfipour. Protocol # 10-013 (Title of Protocol: Best Practices for Online Art Education)
- Your participation in this project and survey is voluntary and you have the right not to respond to any or all of the questions. Your participation is very important to the validity and success of the project and survey and I endorse your full cooperation. However, if you decide not to participate there will be no penalty or loss of benefits to you. You may discontinue participation at any time.
- The e-course will run for a total of 3 consecutive weeks starting on March 1st 2010 and ending in-class on Friday March 19th 2010. You will engage in various lesson plans, discussion board assignments (postings, blogging, chatting and private messaging), peer reviews, and flash games. Finally, you are to work on a self-portrait starting from the 2nd week in-class or at home and present this in-class on the final day- using your reflections from the discussion board. The materials for the self-portrait will be provided free and available in-class.
- Each week asks you to read/watch video tutorials and to reflect on your experience and raise any questions. These will be posted on the main discussion board which can only be seen by registered users.

You are expected to have a working email in order to register to the discussion boards (main discussion board and oekaki board). Any and all behavior on the discussion boards will be monitored constantly by the researcher. You are to exercise good posting habits and to not post any inappropriate content. If any inappropriate content is posted, your account will be temporarily suspended and your parents will be contacted. If you are uncomfortable with having your posting activity monitored, you may decline from the project at anytime with no penalty to you. Monitoring is essential to reducing any risk to you and to others.

- The e-course contains 3 lesson plans and various tutorials with optional activities. For the main lesson plans it will take about 30 minutes to complete. The final project will take approximately 2 weeks to complete. If at any time you feel uncomfortable with the project or feel overwhelmed with work, you may discontinue at anytime.
- The survey contains 24 items for students (32 items for content experts) and will take you about 45 minutes to complete. If you cannot answer a question or feel uncomfortable answering- you may leave it blank. If at any time you feel uncomfortable with the survey, you may leave at anytime.
- Your survey answers are *completely anonymous*. You should not put down your name on the survey sheet. The survey sheet will be distributed by the art teacher (for student surveys) and be collected by the art teacher.
- There is no compensation for participation in this study. Please contact the investigator at (909) 643-4775 or wamctar@csupomona.edu if you have questions about this research or your rights as a participant. You are entitled to receive a copy of the completed informed consent form.
- Please try to complete the project and survey on time. Deliver the survey to the art teacher.

Name of Participant

Signature

Date

Name of Principal Researcher

Signature

Date

Primary Researcher: Will McTarsney
Email: wamctarsney@csupomona.edu

Phone: 909-643-4775

Art Teacher: Jon St. Amant
Email: jstamant@walnutvalley.k12.ca.us

Phone: 909-594-1657

Project Advisor: Dr. Shahnaz Lotfipour
Email: slotfipour@csupomona.edu

Phone: 909-869-2255

APPENDIX F
Online Art Course Syllabus

ONLINE E-COURSE SYLLABUS

DATES:

EMAIL: WAMCTAR@CSUPOMONA.EDU

ART

E-COURSE SITE:
WWW.CREATIVEDISTANCE.COM

OBJECTIVE	Students will be able to successfully identify the color wheel/color relationships and complete a self-portrait in an art style & color scheme of their choosing.
FORMAT	The lessons will be covered during a 3 week period and will be concurrent with in-class activities/instruction & online instruction.
ACTIVITIES	<p>SELF-PORTRAIT (FINAL): Complete a self-portrait using acrylic paints.</p> <p>Base your work on a chosen Art Style (can be an art style not covered on the website), in addition to a color scheme. Plan out and choose your approach by the end of WEEK2 by the latest. Post what you plan to do for your self-portrait on the message board by the end of WEEK2.</p> <p>DISCUSSION BOARD Each week, students will reflect and share what they have learned. They will be required to reply to at least 2 other posts with thoughtful comments/suggestions.</p> <p>BLOG (optional) Students may use their blog to keep a diary of their daily activities.</p>

CALENDAR

WEEK1: ART STYLES

WEEK2: HUMAN FIGURE: [PLAN DUE](#)

WEEK3: COLOR THEORY: [FINAL PRESENTATION](#)

APPENDIX G

Teacher Survey

Teacher Survey for Online Art Course

Please Answer Each Question Carefully. Do Not Write Your Name.

Use The Back For More Space If Needed.

Part I:

1. Have you observed an online art course before? If yes, please briefly explain your experience:

2. Please check the statement(s) which best represents your familiarity with online education:

I have used online education in my own classroom____

I am somewhat familiar with online education and would use it in my class____

I have no knowledge of online education____

I know what online education is but would not use it in my class____

3. Does your school district provide professional training for teachers wishing to incorporate online education? (Circle One): **YES/NO/Do not Know**

4. Does your school provide a fully functional computer lab which is available for student use if an online class is used at your school? (Circle One): **YES/NO/Do not Know**

5. What type of classroom do you teach? Would online education help reach your goals in achieving all of the content required by the state standards?

Part II:

1. Was the art online course easy to access and to navigate?

2. Please rate the effectiveness of the course (1 = poor ; 2= average; 3= best) in each area according to your observations:

Week 1	<i>Rating</i>	Week 2	<i>Rating</i>	Week 3	<i>Rating</i>	Other	<i>Rating</i>
Tutorials		Tutorials		Tutorials		Oekaki	
Quizzes		Quizzes		Quizzes		Gallery	
Board		Board		Board		Games	

3. What do you suggest could have been better for the weekly lessons?

4. Did you find the discussion board postings effective and helpful for the students? If not, please explain what could have been better.

5. Were the online tutorials less or more effective when compared to face-to-face demo lessons? **Please explain:**

6. Where you familiar with the blog/chat system? **YES/NO/Do not Know**

If you where familiar, would you use them in your own class? **YES/NO/Do not Know**

7. Please circle a number from 1 to 3 that best represents the effectiveness of this course as a choice-driven learning course (a course which allows the student to make choices similar to that of a real artist): (1 = poor ; 2= average; 3= best)

1

2

3

8. What suggestions do you have, if any, that could make the course more effective as a choice-driven course?

9. In your observations, were the games beneficial to the course? **YES/NO/Do not Know**

10. Did you know what an oekaki board was before observing this course? **YES/NO**

Would you use an oekaki board for your own course? **YES/NO/Do not Know**

11. Was unlocking each module per week effective and stirred the students in the right direction? **YES/NO/Do not Know**

12. Would you have preferred to have the student have access to all of the content from the beginning? **Please explain if yes:**

13. Please gauge your reaction to using a discussion board as an e-portfolio to house student progress/work: (1 = poor ; 2= average; 3= best)

1

2

3

14. Do you believe using a message board to write reflections and progress as an important part of the course? **Please explain:**

15. Please circle a number from 1 to 3 that best represents your computer knowledge:
(1 = poor ; 2= average; 3= best)

1

2

3

16. Please check the statement that best represents your knowledge of art subject matter:

I have proficient knowledge of art content/can teach the subject____

I have minimal knowledge of art content____

I have no knowledge of art content____

17. Would you use online quizzes as a means of assessment for your own course?
YES/NO

18. Overall, what would you rate this course as an effective assessment tool?

(1 = poor ; 2= average; 3= best)

1

2

3

Part III:

1. When observing this course did you find, if any, students were lost/needed any helping with staying on task? **YES/NO/Do not Know**

2. Would adding more content for the students be more or less helpful?

More Helpful Less Helpful No Change

3. Did you find that the discussion/reflections on the message board enhanced the student's final project? **YES/NO/Do not Know**

Please Explain:

4. Did the student(s) stay on task? **YES/NO/Do not Know**

Part IV:

1. Was the website layout (please circle all which apply to you):

Confusing	Clear/focused	Worked Well
Fun/Entertaining	Not Fun/Entertaining	Did Not Work Well

2. What would you have improved about the website layout/presentation?

3. What did you find as the most successful aspect of the course?

4. Please circle a number from 1 to 3 that best represents your interest after you took the course: (1 = poor ; 2= average; 3= best)

1

2

3

5. What suggestions/comments do you have with improving this course?

APPENDIX H

Student Survey

Student Survey for Online Art Course

Please Answer Each Question Carefully and Turn In To Your Teacher. Do Not Write Your Name. Use The Back For More Space If Needed.

PART 1:

1. Please circle a number from 1 to 3 that best represents your interest before you took the course: (1 = poor ; 2= average; 3= best)

1

2

3

2. Please mark the box which best describes your experience:

	Positive	Do not Know	Negative
Website's organization was:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your interaction with the website navigation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your understanding of course materials/lessons:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your participation in the class:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Organization of content covered:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your interaction on the message board/chat:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your satisfaction with the course outcome:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Was unlocking each weekly lesson helpful or would you have preferred to have accessed all of the lessons from the start? Please explain:

4. Please rate from 1 to 3 (1 = poor ; 2= average; 3= best) that best represents the effectiveness of this course in each area:

Week 1	<i>Rating</i>	Week 2	<i>Rating</i>	Week 3	<i>Rating</i>	Other	<i>Rating</i>
Tutorials		Tutorials		Tutorials		Oekaki	
Quizzes		Quizzes		Quizzes		Gallery	
Board		Board		Board		Games	

5. Circle the word(s) which best describes your experience with the weekly lessons:

Confusing	Clear/focused	Worked Well
Fun/Entertaining	Not Fun/Entertaining	Did Not Work Well

6. Did you find the discussion board postings effective and helpful in your progress? If not, please explain what could have been better.

7. Circle the word(s) which best describes your comparison to this class with a regular art class

Confusing	Clear/focused	Worked Well
Fun/Entertaining	Not Fun/Entertaining	Did Not Work Well

8. Please indicate how much time you roughly spent in each section (example: 30mins):

Week 1	<i>Time</i>	Week 2	<i>Time</i>	Week 3	<i>Time</i>	Other	<i>Time</i>
Tutorials		Tutorials		Tutorials		Oekaki	
Quizzes		Quizzes		Quizzes		Gallery	
Board		Board		Board		Games	

9. Circle the response which best describes your progress when completing your final project:

1) I had difficulty understanding the lesson/tutorials for my project: **YES/NO**

2) There was enough time to complete my project: **YES/NO**

4) The discussion board effectively assisted me in my final project: **YES/NO**

5) I found that the chat box was helpful for my final project: **YES/NO**

Please explain:

PART 2:

Circle one answer:

10. Did you use the blog and/or view other people's blogs? **YES/NO/Do not Know**

11. Did you surf the internet to find out about other art styles? **YES/NO/Do not Know**

12. Did you spend time on the flash games? **YES/NO/Do not Know**

If yes, were the games beneficial to your progress? **YES/NO/Do not Know**

13. Did you spend time on the oekaki board? **YES/NO/Do not Know**

Did you know what an oekaki board was before taking this course? **YES/NO/Do not Know**

Was the oekaki board beneficial to your progress? **YES/NO/Do not Know**

14. How close do you feel you were in matching the chosen art style for your final project?

Very Close

☐

Uncertain

☐

Not Close

☐

15. Did you try to incorporate your own style instead? **YES/NO/Do not Know**

16. Please circle a number from 1 to 5 that best represents your interest in taking another course like this again: (1 = poor ; 2= average; 3= best)

1

2

3

17. Was the material helpful and available for your use? **YES/NO/Do not Know**

PART 3:

18. Please circle a number from 1 to 5 that best represents your computer knowledge:

(1 = poor ; 2= average; 3= best)

1

2

3

19. Please circle a number from 1 to 5 that best represents the ability to find and use a computer for this project: (1 = poor ; 2= average; 3= best)

1

2

3

20. Was the tutorials clear to understand/familiar and were the additional links beneficial to your progress? **YES/NO/Do not Know**

21. Was the website layout was (please circle all which apply to you):

Confusing	Clear/focused	Worked Well
Fun/Entertaining	Not Fun/Entertaining	Did Not Work Well

22. Circle what you felt where the most successful elements in the course:

Tutorials	Self-Portrait	Message Board
Oekaki Board	Games	Quizzes

23. Please circle a number from 1 to 3 that best represents your interest after you took the course: (1 = poor ; 2= average; 3= best)

1

2

3

24. What suggestions/comments do you have with improving this course?
