Bringing the Visual Arts Classroom Into the 21St Century

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BRINGING THE VISUAL ARTS CLASSROOM
INTO THE 21st Century

by
Anna Gianakos

A Research Project Presented in Partial Fulfillment
of the Requirements for the Degree
Masters of Education

REGIS UNIVERSITY
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ABSTRACT

Bringing the Visual Arts Classroom Into the 21st Century

Technology has become a key component to everyday life and society, especially in education. Although teachers are faced with many barriers that can hinder the integration of technology into the classroom, such as cost/funding, teacher training, and teacher planning time, with some support and planning, teachers will begin to see and use technology as an invaluable resource and tool in the classroom. The purpose of this project was to provide visual arts teachers with the information, background, and tools to begin their journey of integrating technology into the visual arts classroom. A curricular unit was developed to provide visual arts teachers with an example of how technology can be successfully and easily incorporated into their classrooms. Through this curricular unit many tools, ideas, and options were introduced to better equip them for this task.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Project</td>
<td>2</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>2</td>
</tr>
<tr>
<td><strong>2. REVIEW OF LITERATURE</strong></td>
<td>4</td>
</tr>
<tr>
<td>Historical Background of Technology Use</td>
<td>5</td>
</tr>
<tr>
<td>Facts and Statistics</td>
<td>11</td>
</tr>
<tr>
<td>Initiatives and Studies for Technology Integration</td>
<td>13</td>
</tr>
<tr>
<td>Project ImPACT Model</td>
<td>13</td>
</tr>
<tr>
<td>Method</td>
<td>14</td>
</tr>
<tr>
<td>Preservice Teachers’ Perception Concerning Technology</td>
<td>16</td>
</tr>
<tr>
<td>In the Classroom</td>
<td>17</td>
</tr>
<tr>
<td>Technology Adaptation: A Five Step Hierarchical Model</td>
<td>17</td>
</tr>
<tr>
<td>Art and Technology Integration and Community Discovered Projects</td>
<td>19</td>
</tr>
<tr>
<td>Advantages of Technology in the Classroom</td>
<td>20</td>
</tr>
<tr>
<td>Barriers and Disadvantages of Technology in the Classroom</td>
<td>24</td>
</tr>
<tr>
<td>Technological Teaching Tools</td>
<td>27</td>
</tr>
<tr>
<td>Computers and Compact Discs</td>
<td>27</td>
</tr>
<tr>
<td>Multimedia Communication and Presentations</td>
<td>28</td>
</tr>
<tr>
<td>Power Point Presentations and the Value of Computers to Art</td>
<td>29</td>
</tr>
<tr>
<td>Internet, Electronic Mail, and SURWEB</td>
<td>30</td>
</tr>
<tr>
<td>Helpful Resources</td>
<td>32</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>33</td>
</tr>
<tr>
<td><strong>3. METHODS</strong></td>
<td>35</td>
</tr>
<tr>
<td>Target Audience</td>
<td>36</td>
</tr>
<tr>
<td>Goals of the Applied Project</td>
<td>36</td>
</tr>
<tr>
<td>Procedures</td>
<td>37</td>
</tr>
<tr>
<td>Peer Assessment</td>
<td>38</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>38</td>
</tr>
<tr>
<td><strong>4. RESULTS</strong></td>
<td>39</td>
</tr>
<tr>
<td>Unit Plan</td>
<td>40</td>
</tr>
<tr>
<td>Lessons 1 &amp; 2</td>
<td>44</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

In the educational system, students must be provided with a wide range of knowledge so that they will be able to become productive and positive citizens in the world. To accomplish this task, educators must be proficient not only within their core subject area, but also they must be aware of the advances in technology and other subject areas. In the visual arts classrooms today, it is important that educators refine teaching methods that move toward the integration of cutting edge techniques and strategies that incorporate technology. In response to the National Technology Standards (International Society for Technology in Education & National Educational Technology Standards [ISTE/NETS], 2002/2004) set forth by the federal government, individual states are now pressured to provide continued education, equipment, and funding for educators so that they may teach and integrate technology into daily classroom instruction. Studies and research have been conducted to truly understand the impact and importance of these new technological advancements. The visual arts classroom provides a rich environment for students to further understand and utilize technology to the fullest capacity, but advances will continue only with motivation, incentives, and the continued education of teachers.

Statement of Problem

Currently, educators continue to struggle to incorporate new and old techniques to determine the most effective way to teach. The problem is that educators do not always
have the time and training to properly research and understand what works best in a visual arts classroom. While educators acknowledge that students have become more advanced in the integration of technological resources and tools into their daily education, there are many questions that have been raised as to how effective and efficient the learning has become due to these advances. In order to meet the new standards of excellence set forth in federal and state mandates, educators and students need to learn to understand and utilize a wide variety of tools, programs, and strategies that incorporate new technologies.

**Purpose of the Project**

The purpose of this project will be to design a curricular unit to integrate the visual arts and technology and that will meet the requirements of the Colorado State Standards for the Visual Arts (The Kennedy Center Arts Edge, 2004). The focus of this unit will be to develop a body of lessons to integrate technological equipment into the instruction of visual arts projects. By the development of a unit that utilizes technology, such as PowerPoint presentations, digital pictures, and instructional videos, future teachers will be able to access new ideas and information for their own visual arts classrooms.

**Chapter Summary**

Through a comprehensive understanding of technology integration into the classroom, it is this researcher’s opinion that students can better utilize and understand the visual arts as a whole. Also, it is this researcher’s opinion that, in order to adequately integrate technology into the classroom, teachers require updated software, hardware, access, pre and continued training, support from peers, administrators, community, parents, and
adequate time to prepare lessons. The goal of this project will be to assist visual arts teachers to develop a comprehensive understanding of how to integrate technology into daily instruction and then continue to refine those methods as time and technologies advance.

In Chapter 2, a review of literature is presented to introduce the history and background information that supports the positive effects of technology integration into classroom instruction and practice. Also, many case studies are explored in order present the advantages, disadvantages, and tools that can be utilized during technology integration. In Chapter 3, Method, the procedures, target audience, and goals will be outlined in detail in order to develop a teaching unit based on the integration of technology into the visual arts classroom.
Chapter 2

REVIEW OF LITERATURE

At onset of the 21st C., there is a new wave of educational teaching strategies and tools that are available to assist teachers and students to utilize technology to maximize learning in the classroom. The purpose of the project will be to provide teachers and students with an example unit that integrates technology into the visual arts classroom on a daily basis. Regardless of all the hype that surrounds the recent advances in technology, there are still many barriers that must be overcome to truly integrate technology into the classroom in a timely and cost efficient manner. Educators must receive continued support from the community, administration, and parents to take full advantage of technology integration in the classroom. At the same time, educators must be allotted adequate preparation time, training, and tools to become confident technology users and teachers.

In a decade when the visual arts receive less attention in national education, it seems apparent that visual arts teachers must prove their importance to the whole of society. By the integration of technology into the instruction and exploration of visual arts, visual arts teachers can reinforce the validity of the subject. However, even with the recent mandates such as the No Child Left Behind Act (National Conference of State Legislatures, 2004), National Visual Arts Standards (The Kennedy Center Arts Edge, 2004), and National Educational Technology Standards (International Society for...
Technology in Education & National Educational Technology Standards ISTE/NETS; 2002/2004), classrooms, students, and teachers are still left with stringent budgets that restrict the purchase of updated hardware and software programs and technological equipment. Faced with numerous barriers, visual arts teachers can easily lose sight of the potential that technology can bring to the classroom.

Historical Background of Technology Use

Over the past decade, there have been a plethora of changes in American education. Assey (1999) stated:

Currently in American education, we are experiencing a shift in goals and strategies from teaching the basics to using vast amounts of information. Now more than ever, this change requires students to use technology to solve problems, make meaningful decisions and think creatively. Instead of just learning discrete and isolated facts, students need to acquire skills for applying information whatever the subject matter. (p. 3)

In 1992, members of the International Society for Technology in Education (ISTE; as cited in Assey) established standards for educators that address the need to integrate technology into education. The ISTE members identified the three areas in which teachers need to become proficient: (a) basic computers/technology concepts, (b) personal/professional use, and (c) applications in instruction. In 1995, members of the National Council for Accreditation of Teacher Education (NCATE; as cited in Assey) modified the ISTE concepts and proposed technology standards for teachers. These modifications required that the faculty at higher education institutions incorporate and prepare preservice teachers to master the skills necessary to meet the technology standards. The staff of ISTE was the initiator of the National Educational Technology
Standards (NETS) Project (ISTE NETS Project, 2004). According to the staff, “The primary goal of the ISTE NETS Project is to enable stakeholders in PreK-12 education to develop national standards for educational users of technology that facilitate school improvement in the United States” (p. 1). Currently, the NETS Project staff is in the process to: (a) define standards for students, (b) integrate curriculum technology, (c) develop technology support, and (d) set standards for student assessment and evaluation of technology use. The staff of the NETS project has gone to great lengths to incorporate an array of input in the creation of the Plan. Anyone who wanted to participate in the creation of the Plan was encouraged to contribute ideas, ask questions, or voice concerns via the website. To increase the input of students into the Plan, the U.S. Department of Education partnered with NetDay to help support Speak Up Day 2003. The staff of the ISTE NETS Project stated, “the Department was able to reach and receive input from over 200,000 students in a survey effort that collected viewpoints from all 50 states, from a balanced mix of urban, rural, and suburban schools, and from all ages and grade levels” (p. 2). The major themes that emerged from the students’ comments, according to the staff of the ISTE NETS Project, included:

1. Today’s students are very technology-savvy, feel strongly about the positive value of technology and rely upon technology as an essential and preferred component of every aspect of their lives.
2. Students are not just using technology differently today but are approaching their lives and their daily activities differently because of technology.
3. As students get older, their use of technology becomes more sophisticated, but, comparatively, the younger students are in a fast track to becoming greater technology users and advocates.

4. The access point fit technology use, particularly for older students, is home-
focused, not school-focused.
5. Today’s students are ultra-communicators. (p. 9)

Clearly, the students’ feedback was a key component to the progress being made to refine the Plan. It is important to note that the staff of the ISTE NETS Project has gone to great lengths to incorporate student, expert, and public feedback in the development of the Plan.

On March 31, 1994, *The Goals 2000: Educate America Act* was signed into law under the Presidency of Bill Clinton (North Central Regional Educational Laboratory, 2004).

The Act codified in law the six original education goals concerning school readiness, school completion, student academic achievement, leadership in math and science, adult literacy, and safe drug-free schools. It added two new goals encouraging teacher professional development and parental participation. The National Education Goals as stated in the Act (Sec. 102) are the following:

By the year 2000:
1. All children in America will start school ready to learn.
2. The high school graduation rate will increase to at least 90 percent.
3. All students will leave grades 4, 8, and 12 having demonstrated competency over challenging subject matter including English, mathematics, science, foreign languages, civics as government, economics, the arts, history, and geography, and every school in America will ensure that all students learn to use their minds well, so they may be prepared for responsible citizenship, further learning, and productive employment in our nation’s modern economy.
4. United States students will be first in the world in mathematics and science achievement.
5. Every adult American will be literate and will possess the knowledge and skills necessary to compete in a global economy and exercise the rights and responsibilities of citizenship.
6. Every school in the United States will be free of drugs, violence, and the unauthorized presence of firearms and alcohol and ill offer a disciplined environment conducive to learning.
7. The nation’s teaching force will have access to programs for the continued improvement of their professional skills and the opportunity to acquire the knowledge and skills needed to instruct and prepare all American students for the next century.
8. Every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children. (pp. 1-2)

In another section of the Act Part C- Leadership in Educational Technology (Sec. 231), there are guidelines that specifically address how the Act will help to infuse technology into educational systems (H.R. 1804 Goals 2000: Educate America Act, 1994). According to these guidelines, there will be support at the Federal levels that:

1. infuses technology and technology planning into all educational programs and that there will be continued training at the State and local levels,

2. conducts continual research and awareness of the potential of technology concerning the improvement of teaching and learning,

3. promotes high quality professional development opportunities for teachers and administrators that address the integration of technology into instruction and administration, and

4. monitor advancements in technology in order to and encourage effective use of educational technology tools.

At the same time that the Goals 2000: Educate America Act (North Central Regional Educational Laboratory, 1995/2004) was being formulated, the Secretary of Education, Richard Riley, created a National Long-Range Technology Plan (Assey, 1999). Riley noted that technology has made structural changes in the U.S. educational system. These changes have forced administrators and teachers to reevaluate their curricula, content, physical learning environment, and the changing roles of teachers.

To help guide teachers, a committee from the U.S. Department of Education formulated
The National Standards for Visual Arts (The Kennedy Center Arts Edge, 2004). The National Standards help to give teachers goals and standards to follow during instruction.

The National Visual Arts Standards are:

1. Content Standard 1: Understanding and applying media, techniques, and processes.
2. Content Standard 2: Using knowledge of structures and functions.
3. Content Standard 3: Choosing and evaluating a range if subject matter, symbols, and ideas.
4. Content Standard 4: Understanding the visual arts in relation to history and cultures.
5. Content Standard 5: Reflecting upon and assessing the characteristics and merits of their work and the work of others.
6. Content Standard 6: Making connections between visual arts and other disciplines. (pp. 4-5)

Goals 2000: Educate America and the National Visual Arts Standards have become two of the initial forces that have driven visual arts instruction and solidified the importance of arts education.

On January 8, 2002, President George W. Bush signed into law the No Child Left Behind Act of 2001 (NCLB; National Conference of State Legislatures, 2004). The NCLB provides an increase in federal resources to states to improve low performing schools. Each state is given the choice of whether they want to participate in NCLB, yet the federal funding accounts for about 8% of the state education budget. In 2005, the staff members of the International Society for Technology in Education (ISTE) gathered and synthesized all the information from the past years and introduced The New National Technology Plan (ISTE NETS Project, 2004). According to the criteria of The New National Education Technology Plan for the U.S. Department of Education, 2005, the NCLB presents a framework for reform to help close the achievement gap. To help
reinforce these drastic changes in the educational structure, NCLB provides the opportunity for technology funding for every program. The purpose of the New National Education Technology Plan is to help motivate and encourage technology driven transformation. In his introduction to the Visions 2020 Report, the Secretary of Education, Dr. Rod Paige, during Clinton’s presidency, stated:

Indeed, education is the only business still debating the usefulness of technology. Schools remain unchanged for the most part despite numerous reforms and increased investment in computers and networks. The way we organize schools and provide instruction is essentially the same as it was when our Founding Fathers went to school. Put another way, we still educate our students based in an agricultural timetable, in an industrial setting, but tell students they live in a digital age. (p. 1)

One of the major aspects of The New National Education Technology Plan is that it provides the U.S. school systems with a set of action steps and recommendations, that assist in new transformations of educational systems. The seven action steps and recommendations include:

1. Strengthen Leadership
2. Consider Innovative Budgeting
3. Improve Teacher Training
4. Support E-Learning and Virtual Schools
5. Encourage Broadband Access
6. Move Toward Digital Content
7. Integrate Data Systems

The staff members of ISTE believe that, if school systems adopt the ideals of The
National Education Technology Plan, “The Path is clear-- more advanced technology will ensure better success in No Child Left Behind” (see Appendix A, A Technology Framework for No Child Left Behind Success).

Facts and Statistics

While it is important to understand the historical background of how the educational system has evolved, it is equally important to understand what is happening now and how funding affects the U.S. school systems. According to the U.S. Department of Education (2005a), for the 2003-04 school year, taxpayers invested an estimated $501.3 billion into K-12 education. Surprisingly, this amount exceeds the taxpayer investment for national defense. Even more controversial is the fact that the U.S. is a world leader in education investment, yet nations that spend much less achieve higher levels of student performance. Even though state and local funding are the primary sources of money for K-12 education, federal spending has increased from 5.7% in 1990-1991, to 8.2% in 2001-2002.

Direct facts and statistics that relate to funding for technology provided by the U.S. Department of Education (2005b) indicated that, “more than $700 million is dedicated for the use of technology to improve student achievement through the Enhancing Education Through Technology initiative. Schools must use at least 25% of these funds for professional development” (p. 1). In No Child Left Behind (NCLB; as cited in National Conference of State Legislatures, 2004) technology funding was provided for every program because technology can be used to help accomplish specific program goals. According to the NCLB, by the eighth grade, it is required that every student should be
technologically literate. To help support this requirement, a public/private partnership called the 21st Century Skills Forum is being established that integrates companies such as Microsoft, Apple, SAP, NEA, Cisco, AOL, Infotech Strategies, and Dell into the educational framework. The NCLB provides $15 million for a 5 year research study that utilizes scientifically based research to identify the necessary conditions by which technology can be used to improve student achievement. In 2002, at 8% of the public schools, laptop computers were loaned to students, the highest percent loaned was in rural areas at 11%; “99% of schools and 92% of classrooms are connected to the Internet” (p. 1). Online high school programs have been established in 12 states, and 5 other states are in the process of developing them. By the end of the 2001-2002 school year, 40-50,000 K-12 students had enrolled in an online course. “At least 15 states provide some form of virtual schooling to supplement regular classes or provide for special needs, and about 25% of all K-12 public schools now offer some form of e-learning or virtual school instruction” (p. 2). Finally, the U.S. has reached an era where the gender divide in computer use has for the most part been eliminated. This means that, for the first time, there is no overall difference in computer use between boys and girls. These trends continue to support improvements in education and further the integration of technology. The hope is that students of the U.S. will continue to prosper on a path to become more efficient productive leaders of the world.
Initiatives and Studies for Technology Integration

Throughout the last decade, many initiatives have been initiated to teach all levels of educators how to integrate technology into their daily teaching strategies (ISTE/NETS; 2002/2004). It is important for individual employees of school districts to analyze and synthesize a variety of research that has been conducted to find the programs and methods that best suit the students and staff’s individual needs within the school. In the sections that follow, this author explores just a few of the initiatives and studies that have been developed to assist in the integration of technology into the classroom.

*Project ImPACT Model*

Project ImPACT is a model that was developed to implement the Preparing Tomorrow’s Teacher to use Technology (PT³) project to study how teachers’ technical skills and their ability to integrate instructional technology into their own teaching methodologies could be improved (O’Bannon & Judge, 2004/2005). In 1999, the officials from the U.S. Department of Education (as cited in O’Bannon & Judge), in response to the lack of technology that was used being used for instruction in the classroom, funded the PT³ initiative. In response to the PT³ initiative, staff of The University of Tennessee developed a model titled, Implementing Partnerships Across the Curriculum with Technology (O’Bannon & Judge; [http://web.utk.edu/-impact](http://web.utk.edu/-impact)). Since technology has become accessible to students around the world, it has become apparent that teachers should become facile in their ability to incorporate technological advances into their classroom teaching strategies. Through teacher access to technological equipment, professional development, technical, instructional, and administrative
support, teachers have been able to adapt new teaching strategies into their curriculum that proved to be beneficial to students learning. The purpose of the O’Bannon and Judge study was, “To investigate the extent to which teacher participation in Project ImPACT was associated with an improvement in the use and integration of technology and an increase in technical skills” (p. 209). They wanted to demonstrate that, by participation in Project ImPACT, the mentor teacher would “increase in the ability to integrate technologies into instructional practices, while increasing technical skills in the process” (p. 198).

**Method**

Many changes were made in the participant schools to ensure that the conditions of Project ImPACT were met (O’Bannon & Judge, 2004/2005). One of the first conditions was teacher access. All the classrooms contained a variety of computers for the students and a teacher station with the TV and Internet connected. Also, it was required that, over time, the school officials were to set aside money to update computers and software and buy digital cameras, printers, and scanners. In addition, each teacher who participated in the study received a laptop with the appropriate software to use for the duration of the 1 year study.

The second condition, according to O’Bannon and Judge (2004/2005), included continued professional development for the participant teachers. Throughout the project period, teachers were introduced to a variety of teaching methods that included curriculum-based, hands-on, and modeling techniques that integrated technology into classroom instruction.
Professional development sessions consisted of five 3 hour sessions throughout the Fall semester.

In the third condition, teachers received intense support from administrators, technology coordinators, and project staff, and through continued instructional education (O’Bannon & Judge, 2004/2005). At each school, a full time technology coordinator was employed who assisted teachers with the new materials. Each teacher was paired with a mentor teacher for the year to provide extra support and collaboration.

In the last condition, teachers committed to invest a substantial amount of time to develop their new technology integrated curriculum (O’Bannon & Judge, 2004/2005). Therefore, teachers were rewarded with a $1,500 stipend, travel, certificates, recognition, and graduate credit. During project meetings, a variety of door prizes were given as additional incentives. All of these four conditions were combined to create a base of rules and regulations that helped to guide the study.

According to O’Bannon and Judge (2004/2005), evaluations were conducted throughout the study to measure the adequacy and effectiveness of the model. The method that was used for the evaluations “combined an analysis of documents and focus groups conducted by an external evaluation team and interviews and observations conducted by project staff” (p. 203). Also, teachers participated in focus groups to examine each part of the project model. Several authors (Morgan, 1988; Stewart & Shamdasani, 1990; both cited in O’Bannon & Judge) found that the use of focus groups: (a) could generate large amounts of data in a short amount of time, (b) assess participants’ experiences and perspectives, (c) produce new data and insights that may not happen
through individual interviews, and (d) provide research findings that could stand alone or be combined with other data to produce a comprehensive evaluation.

*Preservice Teachers’ Perception Concerning Technology In the Classroom*

The mastery of computer skills is one of the first steps teachers must achieve to successfully integrate technology into the classroom. Wang (2002) explained: “equally important is the perceptions preservice teachers develop out of their training about effective teaching and learning in the classroom with computers” (p. 150). Preservice teachers face new challenges and acquire new strategies to teach throughout their education. Therefore, they must learn how to develop clear, concise standards to teach by, that incorporate computers in the learning process on a regular basis. The purpose of the Wang study was to determine the perceptions of preservice teachers in regard to the role of the teacher in a room with computers. Also, Wang investigated to what degree and how the preservice teachers could actually use the computers in the classroom.

While many preservice teachers are educated by instructors at universities to integrate technology into classroom instruction, Wang (2002) explained that the process must go much deeper than that. Wang cited Norum, Grabinger, and Duffield (1999) who noted that the presence of computers changed the traditional classroom by: (a) the shift of responsibility from teacher centered to student centered, (b) new arrangements in the classroom setup, (c) reformation of social organization, and (d) the establishment of a new type of partnership between teachers and students. Even though teachers are willing to make changes and adopt new ideas, Wang cited Sandholtz, Ringstaff, and Dwyer (1990) and stated that “the change is slow, and sometimes includes temporary regression”
Becker (1991, as cited in Wang) found that many teachers teach according to how they were taught, trained, and the experiences they have had in the past.

Wang (2002) demonstrated that preservice teachers’ perceptions are an integral part of shaping future teaching behaviors. Today, computers have become essential to the learning process. Therefore, Wang concluded that what preservice teachers’ perceptions of computers is just as important as how they are used in the classroom.

**Technology Adaptation: A Five Step Hierarchical Model**

To understand where teachers are in terms of their level of technology adaptation in the classroom, Rogers (1999) cited the Reiber and Welliver (1989) and Hooper and Reiber (1995) five step hierarchical model. In this model, five “stages of growth associated with infusing a new technology in teaching and learning” (p. 5) are described. The first stage, familiarization, represents the level of basic exposure the teacher has had in the incorporation of technology. This is, the most basic level of exposure to technology that the teacher experiences. This type of exposure includes: (a) summer workshops, (b) conventions, (c) inservice workshops, and (d) a museum show on computer generated art. Most of the time, after the initial exposure to the computer based technologies, the teacher dismisses the adoption of the new information due to the lack of usefulness or accessibility of the product. The second stage, utilization, happens when the teacher actually tries the technology. Teachers at this stage “have at least used the technology once or twice, but may never return to it after this initial trial” (p. 5). Teachers either do not see the usefulness of the technology, or they fear malfunctions with the programs and computers. Hooper and Reiber (1995, as quoted in Rogers)
“described this as the highest level most teachers usually reach with computer based technologies” (p. 5). The third stage, integration, represents a point where teachers use computer based technologies in the delivery and development of instruction. At this point, teachers can rework the learning environment to fit the needs of the students and themselves, but this stage can be influenced by the opportunities afforded by the technology. According to Hooper and Reiber, the fourth stage, reorientation, “requires that educators reconsider and reconceptualize the purpose and function of the classroom” (p. 6). During this stage, the teacher’s job is to find ways to facilitate the learner. This stage redefines the roles between the teacher, learners, and computer based technology within the classroom. Emphasis is now focused on the learner, and computer based technologies become a part of the learning context. The fifth and final stage, evolution, according to Rogers, “is the continued ability to grow and change as the needs of the learner and learning context change” (p. 6). Jonassen, Campbell, and Davidson (1994, as cited in Rogers) noted that, at this stage, teachers must be willing to change the methods and media as it becomes necessary to facilitate learning. Each stage of the model discussed above requires: (a) support services, (b) funding, (c) time, and (d) administrative and student expectations. Rogers stated that “mismatches in a teacher’s level of technology adoption with certain internal or external sources of potential barriers provide an almost certain failure to adopt technology in the classroom” (p. 7).

Rogers (1997, as cited in Rogers, 1999) provided teachers with a model and several recommendations to aid in the development of curricular plans to integrate technology.

1. Determine the goals of teaching and learning first.
2. Assess the level of technology adoption of the stakeholders, particularly the faculty and staff.
3. Assess the attitudes if stakeholders toward technology in education.
4. Consider three categories of barriers to technology adoption (availability and accessibility, instructional and technical support, and stakeholder development) simultaneously.
5. Technology plans must include a consideration of time and funding issues. (p. 17)

If teachers, technology coordinators, and staff development professionals work together with the administrators, parents, and community to reinforce the principles indicated in this and other studies, technology integration in the classroom is increasingly attainable. “And so the vicious cycle goes” (p. 19).

Art and Technology Integration and Community Discovered Projects

Art and Technology Integration (ATI) is a project that was formed to provide a model program for teaching and learning in Grades K-12 through the collaboration of the staff of the Westside Community Schools, Grand Island, the Smithsonian Institutions National Museum of American Art (NMAA) in Washington DC, and the University of Nebraska at Omaha (UNO; as cited in Ostler et al., 1996). The primary purpose of the ATI is to develop “a multi-element education program that brings National Art Museums into classrooms electronically, develops computer integration strategies, trains and supports teachers, builds curriculum, instruction, and assessment strategies, and seeks to build a statewide community fit and technology integration” (p. 7). The four main goals of ATI are:

1. expand the use of educational technologies that support engaged learning;
2. use art and museum resources as cross disciplinary integrators in grades K-12;
3. digitize selected images and artifacts from the National Museum of American Art, and make them available over the Internet; and
4. increase teachers’ skills, knowledge, and abilities, to demonstrate integration by providing training in constructivist theory, art integration, and technology. (p. 10)

Art and Technology Integration (ATI) was a precursor to a larger project connected with the U.S. Department of Education Challenge Grant entitled, “The Community Discovered” (Ostler et al., 1996). The Community Discovered is a 5 year project that strives to reform the education of K-12 students in Nebraska. Through the Community Discovered project, links are made between technology and visual arts with other subject disciplines. The Community Discovered project has five goals:

1. to promote and encourage academic achievement,
2. to provide student equity in access to state and national museum resources,
3. to enable educators to effectively use appropriate technologies for teaching and learning,
4. to effectively integrate art into interdisciplinary curriculum projects, and
5. to create a national network of educators to support the development and implementation of appropriate learning strategies that integrate technology into other subject areas. (p. 6)

Currently, the Community Discovered project has a World Wide Web site. Even though this site is accessible now, it is continuously being updated and will eventually be the primary source of information for both Community Discovered and the ATI projects. The staff of the U.S. Department of Education hopes that these two projects will one day serve as a national model for curricular revision.

Advantages of Technology in the Classroom

Assey (1999) stated:

Experiences integrated with technology not only have students create new products and performances, but they also develop computer literacy in students by helping them be better producers and consumers of technology. An arts program that develops students’ potential for innovation in music, animation, graphics and multimedia prepares students for the job market of today. (p. 11)
When teachers integrate technology into the visual arts classroom, it gives students the opportunity to expand and interact with new modes of artistic expression. The use of digital technology affords students with the chance to explore and solicit endless resources, and students are able to enhance their creative expression as the world becomes their classroom. Also, the use of technology transforms what and where students are able to learn. Now, students are able to work outside of the traditional school environment. Computers and the Internet allow students to work more independently and move through assignments at their own pace. The use of technology has begun to change the face of education from teacher centered classrooms to student centered learning; students are now able to take charge of their learning. Another side effect of the integration of technology into the classroom is that it gives parents, other schools, higher education, businesses, and communities the opportunity to become more active and involved in students’ education.

Art teachers are now able to share ideas, lessons, assessments, and collaborate on projects with other art teachers around the world (Assey, 1999). This not only broadens personal knowledge, but allows other art teachers the ability to access information quickly from their colleagues. Art teachers can utilize technology to access student progress through the development of digital portfolios. This gives art teachers the opportunity to constantly keep track of student work over longer periods of time and regularly monitor gains in student learning. Participation in mentorship programs and collaboration provides a low cost alternative to scheduled teacher training workshops.
Assey stated that, “Only with support and training of teachers will technology support the improvement of educational outcomes for students” (p. 10).

The findings from the O’Bannon and Judge (2004/2005) study supported previous research (O’Bannon & Vannatta, 2001/2002; Pask-McCatney, 1989; Roblyer, 2003; Summers, 1990-1991; all cited in O’Bannon & Judge) and demonstrated that, as a result of participation in project ImPACT, there were changes in students’ confidence, motivation, and time on task. It was noted that there were changes in the students’ problem solving, vocabulary, and reading skills. The O’Bannon and Judge results are important for educators because they demonstrate that teacher training in technology and access to technological equipment is worth the time, effort, and expense. O’Bannon and Judge explained that “The Project ImPACT model was effective in changing the teacher education program and developing mentor teachers in the field who play such an important role in the development of new teachers” (p. 210). With support from fellow staff, parents, administrators, timely upgrades on equipment and software, and constant teacher training in technology, change can occur.

Sanchez and Nichols (2003) identified a number of these positive effects when technology is integrated into the classroom in their Technology Integration Project (TIP):

1. TIP brought new resources to the classrooms;
2. provided professional development opportunities;
3. technology allowed teachers to better meet the needs of students with learning disabilities;
4. gave teachers the chance to use computer equipment and multimedia software that
addressed a range of students’ learning styles (e.g., auditory, visual, and
kinesthetic);

5. gave teachers and students the ability to access new and up to date information
faster; and

6. provided teachers with the knowledge and confidence to meet state and federal
standards.

These six advantages of technology integration in the classroom provide further evidence
that, through continued teacher and student educational initiatives, that the arts
educational community can prepare “students to become performers and consumers of the
arts while realizing the lifelong benefits” (p. 14).

In the 21st C., it has become ever more apparent, that “the increase in visual
languages of all kinds used in multiple communication systems compounds the
importance of art” (Hicks, 1993, p. 44). Hicks feels strongly that no matter what career
path students take, that they need some art knowledge to develop and understand the
impact that mass media has on their lives. “They must be prepared to use communication
technology effectively because every profession incorporates complex communication
systems. The visual aspects and art relatedness of these systems require design concepts
and the thinking skills associated with a good art class” (p. 44).

Also, Hicks stated that “Information age changes are dictating that art programs are
essential” (p. 47). Since the shift in the importance of the technology era, it has allowed
the opportunity for the arts to gain more clout on the educational front.

The information age has provided visual arts teachers with a chance to really demonstrate
to the world that art is the basis for many essential teachings beyond the immediate content of art.

Barriers and Disadvantages of Technology in the Classroom

Rogers (1997, as quoted in Rogers, 1999) suggested “that barriers to technology adoption in schools are a complex balance and counter balance of several components” (p. 15). Also, Rogers indicated that attitudes and perceptions of individuals toward technology integration in the classroom, as well as the level of instructional support available, are key components to the success of the adoption of any technology in the classroom. Rogers concluded:

Once past this component, potential barriers cluster within three major categories: availability and accessibility of hardware and software, appropriate stakeholder development opportunities for teachers at all levels of technology adoption, and appropriate and adequate technical and institutional support to initiate and maintain technology adoption in teaching and learning. (p. 15)

When teachers adopt new technologies, the barriers that emerge are dependent upon a variety of circumstances and relationships. For example, several authors (Borrell, 1992; Piller, 1992; both cited in Rogers) indicated that, “many schools purchased a computer for every classroom in the late 1980's but did not provide technical support or staff development opportunities” (p. 15). The computers were accessible, but without any technical support and training, they become useless and, in turn, a waste of funding. If funds are not properly allocated to support all facets of technology adoption, then this imbalance creates additional barriers that can lead to negative attitudes toward technology.

Roger (1999) noted that the barriers were reported as overlapping issues and needs.
To infuse technology into the learning process, planning for technology becomes a key component. Rogers stated, “The most successful technology plans include input from all stakeholders concerned as well as those who may be hired specifically to develop technology plans” (p. 17).

Rogers (1997, as cited in Rogers, 1999) concluded that “the results of this study suggest that external barriers are most likely to affect those teachers who are at the beginning stages of technology adoption” (p. 13). As individual staff become more comfortable with the integration of technology, the barriers of access, availability and technical support become more important. At the highest level of technology adoption, the lack of technical support, at the higher, more in depth levels, and lack of continued educational development for teachers becomes another notable barrier.

Mize and Gibbons (2000) conducted a study on how to incorporate instructional technology to support K-12 learning. They reported that financial constraints and the amount of time teachers are given to practice and plan for the integration of technology into the curriculum were some of the major barriers or disadvantages that concern technology integration in the classroom. Also, Mize and Gibbons noted that, as time progresses and technology advances, some school staff become immersed in the notion “that the quality of student’s work is dependent upon the quality of the tool” (p. 2). This misconception by school administration and staff forces a constant financial battle because school staff always attempt to get the newest technological innovations so that students will produce the best work. All the new mandates in place that require teachers to integrate technology into the curriculum have forced teachers to find new ways to use...
technology in the classroom. Problems arise when teachers use a trial and error method to make these incorporations. “Teachers commonly must accept a technology that, although it satisfies the situation, it causes the teachers to sacrifice as optimal situation to an instructional problem” (p. 3). In turn this syndrome can be transmitted to the students. “Although students appear to have spent a great deal of time with various software, they so not seem to know when and how to apply their software skills to work related problems” (p. 3). Mize and Gibbons suggested that, by teaching teachers how to infuse technology into their curriculum instead of adding it on top, this will help to overcome the issues of time and minimize misuse.

Repeatedly, researchers like Assey (1999), Mize and Gibbons (2000), Ostler et al. (1996), and Rogers (1999) have identified the barriers and disadvantages to the integration of technology into the classroom as:

1. limited time allotted for teacher exposure, preparation, and practice;
2. lack of continued teacher education and technical support;
3. teachers’ personal preconceptions and confidence or attitude;
4. lack of funding for updated software, hardware, and training;
5. limited availability and accessability;
6. problems in matching museum images with specific topics; and
7. lack of an enhanced search mechanism to help identify images.

Assey (1999) cautioned that, because technology now plays such an important role in job opportunities for the future, the uneven distribution of technology based on income, gender, race, or geography could widen the social divisions that exist in this society.
Also, Assey warned that teachers must keep their technology integration in check. It is essential that art content is the most important part of the curriculum. Art teachers must make sure that they do not let technology overshadow the true curriculum, instruction, and assessment of art instruction. Teachers must learn how to sort out the chaotic information that accompanies the use of technology and learn to become wise consumers and teachers about the information that exists.

Technological Teaching Tools

*Computers and Compact Discs*

In 1983, the number of computers available in U.S. schools for students was a ratio of 1:125 (Brouch, 1994). In 1991, the ratio grew to 20 students to 1 computer. Arts educators have learned how to use computers in a variety of ways; they can scan in images for the display of examples for projects, rough out compositions and work through design problems, and manipulate photo images. This is just a few of the things that can be done.

In the mid 1980s, the staff of the National Gallery of Art initiated a program that stores a collection of images on laser discs to assist in research and education programs (Brouch, 1994). A single laser disc can hold as many as 105,000 images. The laser discs provide teachers with the ability to quickly access thousands of images and resources. “A single CD-ROM (Compact Disc-Read Only Memory) can store 660 megabytes of data, the equivalent of 250,000 pages of text and 40,000 pages of images” (p. 46). The CD-ROM is very useful because it can be shared and saved for years without being damaged or lost.
Greh (1997) provided just a few of the newer CD-ROM titles to assist art educators. They include:

1. *The Ultimate Frank Lloyd Wright: America’s Architect* from Microsoft;
2. *Van Gogh-Starry Night, Painters Painting, With Open Eyes and Comic Book Confidential* from Voyager;
4. *Paul Cezanne: Masterpieces from the Musee d’Orsay*;
5. *Leonardo the Inventor*. (p. 20)

With these CD-ROMS, students are provided with the opportunity to explore learning at their own pace, and they store a large amount of information that can be shared multiple times. Also, some of the CD-ROMS can provide an interactive experience for students.

*Multimedia Communication and Presentations*

In classrooms that are equipped with interactive telecommunication network capabilities, teachers and students are able to communicate with other people and resources in almost any area of inquiry (Boruch, 1994). Also, some schools have purchased roving, time share mobile units that are equipped with computers and satellite links. Access to these types of units afford teachers the opportunity to connect their classrooms and teachings with other classrooms around the world. Also, computers can be used to provide the opportunity to incorporate multimedia designs and presentations.

Brouch stated:

Multimedia takes any created or recorded event and packages it in mini-units of training or instruction. Multimedia combines words, photo-images, animations, sounds, and film and video clips into real-time events. These data are refined on computers, then recorded on compact or laser disks to be used for interactive training packages designed to optimize learning that is increasingly focused by topic and selectively personalized for individual needs. (p. 45)
Brouch indicated that curricula that are enhanced by the integration of some of these technologies help learners to comprehend accumulated knowledge in any discipline.

*Power Point Presentations and the Value of Computers to Art*

Another form of multimedia presentation is through the use of a PowerPoint presentation. An example of how to create an effective PowerPoint presentation can be found in Appendix B, *Effective PowerPoint Presentations*. Matthews (1997) reported that:

> To refuse to use computers in art education is to increase the probability that one’s students will be left behind, caught on the wrong side of history. The embrace of new media os not a rejection of the old. It is simply an important expansion of one’s creative armamentarium. Art educators need to help their students become competent in this most powerful visual art medium. (p. 2)

When art educators use computers to teach, they are able to reach a variety of students and tap into riches that students may have not realized were even there (Matthews). For many reasons, art education is less valued than many other subjects in the view of some administrators, parents, and the community. For this reason, computers can be used to provide art teachers with the opportunity to prove to the administrators, parents, and the community that through art education, students will learn to master the creative possibilities of the computer. The ability to use the computer has strengthened the validity of art education throughout educational systems around the nation.

Also, computers can be used to increase the capability of interdisciplinary collaboration (Matthews, 1997). With computers, students can express artistic ideas with peers, and they are an excellent medium for students to try new artistic ideas without the negative experiences that *messing up* can cause.
An original work can be preserved, and then students can easily manipulate the original image and create new work in just a matter of minutes. This type of manipulation might take weeks with the use of traditional methods.

In a 10 year study conducted by Apple Computer that analyzed the Apple Classrooms of Tomorrow project (ACOT; Fisher, Dwyer & Yocam, 1996; Sandholtz, Ringstaff & Dwyer, 1997; both cited in Barnett, 2003), the researchers made four conclusions about computers as learning tools,

1. Students routinely used higher-order thinking skills far beyond what was expected for their grade level.
2. Students demonstrated enhanced ability to collaborate with peers to develop projects and reports.
3. Students demonstrated increased initiative. They maintained time on task for longer periods and often continued their work during recess, before school, and after school.
4. The use of technology coupled with teachers having time for reflection led, over a period of three to five years, to substantial changes in teachers’ beliefs about teaching and learning. (p. 3)

As exhibited in these conclusions, it is apparent that there were many positive effects when computers were used as teaching tools in the classroom.

**Internet, Electronic Mail, and SURWEB**

The use of computers have enabled art educators to gain instant access to an abundant amount of information and professional development through the World Wide Web or as it is now referred to, the Internet (Matthews, 1997). Currently teachers and students can access any information that they need by the entry of search words into the search box on any web browser. Teachers can post art lessons and access other teachers’ lessons through the Internet, and it can provide teachers with extended support; not only can they
view and print lessons, but they can utilize electronic mail (e-mail) to communicate with the authors of the lesson. This means that, if a teacher has any further questions or comments, they can be sent through e-mail, which provides a quick and easy connection between teachers anywhere in the world. Also, e-mail can be used to connect classrooms of students to real life artists. Students are able to ask artists from anywhere about their work and hold productive conversations about art work without being in the same room or even state.

Another very important connection that the Internet has made available for art education is through virtual tours of major art museums (Provenzo, Brett, & McCloskey, 2005). Provenzo et al. provided two examples of where art educators can find these virtual museum tours, the Metropolitan Museum of Art (http://www.metmuseum.org/special/index.asp) and the National Gallery of Art (http://www.nga.gov/collection/). Other than virtual museum tours, art educators now have access to other programs that can be accessed through the Internet such as Kid Pix, Jump Start Artist, and Kid Pix Deluxe. These programs have been developed to enable students to paint, draw, and create multimedia projects. With these programs, a variety of activities are available for students that meet the National Standards for Art Education (The Kennedy Center Arts Edge, 2004). With these programs, students have the opportunity and freedom to create art in their own world and at their own pace.

The SURWEB is another multimedia tool and resource database that is available and free on the Internet (Barker & Bills, 1999). The SURWEB, which was established in 1995 at the State of Utah Resource Web, can be found at http://www.surweb.org/.
The SURWEB consists of over 37,000 images and related text files. With this tool, teachers can create multimedia presentations for interchange with other students that can be previewed in the classroom or at home. Listed below are just a few of the thousands of media shows that are included on the SURWEB explored by Barker and Bills:


New media shows are constantly being added to the SURWEB, and they include categories from many curricula not just the visual arts. According to Barker and Bills,

As educators move into the year 2000 and beyond, our nation’s students need to develop skill and expertise in accessing, exchanging, and analyzing digital information resources if they hope to be successful in the world and work place of the future. As the Internet continues to evolve and as students and teachers master skills in navigating through its databases, tools, and services, the information of the world will truly be at their fingertips and before their very eyes. (pp. 6-7)

Helpful Resources

Today, there is an enormous amount of information for art educators to access through technological advances. There is so much information available that it is hard to know where to start. The following are some resources and figures that can help art educators begin to look for information. For example, there are Online Magazines (Lu, 2003):

2. Scholastic News at http://teacher.scholastic.com/scholasticnews/ (p. 4)
In addition, there are sites for resources and equipment (Clark, Hosticka, & Bedell, 2000):


Other sites include:

1. The Art Teacher Connection Website at http://www.artteacherconnection.com

Also see Appendix C, *Specialized Search Engines and Directories.* Hopefully, these resources and figures will encourage future art educators to become inspired and motivated to learn and incorporate educational technologies into their teaching strategies.

**Chapter Summary**

A survey of historical background of how technology is used in education and facts and statistics were presented in this chapter. Research and strategies on how technology integration is taking place in education was presented, also. Some of the advantages and disadvantages of technology integration were outlined, and even though many of them can be disputed to help or hinder the expansion of technology into the classroom, it is apparent that there is not turning back now or trying to stop it. Also, this author provided some of the resources and tools available to art educators to assist them in teaching with technology in the visual arts classroom. It is apparent that teacher training, time for teacher planning, funding, and continued support by administrators, parents, and the
community are vital factors in the assurance of successful technology integration.

Furthermore, it is critical that teachers take time to explore new tools and ideas, and continue to educate themselves about technology and resources as they emerge, while they utilize the materials provided by technology as they teach. One attempt to develop such an approach to learn how to integrate technology into the visual arts classroom will be detailed in Chapter 3.
Chapter 3

METHOD

The purpose of this project was to educate teachers on how to incorporate new and innovative technologies to enhance educational experiences in the visual arts classroom. The need for the integration of technology into the visual arts classroom came to the attention of this researcher during student teaching and then long term substituting in both high school and K-5 schools. Visual arts teachers must be qualified and are certified to teach students at all grade levels. Even though this can provide them with more opportunities to find work, it can also be a source of great pressure that forces them to have a broad variety of lessons that can meet the needs of various grade levels and learning needs of the students.

It is understood by this researcher that a visual arts teacher can maximize the time and efficiency of teaching visual arts by the utilization of technological instruments. This researcher attempted to analyze and utilize the research provided to formulate a cohesive visual arts unit that integrates the use of technology. This unit provides an example for other visual arts teachers on how to integrate technology into the visual arts classroom. The integration of technology into education is here to stay and with the pressures from mandates like No Child Left Behind Act (National Conference of State Legislatures, 2004), National Visual Arts Standards (The Kennedy Center Arts Edge, 2004), and
National Educational Technology Standards (International Society for Technology in Education & National Educational Technology Standards [ISTE/NETS], 2002/2004), all teachers must continue to teach with technology and teach students how to use technology on a daily basis.

Target Audience

The groups or individuals that would be interested in the use of this particular project and its application would be visual arts teachers. This information provides them with the knowledge, skills, and examples to integrate technology into their future lessons. Also, visual arts teachers can utilize the visual arts unit presented in this paper to experiment in their own classrooms. This will allow them to investigate the effects of integrating technology in their individual classrooms before taking the time to formulate their own individual lessons that utilize technological teaching tools.

Goals of the Applied Project

This project has three main goals. The first goal was to teach visual arts teachers how to integrate technology into their daily teaching practices by utilizing technology teaching tools such as, videos, Power Points, digital cameras, smart boards, slides, computers, and the Internet. This researcher provided visual arts teachers with information and examples so they can create their own units for students, that use technology to introduce new visual arts projects.

The second goal of this project was to provide an example unit for visual arts teacher to utilize. This completed unit can be integrated instantly into their own classroom with minimal work for the teacher. This unit allows teachers to observe the benefits of
integrated technology in their own classroom on their own terms and adjust the teaching as they see fit. It is this researcher’s hope that, after they introduce the unit provided, they will see the overwhelming benefits of integrating technology into the visual arts classroom and begin to formulate their own units to integrate technology into the visual arts classroom.

The third and final goal of the project was to open visual arts teachers to the possibilities that technology can provide. This project shows visual arts teachers that they can create units that can be saved and shared through the computer and the Internet for years. At the same time, the units can be expanded and reworked each year without having to spend a great amount of time starting from scratch. Technology is a part of every student’s life today; therefore, the units can quickly be adapted to fit the needs of any grade level. When visual arts teachers adapt and learn new methods for teaching, they set strong examples for their students that show them everybody should be a life long learner.

Procedures

To meet the goals of this project, this researcher provided visual arts teachers with a detailed unit of study. The unit of study will follow the Colorado State Standards for the Visual Arts (The Kennedy Center Arts Edge, 2004) and be presented in lesson plan type format. Throughout the unit, there are many different types of integrated technological tools. The introduction to the unit is a Power Point presentation that presents the students with background and historical information. During the execution of the actual project, the technology that was being utilized at the introduction of the project can be repeated.
throughout the work process to ensure understanding and retention of the information. A digital camera was used to document students’ progress throughout the project so that they have a tangible example of their progress through the artistic process. The unit of study is available to any teacher who wishes to use it in their classroom and this researcher’s contact information, including email address will be included so that if there are any concerns or questions by the teacher they can be answered in a timely manner.

Peer Assessment

The author requested to have several colleagues or experienced teachers to review the unit and provide informal feedback. The author used the feedback information to assess the usefulness of the unit and to develop future improvements.

Chapter Summary

In this chapter, the methods used to conduct this project were described. Also, detailed in the chapter were the purpose of the project, who the project is targeted for, the three goals that the author strives to achieve, and the procedures used to meet the goals. The project that has been detailed in Chapter 3 will be presented in full in Chapter 4. Results and discussion of the project presented will be discussed in Chapter 5, along with the limitations and recommendations for future study.
Chapter 4

RESULTS

A sample project that this researcher will include in Chapter 4 was a unit curriculum and student examples of the unit presented. There is a pre test at the start of the lesson so that the teacher can evaluate the students’ knowledge at the start and compare it to the information learned by the end of the unit. The rubric for this unit of study will be included as an appendix. The rubric includes assessment of the students’ creativity and expression, technique and craftsmanship, assignment comprehension, design quality, collaboration and cooperation. There is also a test at the end of the unit where students provide information about the slides that were presented and reintroduced throughout the lesson to evaluate the retention of the information. Digital photographs of student progress throughout the project is an added evaluation component, to assure that the teacher keeps track of individual student progress on a daily basis. This helps to assure student time on task, while providing students with a tangible example of process in art.

Sample Unit, “Drawing Techniques” follows in Regis University lesson plan format.
Unit Plan

**Unit Title:** Drawing Techniques: A Study of Value & George Seurat

**Content Area:** Exploring the arts through learning and practicing drawing techniques and the study of art by George Seurat.

**Grade Level:** Grades 9th-12th (Examples of 5th grade work are also included in Power Point)

**Amount of Time:** 4-5 Weeks of 55 minute periods

**Standards Addressed/ Assessed:**

**Visual Arts Standards**

- **Standard 4:** Students relate the visual arts to various historical and cultural traditions.
  - Identify an artist who has achieved notoriety and recognize ways that his or her work reflects, plays a role and influences culture
  - Identify universal concepts expressed in art in visual and written form
- **Standard 5:** Students analyze and evaluate the characteristics, merits, and meaning of works of art.
  - Apply the four steps of art criticism 1.) describe 2.) analyze the work in terms of elements and design principles 3.) interpret the work in terms of ideas and emotions, and 4.) judge the work as to its success both technically and in either communicating an idea, an emotion, of fulfilling a practical purpose
  - Discuss art from a variety of aesthetic stances, formalism, expressionism, multiculturalism, imitationalism, contextualism
  - Use selected criteria as the basis of making judgments about works of art
  - Analyze factors leading to a successful resolution of an artistic problem
- **Standard 2:** Students know and apply elements of art, principles of design, and sensory and expressive features of visual arts.
  - Recognize and apply the Principles of Design, and Elements of Art by learning the new vocabulary words.
- **Standard 1:** Students recognize and use the visual arts as a form of communication.
  - Investigate and sequence multiple visual solutions to a given problem making revisions and articulating the rational for the best solution.
  - Maintain a sketchbook journal of ideas and writings to be used as a resource and planning tool.
- **Standard 3:** Students know and apply visual arts materials, tools, techniques, and process.
  - Refine skills to create an original artwork using a variety of techniques, tools, and media.
  - Follow directions for the safe use of tool, materials, and procedures.

**Reading and Writing Standards**
• Standard 4: Students apply thinking skills to their reading, writing, speaking, listening, and viewing.
  - Use reading, writing, speaking, listening, and viewing skills to solve problems and answer questions.
  - Make predictions, draw conclusions and analyze text.
• Standard 1: Students read and understand a variety of materials.
  - Read and understand literary and technical text at the literal, interpretive and evaluative levels.
  - Determine meanings of words, including those with multiple meanings, using clues.
• Standard 2: Students write and speak for a variety of purposes and audiences.
  - Support an opinion using various forms of persuasion (factual or emotional) in speaking and writing.

**Enduring Understandings/ Essential Questions:**
• Students will understand how to use tools and techniques in a safe and productive manner.
• Students will learn the skills to successful evaluate their own artwork and the work of their peers.
• Students will be able to identify and discuss specific characteristics of artists from the 1800’s, especially focusing on George Seurat.
• Students will be able to discuss the impacts of the artist we study on the modern artist of today. What were the influences and techniques that have transcended centuries of art? How do we use these skills and techniques today?

**Pre-Assessment:** Students may or may not have taken an art class previously. The teacher will give a short pre-test at the beginning of the unit to explore what the students already know. These pre-tests will include vocabulary terms, safety instructions/requirements, and technique evaluations.

**Design Unit Plan:** After pre-assessment, the teacher should adjust the instruction based on students’ understanding of content material. The teacher should make accommodations and adjustments after finding out what the students already know and what needs to be taught. The teacher should also be aware that lessons should be adjusted from year to year to keep up with current trends and ideas.

**Unit Overview and Rationale:**
• Help improve students’ reading and vocabulary skills.
• Help students’ improve on techniques and strategies for solving artistic and linguistic problems.
• Instruct students’ on how to become aware of their surroundings and use what they observe in their artwork.
• Educate students about the historical and cultural background of the arts focusing on various time periods and people.
• Create original artworks that utilize learned techniques and tools.

Materials/Resources: pencils, Bristol Board, drawing paper, tracing paper, tape, found or taken pictures/images, magazines, fine point ink pens, value scale, Seurat books/pictures, erasers, sketchbook, rulers, watercolors, brushes, containers to hold water, digital cameras, projector, computer, screen, pre-assessment worksheet (see Appendix E), performance assessment worksheet (see Appendix F), rubric (see Appendix G), how to draw with a grid worksheet (see Appendix H), post test (see Appendix I), Power Point Presentation (see Appendix J).


Daily Lessons & Activities: Refer to the Daily Lessons that follow in the next pages.

Assessment/Data Collection: Use rubric and post test (see Appendices G & I). Students will be required to keep a daily sketchbook for taking notes, answering questions, and defining vocabulary words. Once a week the sketchbook will be checked to make sure students are keeping up with their work and given weekly points based on the maintenance of their sketchbook. There will also be a test on the same day that the rubrics are evaluated. Students will meet with the teacher on a one on one basis to discuss the final artwork. The grade will be assigned and the student will take a digital photograph of the artwork for their digital portfolio with they will compile at the end of the semester.

Summarize, Evaluate & Reflect: Student and Teacher reflections. What worked well? What did not work well? What supplies/materials would be helpful next time? Could the explanations and examples be changed to enhance learning? Was there anything that was too challenging or not challenging enough?
*What are some other adaptations that can be made to this lesson to fit the needs of younger students?

Differentiated Learning Needs:
• Some students may need more time to finish projects, adjustments must be made if so.
• If some students finish early then they can begin working on new projects; or an extensions of the ones that they have already finished.
• Each student works at a different pace, adjust the lessons to fit the needs of the class and age group that is being instructed.

• The teacher should encourage students to research more about the time periods and people that we are studying and give a short class presentation.
• The teacher should have left-handed supplies for students that are left-handed.
• The teacher should assist students as needed when they have problems or questions.
• All students will be expected to evaluate their work and the work of others throughout this unit.
• The teacher should have the test translated to other languages if needed.
• There will be a time restriction for the slide portion of the test. If needed, a few more minutes may be given. Students may have as much time as they need to finish the second part of the test.
• The test will be given at the start of the period with the critique at the end. If the test takes too long, the critique can be carried to the following period.
• The teacher should encourage students to write anything and everything that they can tell me on the test. Be descriptive and thorough, credit will be given according to what valid ideas are stated.
Lessons 1 & 2

Unit Title: Drawing Techniques: A Study of Value & George Seurat

Instructional Group: Grades 9th-12th (Examples of 5th grade work are also included in Power Point)

Duration of Lesson: Two periods of 55 minutes (The teacher should make a note of where the lesson ended during the first day so the continuation of the lesson the next day is not forgotten)

Learner Outcomes: At the conclusion of this lesson students will be able to:
- Explain what pointillism is and how to do it
- Investigate and explore historical context of pointillism
- Explain who George Seurat is and what contributions he has made to the world of art and the 1800’s
- Recognize slides of art works by George Seurat
- Demonstrate the correct usage of target vocabulary words: pointillism/stippling, shading, contrast, depth, design, intensity, value, George Seurat, fine point pen, Bristol Board

Transition: Assigned seating will not be necessary if behavior is appropriate. Large group instruction and overview of work to be done, note taking. During slide presentation there will be large group discussion on what is being viewed. Small groups will look through picture books at tables according to where they are already sitting.

Colorado Content Standards Addressed:

Visual Arts Standards
- Standard 4: Students relate the visual arts to various historical and cultural traditions.
  - Identify an artist who has achieved notoriety and recognize ways that his or her work reflects, plays a role and influences culture
  - Identify universal concepts expressed in art in visual and written form
- Standard 5: Students analyze and evaluate the characteristics, merits, and meaning of works of art.
  - Apply the four steps of art criticism 1.) describe 2.) analyze the work in terms of elements and design principles 3.) interpret the work in terms of ideas and emotions, and 4.) judge the work as to its success both technically and in either communicating an idea, an emotion, of fulfilling a practical purpose
  - Discuss art from a variety of aesthetic stances, formalism, expressionism, multiculturalism, imitationalism, contextualism

Reading and Writing Standards
- Standard 1: Students read and understand a variety of materials.
- Read and understand literary and technical text at the literal, interpretive and evaluative levels.
- Determine meanings of words, including those with multiple meanings, using clues.
  - Standard 4: Students apply thinking skills to their reading, writing, speaking, listening, and viewing.
- Use reading, writing, speaking, listening, and viewing skills to solve problems and answer questions.
- Make predictions, draw conclusions and analyze text.

**Materials/Resources Needed:** Power Point Presentation (see Appendix J), computer that is connected to a projector, screen or white surface for projection, sketchbook, pencils, pre-assessment worksheet (see Appendix E), slide worksheet (see Appendix I), Seurat books/pictures


**Pre-Assessment:** The teacher will instruct students on how to fill out the Pre-Assessment Worksheet (see Appendix E). After the pre-assessment the teacher will begin lecture by showing slides and talking through what is being viewed. During slide the teacher should promote an interactive discussion with the students about what they know about pointillism and George Seurat.

**Anticipatory Set:** What is pointillism? Where have you seen it before? Can you name some artists that you know that use pointillism in their work? How long so you think that it takes to finish a piece of work using this technique? Do you have any ideas about how this style came about? Do you consider this style a type of optical illusion?

**Teaching the Lesson:**
  - **Input:**
    1. Present slide show and lead discussion.
    2. Lecture on background information of George Seurat from the late 1800’s.
    3. Discuss some of the key vocabulary terms that students will need to be familiar with to understand the direction of this next project; pointillism/stippling, shading, contrast, depth, design, intensity, value, George Seurat, fine point pen, Bristol Board

  - **Modeling:**
    1. Demonstrate how to fill out the pre-assessment worksheet.
    2. Demonstrate how to fill out the slide worksheet.
    3. Demonstrate how to give a successful slide presentation.
    4. Demonstrate how to use the vocabulary from this lesson within the context of the content.
• Checking for Understanding:
1. Students must turn in the pre-assessment worksheet before the slide presentation.
2. Students may take home the slide worksheet for homework and fill any notes they may have not had time to write during the period. The slide worksheet will be collected at the beginning of next period.
3. The teacher will also be asking questions and leading a class discussion during the slide presentation during which time she/he will randomly ask students questions while asking for their input.

Guided Practice/ Instructional Strategies: Students will have the opportunity to fill out both the worksheets for the day during the class period. If they are having problems they may receive help from the teacher or the students at their table. Tables will be already set up to small groups of 3-4 students at each table.

Independent Practice: For homework the students will have the opportunity to take home the slide worksheet and finish anything they did not have time to finish in class. Have students begin to think about and bring in next period some pictures or images that you have seen that really interest you and that you might want to replicate.

Post-Assessment: The last 5-10 minutes of class time will be used to wrap-up the teacher slide presentation. Also discuss what the focus for this unit is and what will be expected for the next period.

Closure:
1. “Today we learned who George Seurat is and what types of painting techniques he used to create his works of art. Students should be able to use correct vocabulary words when discussing and explaining these works of art.”
2. “Now we should have a solid understanding of painters from the late 1800’s, names of their works, color schemes, differentiation in shading techniques, and when and where they painted their pieces.”
3. “Next period we should be able to review what the goals are for the next piece of artwork and what techniques we will exhibit in the piece.”

Summarize, Evaluate & Reflect: How did the students respond to the slide discussion? Where they engaged and taking notes? Showing concrete examples of other students work and teacher examples has proven very beneficial in helping students to grasp the concept of the final artwork that I am trying to assist them in producing.
* For younger students the slide presentation can be shortened and they can just participate in the discussion without taking notes. This same project can also be done by using a photocopy of a picture or a photograph and hole punching construction paper holes to make small dots, then gluing the colored dots onto a photograph.

Differentiated Learning Needs:
• Based on the levels of response, the teacher will adjust the lesson accordingly.
• During the slide presentation the teacher should try and speak in a slow and to the point manner.
• The teacher should explain and define any vocabulary that is unclear to the students and even write and define the words on the board.
• The teacher will be incorporating listening, viewing, and taking notes to meet the learning needs of a variety of students.
• If students are really struggling offer an after-school slide show too if needed (a review).
• Make sure if some students do not speak English that all the instructions where translated and that they understand the expectations.
• No one will begin to work on the project until all the worksheets and notes are turned in to the teacher and checked.
Lesson 3

Unit Title: Drawing Techniques: A Study of Value & George Seurat

Instructional Group: Grades 9th-12th

Duration of Lesson: 1 period of 55 minutes

Learner Outcomes: At the conclusion of this lesson students will be able to:

• Explain what pointillism is and how to do it.
• Create a value practice worksheet to use as a reference when creating their final artwork (see slides 16 & 17 in the Power Point Presentation, Appendix J).
• Transfer images using tracing and/or grid methods onto Bristol Board.
• Recognize and understand George Seurat’s techniques and procedures, and begin to apply them to their own pieces of artwork.
• Students will have brought in or found a picture/image that they would like to work from and they will begin transferring the picture/image to Bristol Board using a tracing method that was demonstrated at the beginning of the period.
• Students will stipple their artwork.
• Demonstrate the correct usage of target vocabulary words: pointillism/stippling, shading, contrast, depth, design, intensity, value, George Seurat, fine point pen, Bristol Board, ink saturation, analogous colors, achromatic, monochromatic, complementary colors

Transition: Assigned seating will not be necessary if behavior is appropriate. Large group instruction and overview of work to be done, note taking. Also large group demonstration of tracing methods and showing examples of final products. Small groups will look through picture books at tables according to where they are already sitting. Individual work on tracing and starting artwork.

Colorado Content Standards Addressed:
Visual Arts Standards
• Standard 2: Students know and apply elements of art, principles of design, and sensory and expressive features of visual arts.
-Recognize and apply the Principles of Design, and Elements of Art by learning the new vocabulary words.
• Standard 1: Students recognize and use the visual arts as a form of communication.
-Investigate and sequence multiple visual solutions to a given problem making revisions and articulating the rational for the best solution.
-Maintain a sketchbook journal of ideas and writings to be used as a resource and planning tool.
Standard 3: Students know and apply visual arts materials, tools, techniques, and process.
- Refine skills to create an original artwork using a variety of techniques, tools, and media.
- Follow directions for the safe use of tool, materials, and procedures.

Reading and Writing Standards

Standard 4: Students apply thinking skills to their reading, writing, speaking, listening, and viewing.
- Use reading, writing, speaking, listening, and viewing skills to solve problems and answer questions.
- Make predictions, draw conclusions and analyze text.

Materials/Resources Needed: white 8.5 X 11 inch thick paper, water colors, paint brushes, water, water containers, sketchbook, pencils, Bristol Board or nice drawing paper, tracing paper, tape, found or taken pictures/images, magazines, fine point ink pens, value scale, Seurat books/pictures, erasers, rulers, performance assessment worksheet (see Appendix F), rubric (see Appendix G), how to draw with a grid worksheet (see Appendix H).

Pre-Assessment: The teacher will have looked through the pre-assessment worksheet that the students turned in the previous period and will have assessed what more information the students might need to have a strong understanding of content material. At the start of the period there will be a class discussion on what was discussed the previous period to see what information the students retained. Question and answer session. Students will have to complete and turn in the value practice worksheet (see slides 16 & 17 in the Power Point Presentation, Appendix J).

Anticipatory Set: Where did you go to find pictures/images? How many did you find and what are they? Students will take this time to share what they have found and look through the magazines that were provided to find a picture/image that they would like to use for their project. The teacher will walk around pointing out the pictures and images that will become successful art works. Did you observe anything when you were looking around the last few days that really struck you visually? Could you see the dots in the image? The teacher can also require students to use a portrait image for this project.

Teaching the Lesson:

Input:
1. Review the vocabulary terms associated with this unit.
2. Show personal examples of pointillism work. Talk to students about why the images chosen worked well or didn’t.
3. Show examples of the new vocabulary words that were added today: analogous colors, achromatic, monochromatic, complementary colors, explain to students how they are used and what they mean.
4. Pass out the performance assessment worksheet and the rubric and read through them with the whole class (see Appendices F & G). Each student will receive their own copy of both things and they will also be posted in the room for everyone to see at any time they need.

• **Modeling:**
  1. Demonstrate how to transfer pictures/images to Bristol Board.
  2. Demonstrate how to use the picture/image that has been transferred to begin stippling in their piece of artwork.
  3. Demonstrate how to create the value practice worksheet instruct on how to fold paper.
  4. Use key vocabulary words within their context.

• **Checking for Understanding:**
  1. After explaining how to transfer the pictures/images to the Bristol Board using the tracing and/or grid methods, two students will repeat the steps to the whole class. For students that are absent the steps will be posted in the appropriate places around the room and they can ask a classmate for assistance if needed.
  2. The teacher will evaluate on a one on one basis the completion of the value practice worksheet.
  3. During the demonstrations there will be use of the key vocabulary terms. As the teacher is speaking and using the terms random students will be asked to give the definition in their own words.
  4. Ask if there are any questions about the rubric that need to be explained more.
  5. Students will have their notes and worksheets checked by the teacher and noted in the anecdotal records before they can begin projects.

**Guided Practice/ Instructional Strategies:** The teacher will demonstrate how to use the techniques introduced in this project. The steps and terms will also be visually posted in the classroom. Students may use the resource and people at their desk communities (3-4 people) while working on individual projects. Student will also complete and turn in their value practice worksheet (see slides 16 & 17 in the Power Point Presentation, Appendix J).

**Independent Practice:** There will be no set homework assigned but students will be encouraged to review and study the slide information and key vocabulary terms that were presented the first day of the unit to prepare for the test at the end of the unit. Students will individually work on projects for the next few weeks or so depending on how the class is moving and how far students are getting.

**Post-Assessment:** The last 10 minutes of class will be used to wrap-up the day and clean up the room. Each student will have to tell one success and failure that they had during the period to exit the room. The teacher will take note of the student comments and try to
accommodate the next period towards the comments made, meeting the needs of each individual student.

**Closure:**
1. “Today we learned how to transfer our pictures/images to Bristol Board using tracing techniques.”
2. “We also practiced using our new vocabulary within the context of the assignment and by practicing creating value with the value practice worksheet.”
3. “We can take what we have learned about George Seurat’s techniques and apply them to our own pieces of artwork.”
4. “Hopefully we can now respect and understand the patience and intensity of the artwork we are now creating.”

**Summarize, Evaluate & Reflect:** This section of the lesson is by far the longest. It consists of the meat of the project. During these few weeks students are using all the examples and drawing techniques that are practiced and learned to create a final piece of artwork. Patience and persistence is an integral part of this section for both the teacher and the students. During this section of the lesson the teacher should concentrate on daily one on one interactions with the students throughout each class period critiquing and discussing their work. Throughout the lesson try and take time for students to look at each others progress also.

**Differentiated Learning Needs:**
• Based on the levels of response, the teacher will adjust the lesson accordingly.
• There will be steps clearly posted around the room in the appropriate places to give students guidance while working on their project.
• If there is too much talking and not enough work there will be quiet work time set.
• The teacher will be walking around the room after the demonstrations, during the free work time talking to and assisting students that may be struggling with certain parts of the project.
• There will be one more review of the slides in class at some time within the following weeks. There will be one after-school review if students feel they need to study more.
• If students do not want to say their concerns out loud they can write them down and turn them in as they leave. Questions will be shared with all the other students so if they are having a similar problem they can fix it.
Lessons 4 - 24

Unit Title: Drawing Techniques: A Study of Value & George Seurat

Instructional Group: Grades 9th-12th

Duration of Lesson: 21 periods of 55 minutes

Guided Practice: Throughout these 21 periods of 55 minutes students are greeted upon arrival and instructed to enter the classroom quickly and quietly. Upon entry of the room students gather their supplies and materials and immediately continue to work on their original independent projects. This time period of lessons are when students work independently on their original projects while the teacher roams the room during the period and assists students as needed. It is important to have some contact with each student every period during this time. The teacher should make sure students are on track and working the whole period. The teacher should keep some notes on each student participation during this time. It is helpful to take digital pictures during this process for records and to show students their progress. If a student needs a break they are instructed to get up and roam the room and observe other students work and progress. During this time students may converse and listen to music as long as they stay on track and are not disruptive to classmates. At least once a week the teacher should stop all the students and have them walk around the room to look at everyone progress. This will give students the opportunity not only to see everyone’s work but to see and talk about their own work and assist each other with where they could make adjustment or improvements to their project.
Lesson 25

Unit Title: Drawing Techniques: A Study of Value & George Seurat

Instructional Group: Grades 9th-12th

Duration of Lesson: 1 period of 55 minutes

Learner Outcomes: At the conclusion of this lesson students will be able to:
- Explain what pointillism is and how to do it.
- Share with the teacher and class the artwork that they have created.
- Explain who George Seurat is and what contributions he has made to the world of art and the 1800’s
- Recognize and identify slides of artworks by George Seurat by completing the test
- Demonstrate the correct usage of target vocabulary words: pointillism/stippling, shading, contrast, depth, design, intensity, value, George Seurat, fine point pen, Bristol Board, through discussion and the test
- Provide classmates with constructive comments about the artworks that have been completed through a class critique.
- Students will take a digital photograph of their final artwork for their digital portfolio.

Transition: Students will enter the room and immediately be instructed to hang up their pieces in the designated area then take a seat and wait quietly. The teacher will lead the large group critique of the work encouraging students to participate in the discussion. The teacher will wrap-up the critique and then the students will arrange the room to take the test. Test room arrangement will be modeled at the start of the school year. The first part of the test will be teacher prompted (slide evaluations and identifications). The second part of the test will be done on an individual basis.

Colorado Content Standards Addressed:
Visual Arts Standards
- Standard 4: Students relate the visual arts to various historical and cultural traditions.
  - Identify an artist who has achieved notoriety and recognize ways that his or her work reflects, plays a role and influences culture
  - Identify universal concepts expressed in art in visual and written form
- Standard 5: Students analyze and evaluate the characteristics, merits, and meaning of works of art.
  - Use selected criteria as the basis of making judgments about works of art
  - Apply the four steps of art criticism 1.) describe 2.) analyze the work in terms of elements and design principles 3.) interpret the work in terms of ideas and emotions, and 4.) judge the work as to its success both technically and in either communicating an idea, an emotion, of fulfilling a practical purpose
  - Analyze factors leading to a successful resolution of an artistic problem
Reading and Writing Standards

• Standard 1: Students read and understand a variety of materials.
  - Determine meanings of words, including those with multiple meanings, using clues.
• Standard 4: Students apply thinking skills to their reading, writing, speaking, listening, and viewing.
  - Use reading, writing, speaking, listening, and viewing skills to solve problems and answer questions.
• Standard 2: Students write and speak for a variety of purposes and audiences.
  - Support an opinion using various forms of persuasion (factual or emotional) in speaking and writing.

Materials/Resources Needed: display area, students final artwork, digital camera, black cloth to display work on while photographing, computer with projection, screen, pencils, erasers, post test (see Appendix I).

Pre-Assessment: The teacher will be supportive and positive during the test taking process.

Anticipatory Set: The teacher should be extra supportive and positive through all activities of the day. State test rules in a clear manner. Provoke thoughtful questions and inquiry during the critique. Students’ should be reminded that their participation is vital to the growth of our community.

Teaching the Lesson:

• Input:
  1. Teach students to be respectful of each others’ artworks in a constructive manner.
  2. Instruct on good test taking behaviors.

• Modeling:
  1. Demonstrate good test taking behaviors.
  2. How to lead a productive and successful critique.
  3. Demonstrate how to fill out the slide identifications.
  4. Review the techniques for photographing the final artwork with the digital camera.

• Checking for Understanding:
  1. After reading through the instructions for taking the test, stop and take time to make sure everyone is on the same page. Ask students to repeat back what is expected.
  2. Use anecdotal record during the critique to keep track of participation.

Guided Practice/ Instructional Strategies: The teacher will work through how to fill out one slide identification with the whole class at the start of the test. There will be oral and visual instructions to follow. The test will be taken on an individual basis.
The teacher will instruct the students on how to lead a class critique so that later in the year students will be individually assigned to lead the discussion.

**Independent Practice:**  There will be no homework assigned tonight.

**Post-Assessment:** Last 5 minutes of the period take time to reflect on how well the students followed directions and participated in the class critique. There was a lot of paper assessment this period therefore there is not a huge need for the post assessment other than to rap up how the period went as an assessment day.

**Closure:**
1. “Today we learned how to follow and practice test taking procedures for our classroom.”
2. “Now we should have a solid understanding the painter George Seurat. We can identify and discuss specific characteristics of his work.”
3. “We also practiced self and group evaluation skills through the classroom critique.”
4. “We also practiced using the digital camera to photograph the final artwork.”

**Summarize, Evaluate & Reflect:** What things did you enjoy about today? How can we improve on our assessment days? Did you enjoy working on his project? What did you learn about yourself as an artist? What would you do differently if you where to do this project again? Positives and negatives? During the critique discussion I take notes on the students comments for future improvements to the lesson.

* For younger students there will not be a test or a revised version, but we will still take time to critique the class work when finished.

**Differentiated Learning Needs:**
- The teacher should have the test translated if needed.
- There will be a time restriction for the slide portion of the test. If needed, a few more minutes may be given. They may have as much time as they need to finish the second part of the test.
- The test will be given at the start of the period with the critique at the end. If the test takes too long, the critique can be carried to the following day/period.
- The teacher should encourage students to write anything and everything that they can on the test. Be descriptive and thorough, credit will be given according to what valid ideas are stated.
- The teacher should make sure that everyone understands the exceptions, and that if a student has a question to raise their hand and the teacher will come to them.
- There will be one make-up day after school for students who were absent. Students with language barriers or IEP’s may be allowed to take the test home and return it the next day.
Chapter Summary

In this chapter, the author outlined a unit that integrates the use of technology in a visual arts classroom. In-depth instructions and examples are presented. The author has completed this unit curriculum and continued to rework, adjust, and alter the unit curriculum to introduce variations on similar ideas. In Chapter 5, this author will conclude with a discussion of the contributions of this project, its limitations, and suggestions for further research.
Chapter 5

DISCUSSION

To keep teachers and students on the cutting edge of visual arts education, teachers must stay abreast with the current trends in technology of the 21st C. By reviewing this researcher’s curricular unit, teachers will be able to assess and utilize the materials provided to integrate technology into their own visual arts classroom. Although there are many advantages to integrating technology into the visual arts classroom, there are also many barriers that must be overcome. With continued support from administrators, parents, and the community, technology integration into the visual arts classroom is a very achievable prospect. Visual arts teachers must also be allotted adequate time, training, and tools to successful incorporate technology into their daily curriculums.

Contribution of the Project

In Chapter 4 this researcher outlined in detail a sample curricular unit that guides visual arts teachers through all the steps necessary to fully integrate technology and all of its tools into daily classroom activities and lessons. The first goal of this project was to introduce teachers to the technology available to them such as, videos, Power Points, digital cameras, smart boards, slides, computers, and the Internet. The second goal was to provide the teachers with a comprehensive curricular unit that can be instantly integrated into their own visual arts classrooms. Thereby, they can begin to understand and utilize
the benefits of the technology with minimal efforts. The last goal of the project was to provide visual arts teachers with the support, knowledge, and confidence to integrate technology on their own. In conclusion, visual arts teachers will understand and take advantage of the benefits that technology integration can provide. Teachers will also have the tools to enhance their curriculum and quickly and conveniently share their ideas with others.

Limitations of the Project

Although technology has become a integral part of everyday society, there are many components of it that can make its integration and use very difficult. One of the biggest limitations of this project is that technology and all the tools and training that are required to fully comprehend and utilize it become very costly. Due to strict budgets and funding in education, many times the training and equipment that is provided becomes quickly outdated.

Although the integration of technology in the long run would cut down on teacher plan and preparation time, the initial training and formulation of the curricular units can become time consuming. Time for continued experimentation and integration of the technology and its tools then becomes another limitation of this project. Instructional support, outdated equipment and tools, continued training, and funding can greatly limit how much, when, and where teachers can utilize technology in their classrooms.

After the completion of teaching this unit it is always necessary to reflect and adjust for future groups of students. One limitation that this author found was that information is continually changing from year to year, thus it is critical that the teacher
updates the information throughout the Power Point slides to ensure that the information is current. By creating the unit using technology, the teacher now has the ability to make these and other adjustments and alterations quickly and easily.

Recommendations for the Future

Rapid advancements in technology create an environment for continual and exponential growth in this field of study. On a regular basis new technological tools, resources, programs, and training are introduced that provide a plethora of options for future research. This researcher’s recommendation for future study would be to stay current and up to date with new advances of technology.

As previously mentioned, the use of technology is dependent upon available and adequate funds. Therefore, a recommendation for future research would be to provide a list of viable grant options. This would in turn provide teachers with access to funding, equipment, and time to learn and use technology in their classrooms.

Project Summary

The purpose of this project was to provide visual arts teachers with the information, background, and tools to begin their journey of integrating technology into the visual arts classroom. A curricular unit was developed to provide visual arts teachers with an example of how technology can be successfully and easily incorporated into their classrooms. Through this curricular unit many tools, ideas, and options were introduced to better equip them for this task.

The expectations of this author were met upon the completion of the curricular unit. The demonstration of the intended drawing skills and the retention of the studied
background of the artist clearly showed the benefits of technology use in the classroom.

The students’ projects indicated that the integration of technology enhanced their learning and provided them with a deeper understanding of the material presented.
REFERENCES


APPENDIX A

A Technology Framework for No Child Left Behind Success
APPENDIX B

Effective PowerPoint Presentations
Effective PowerPoint Presentations

PowerPoint Presentations should:
- Compel and persuade
- Enhance and communicate a larger and deeper body of work and thought
- Be more about ideas than flash

Criteria to consider
- How well do the elements (ideas, images, sounds) fit together?
- Are the elements given the proper space their value warrants?
- Do the elements stand together visually?
- Have special effects been used to contribute to meaning?
- Do the slides, the design, and the ideas show personal style and originality?

Basic Rules of Design
- Choose colors with high contrast.
- Light text with dark background
- Eye is attracted to the light.
- Effects of color choice are subliminal & can affect audience.

Use a single background.
- Gives a sense of unity.
- Sets the stage.
- Avoids distractions from the message being delivered.

Avoid too much flash and dazzle.
- Use info to dazzle.
- Flashy graphics and animations distract from the message.

Use effective balance of elements.
- Centered graphics leave little room for message.
- Avoid centering bullet points, it makes text ragged and hard to read.
- Left alignment gives an invisible line for eye to follow.
- Effective balance pleases the eye.

Effective text
- AVOID ALL CAPS - DIFFICULT TO READ - SHOUTS AT THE AUDIENCE.
- Simple fonts are easier to read.
- Sans Serif are the best.
- Use large font sizes.
- No text smaller than 18 pt.
- Avoid putting too much text on one slide. If you put too much text on the slide, the audience pays more attention to reading what is on the screen instead of listening to the speaker.
- Be concise.
- Use 6-8 words per line & 6-8 lines per slide.

Graphics and Animation
- Have graphics support the message.
- Pictures can simplify complex concepts.
- Animation and sound should be used to make an important point.
- Too many cause audience focus on effects.

Keep it simple.
- Don’t try to crowd too many elements on any one slide - message will be lost.

Remember...
- The presenter provides the elaboration not the slide show.
APPENDIX C

Specialized Search Engines and Directories
### Specialized Search Engines and Directories

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<td><a href="http://www.tvguide.com">http://www.tvguide.com</a></td>
</tr>
<tr>
<td>Movies, actors</td>
<td>Internet Movie Database</td>
<td><a href="http://www.imdb.com">http://www.imdb.com</a></td>
</tr>
</tbody>
</table>

68
### Directories Especially for Educators

<table>
<thead>
<tr>
<th>Category</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson plans</td>
<td>All Jobs of Design, Lesson Plans, Teaching and Learning</td>
</tr>
<tr>
<td>Discussions about 1st Grade</td>
<td>Art for Art's Sake, T he Good 1st Grader</td>
</tr>
<tr>
<td>Curriculum standards</td>
<td>National Curriculum Standards, State and Local Standards</td>
</tr>
</tbody>
</table>

### Other Educator Sites to Consider

<table>
<thead>
<tr>
<th>Category</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Basics for Projects</td>
<td>Education.com, National Science Foundation</td>
</tr>
<tr>
<td>Tutorials on How to Use Software</td>
<td>ADP, CPRW, Microsoft Word, Excel, Powerpoint, Access, and others</td>
</tr>
<tr>
<td>Information Literacy</td>
<td>Big 6, National Center for Learning and Teaching in the Arts (NCAT), Internet Encyclopedia of Philosophy (IEP), Search Techniques (NPTI), Strategies for Teaching Information Literacy (NHTI), Search Training, Search Skills Training, Search Strategies Training, Search Techniques Training, Search Tools Training</td>
</tr>
<tr>
<td>Search Engine for Educators</td>
<td>NETIinear, WebCT, Blackboard, others</td>
</tr>
</tbody>
</table>

If you need more information, you can contact [The Invisible Web](http://invisible但是对于英文的网页内容，我无法提供有效的翻译。
APPENDIX D

Pre-Assessment Worksheet
NAME_________________

Pre-Assessment Worksheet

1. Name as many painters as you can who completed works of art in the late 1800’s.

2. Who is George Seurat? Do you know the name of one of his paintings, or can you describe what they look like?

3. Using a pencil, demonstrate three degrees of shading in the squares below.

4. In which magazines do you really enjoy looking at the pictures?
APPENDIX E

Performance Assessment Worksheet
PERFORMANCE ASSESSMENT WORKSHEET

Remember that you are creating your own piece of artwork using the style and techniques demonstrated by George Seurat that we discussed and demonstrated in the previous periods. Refer to your rubric to make sure that you are meeting all the requirements for this project.

1. Find an image or picture of something that interests you. It must have depth and shading within the image. This may be a found or taken picture/image.
2. Use the tracing or grid technique that has been demonstrated, transfer your picture/image to Bristol Board.
3. Begin stippling the image with ink or paint onto the Bristol Board. Remember to use the highlights and shading in the picture/image to create density throughout the artwork.
4. Completely fill in the picture/image with stippling.
5. Attach the picture or image that you used to work from to the back of this sheet with your NAME on it.
6. Remember to refer to your rubric to make sure that you are meeting all the standards set for you by this project.
7. We will have a class critique at the end of the project, viewing and discussing each students’ pieces of work.
APPENDIX F

Rubric
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Distinguished 3 (A-B)</th>
<th>Proficient 2 (B-C)</th>
<th>Competent 1 (C-D)</th>
<th>Needs Help 0 (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>POINTILLISM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creativity and Expression</td>
<td>The work shows originality or innovativeness. The work shows a personal vision.</td>
<td>Work is original and imaginative. Demonstrates a strong personal twist when simulating Seurat’s work.</td>
<td>Work is adequate with some originality and imagination. Demonstrates some personal twist when simulating Seurat’s work.</td>
<td>Work is not up to standards set forth by the teacher. No use of originality and imagination. Lacks personal twist.</td>
<td>Little to no work has been completed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Technique and Craftsmanship</strong></td>
<td>Work is consistent and is not rushed. Work show skilful use of tools and media.</td>
<td>Excellent craftsmanship and careful thought. Show display quality. Shading has high contrast and there are many degrees of depth shown.</td>
<td>Satisfactory craftsmanship. Room display quality. Few examples of contrast, shading, and depth.</td>
<td>Unsatisfactory craftsmanship. Little thought put into work. Lacks contrast, shading, and depth. Dots are very far apart.</td>
<td>No thought was put into work. Little of none has been completed.</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Assignment Comprehension</strong></td>
<td>Work shows an understanding of skills and ideas involved, and solves the problems of the assignment.</td>
<td>Student exceeds objectives set forth. Demonstrates strong understanding of background content. Demonstrates understanding of pointillism.</td>
<td>Student met objective set forth. Demonstrates a moderate understanding of background content. Demonstrates understanding of pointillism.</td>
<td>Student met few of the objectives set forth. Does not demonstrate understanding background content or pointillism.</td>
<td>No objectives met. Does not demonstrate understanding background content or pointillism.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Design Quality</strong></td>
<td>Student used the art elements and principles of design to enhance his/her work.</td>
<td>Used many techniques and design elements in creating work. Used pointillism with great details and high depth.</td>
<td>Used some techniques and design elements in creating work. Used pointillism with moderate details and depth.</td>
<td>Used few techniques and design elements in creating work. Used pointillism with minimal details and depth.</td>
<td>Does not demonstrate any techniques and design elements. Poor representation of pointillism.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Collaborative and Cooperation</strong></td>
<td>Student asked appropriate questions? Student was cooperative by participating in art discussions and helping classmates?</td>
<td>On time. Planning is evident and thoughtful. Full class participation. Works independently.</td>
<td>On time. Some planning and thought is evident. Class participation. Usually focused and independent.</td>
<td>Frequent tardiness. Little planning and participation. Seldom on task.</td>
<td>Frequent tardiness of absences. No participation. Disruptive.</td>
</tr>
</tbody>
</table>

75
APPENDIX G

How To Draw With A Grid
How To Draw with a Grid

1. Cover your picture with tracing paper and tape to your desk. Make sure your picture **DOES NOT** move!

2. Trace your picture. Make sure to trace not only the outline and details, but also shadows/highlights.

3. On the left and bottom of the paper, measure the height and width (you may have to round to the nearest ¼). If your picture is **LESS THAN** 4 inches make a mark for every half inch. If your picture is **MORE THAN** 8 inches make a mark every inch.

4. Cross all of these lines, both vertical and horizontal to make a grid. Make sure all of these lines are even with your ruler on the left line write a letter in every square on the bottom, write a number in every square.

5. You will then draw this grid on your large paper.

6. The key is to have the same number of squares on your large paper as on your tracing paper. You will need a ruler to draw in the grid on the large paper. You will need to use your math skills to figure this out.

7. After your grid is on your large paper, you will begin to draw in the picture square by square.
APPENDIX H

Post Test
NAME__________________
UNDERSTANDING POINTILLISM & PAINTERS OF THE 1800’S
TEST

PART 1: Slide Identification (20 points each slide)

Fill in the blanks for each slide shown. Give as much information as possible. Partial credit will be awarded for any and all valid information written.

SLIDE # 1 EXAMPLE

TITLE: Women Fishing
ARTIST: George Seurat
TIME PERIOD: 1884-85
DEFINING CHARACTERISTICS: Used conte’ crayon in a new way building a velvety depth and richness to his blacks. Highlighting a wide range of gray and white. Blocked out figures, massed darks and lights to give the broadest expression to his forms. Began to paint with “broomswept” strokes and broad hatching. Build up of color mass to give forms more definition. Painted peasant and labor-class.
MEDIUM: Conte’ crayon

SLIDE # 2

TITLE:

ARTIST:

TIME PERIOD:

DEFINING CHARACTERISTICS:

MEDIUM:
SLIDE # 3
TITLE:

ARTIST:

TIME PERIOD:

DEFINING CHARACTERISTICS:

MEDIUM:

SLIDE # 4
TITLE:

ARTIST:

TIME PERIOD:

DEFINING CHARACTERISTICS:

MEDIUM:

SLIDE # 5
TITLE:

ARTIST:

TIME PERIOD:

DEFINING CHARACTERISTICS:

MEDIUM:
### Part 2: Matching (2 points each)

Match the terms from the right column with the definition in the right column. Place the letter of the definition in the blank next to the word that it matches.

| 1. stippling          | ______ | A. Using any shades, tints, or tones of colors that lie adjacent to each other on the color wheel. |
| 2. shading            | ______ | B. A colorless scheme using blacks, whites, and grays. |
| 3. contrast           | ______ | C. Using any shade, tint or tone of one color. |
| 4. depth              | ______ | D. Combining a shade, tint or tone of one color and the color opposite on the color wheel. |
| 5. design             | ______ | E. A thick paper that is used as a material to draw and paint on. |
| 6. value              | ______ | F. The lightness or darkness of a color. |
| 7. bristol board      | ______ | G. The way that the artist chooses to organize a composition. |
| 8. analogous colors   | ______ | H. The degrees of difference in of lights and darks within an artwork. |
| 9. achromatic         | ______ | I. Color + Black |
| 10. monochromatic     | ______ | J. How much the picture/image Comes off the page. Creates a 3D tone to the piece. |
| 11. complementary     | ______ | |
| colors                | ______ | |

---

**Extra Credit: (1 point)**

Tell the name of a modern artist and the title of one of his/her artworks that was influenced by the painters of the 1800’s (the Impressionist painters).
APPENDIX I

Power Point Presentation
http://www.mcs.csuhayward.edu/~malek/Seurat2.html

Commentary:

This and the following eight slides are examples of paintings by an artist named George Seurat. Seurat was born in 1859 and died in 1891. Seurat created his masterpieces by setting contrasting dabs or dots of color side by side on the canvas. Seurat paid close attention to how the figures were placed on the canvas making sure that each figure had a distinct personality by some expressive detail of dress or gesture.

Title: *Bathers at Asnieres*

Date: 1883-84

Medium: Oil on Canvas

Location: National Gallery, London
http://entertainment.webshots.com/photo/2358798140037620307qTrjAb

Commentary:

In this later work by Seurat he flattens the image and plays with more decorative, ornamental effects that mimic the Art Nouveau style. *The Circus* is also a foreshadowing to the 1890's entertainment scene because this is when cabarets, fairs, and the circus begin to become popular.

Title: *The Circus*

Date: 1890-91

Medium: Oil on Canvas

Location: Paris
Commentary:

In this detail slide of *The Circus* you can see Seurat's true technique shine through. By inspecting the image closely you can actually see the small dabs or dots of color placed side by side. The true magic of these paintings is how different they look up close versus far away.

Title: *The Circus*, detail
http://entertainment.webshots.com/photo/2358798140037620307qTrjAb

Commentary:

Here is another detail of The Circus, again you can see in great detail the precise placement of each dab or dot of color. When you stand far away from the painting and take it in all at once it creates a type of optical illusion that prevents your eye from seeing each individual dab or dot, but forces your eye to see one congruent image.

Title: The Circus, detail
Commentary:

This painting depicts a popular scene of the late 1800's. Seurat painted primarily social scenes, which tried to capture pivotal moments in time. Even though the viewer can clearly point out the background, middle ground, and foreground of this piece, the painting still reads very flat.

Title: *Le Chahut*

Date: 1890

Medium: Oil on Canvas
http://www.mcs.csuhayward.edu/~malek/Seurat5.html

Commentary:

Here is another detail of *Le Chahut*. Pay close attention to how the colors of each section, even the skin tones are not one solid color. They are combinations of colors so that from far away, the eye is deceived into perceiving a true solid color.

Title: *Le Chahut*, detail
Commentary:

This is a pre-planned sketch by George Seurat that shows how he put his work into grid form before composing his final artwork. The grid method helps assist the artist in focusing on details and resizing the image. Students will be instructed on how to use this method to resize their own work using photographs or original drawings (see Appendix G, How to Draw with a Grid).
Commentary:

*Sunday Afternoon on the Island of La Grande Jatte* is one of Seurat’s most widely known paintings. Seurat declared that this painting could be simplified into three sections, tone, tint, and line. *La Grande Jatte* depicts a scene of Parisians on a holiday weekend. The color in this piece is much brighter than some of the others and the characters are more defined.

Title: *Sunday Afternoon on the Island of La Grande Jatte*

Date: 1884-85

Medium: Oil on Canvas

Location: The Art Institute of Chicago
http://rock.uwc.edu/facultypages/pkudma/pstmp-st.jpg

Commentary:

Here is one last detail of *Sunday Afternoon on the Island of La Grande Jatte*. Seurat died at the age thirty-one and left behind six major paintings. *La Grande Jatte* is know as his most influential paintings and the one that made his mark in the modern period.

Title: *Sunday Afternoon on the Island of La Grande Jatte*, detail
Commentary:

Student Example…Final Artwork, 11th Grader

For this assignment students were instructed to create an artwork using pen and ink. The subject was a self portrait, students could bring in their own pictures or a digital camera was on hand so that if they did not bring one that the teacher could take one. Some exceptions were made and students were allowed to choose a found portrait instead of a self portrait. The background is composed of different colored paper dots that were punched with a hole puncher and glued on. The combination of pen and ink with the glued paper transforms this artwork into a mixed media category. Approximate size of the artwork 12x18 inches.
Used by permission

Commentary:

Student Example…Final Artwork, 11th Grader

Self Portrait with only one small row of paper dots around the outline of the face and hat.

Approximate size of the artwork 12x18 inches. Method is stippling or pointillism.

Medium pen and ink on paper.
Commentary:

Student Example…Final Artwork, 12th Grader

This artwork was enlarged so that the face and hair fill the paper. In doing so this student chose to not have a background. Approximate size of the artwork 12x12 inches. Method is stippling or pointillism. Medium pen and ink on paper.
Discussion:

Begin a dialog with the students about what value means as an art term. Probe them for examples of what value means in their own words. Ask students to give real examples of where they see value in their daily life and art.
Activity:

Have students write the definition of value in their journals. Wait until you see all pencils down to continue.
Commentary:

It is possible to create value within any artwork with the use of many different techniques. The use of different shades of color is one way, but drawing techniques can be used also. The following images show three different examples of how to use drawing techniques to convey value. Parallel lines, cross hatching, and stippling also known as pointillism are some examples of various drawing techniques used in pencil drawings to convey different values.
Commentary:

The following image is a student example of the worksheet to be completed before the start of the final artwork planning begins. This worksheet provides students with practice in creating different values before they begin their final artwork. Students and teachers can use this worksheet as a reference when students are working on their final artwork.

Activity:

Following the Power Point introduction, students are instructed on how to fold the paper into 3x4 sections. The amount of sections can vary, with K-6\textsuperscript{th} grade students the example above seems to be a good amount. The following slide show will show an
example for high school students. Then students are instructed to create value from light to dark using three to four different methods.

One section is done with words, the next with pencil shading, and the last section with watercolors (any colors but yellow and black).
Commentary:

Here is a high school student’s example. Instruct 9-12th grade students to divide their paper into 4x6 sections. Students use the fourth row as a free choice to express value. In this example the student chose cross hatching.
Commentary:

Student Example…Process

The following pictures in the Power Point are examples of the process that a student follows to complete an artwork. In this photograph the student directly transferred the image to the final paper by free hand drawing the picture from the photograph. I encourage students to at least try and free hand draw the image at first and if they are not satisfied with their results a carbon copy method can be used.
Commentary:

Student Example…Process

This is a photograph of the student’s progress after about a week and a half of 55 minute periods. He is using stippling or pointillism as his method of creating value. Stippling is a very time consuming yet rewarding method of creating value within an image. Make sure that throughout the process of the work students take time to look at their artwork from far away and close up. Patience and breaks are the key to completing such an intense artwork!
Commentary:

Student Example…Final Artwork, 10th Grader

This is a photograph of the student’s final artwork. Completion time was about three weeks of 55 minute periods. Medium is pen and ink on paper. Method is stippling or pointillism. Approximate size 12x12 inches.
Commentary:

Student Example…Final Artwork, 11th Grader

Medium is pen and ink on paper. Method is stippling or pointillism. Approximate size 12x18 inches.
Commentary:

Student Example…Final Artwork, 12th Grader

*Portrait of Mom.* Medium is pen and ink on paper, hair is black paper dots glued on.

Method is stippling or pointillism. Approximate size 12x12 inches.
Commentary:

Student Example…Final Artwork, 12th Grader

Medium is pen and ink on paper, the background consists of yellow and black paper dots glued on. Method is stippling or pointillism. Approximate size 12x18 inches.
Commentary:

Student Example…Process
Used by permission

Commentary:

Student Example…Process
Commentary:

Student Example…Final Artwork, 10th Grader

Medium is pen and ink on paper, painted background. Method is stippling or pointillism.

Approximate size 12x18 inches.
Commentary & Demonstration:

The following slides are an example done by a 5th grade student of how to transfer an image from a photograph to drawing paper (similar or carbon copy method). The slide shows a Xerox 8.5x11 image with tracing paper on top. Students are instructed to trace the information from the image with pencil onto the tracing paper.
Commentary & Demonstration:

This is the tracing paper alone after the image was traced. Students use the tracing paper and, using pencil, retrace the image on the back. The tracing paper can then be laid onto drawing paper and then students again trace over the front of the tracing papers lines again. When you lift the tracing paper off the drawing paper the penciled image will be transferred to the drawing paper.
K-5th grade students can struggle with conceptualizing how to transfer different values to the portrait. It was helpful for students to go over the entire portrait with the lightest value to begin.
Commentary & Demonstration:

Student Example…Final Artwork, 5th Grader

Medium is pen and ink on paper. Method is micrography or words. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Student Example…Final Artwork, 5th Grader

Medium is pen and ink on paper. Method is micrography or words. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Student Example…Final Artwork, 5th Grader

Medium is pen and ink on paper. Method is micrography or words. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Student Example…Final Artwork, 5th Grader

Medium is pen and ink on paper. Method is micrography or words. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Teacher Example

Medium is pen and ink on paper. Method is micrography or words. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Teacher Example

Medium is pen and ink on paper. Method is stippling or pointillism. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Teacher Example

Medium is pen and ink on paper. Method is stippling or pointillism. Approximate size 8.5x11 inches.
Commentary & Demonstration:

Teacher Example

Medium is pen and ink on paper. Method is stippling or pointillism. Approximate size 8.5x11 inches.
Commentary:

In this lesson, high school students were asked to find an emotional portrait. Students enlarged the Xerox image to a 12x18 inch piece of drawing paper, either using the grid method or free handing. These students used micrography or words to create the value drawing. The words used were from a 20 list of words that the students brainstormed at the beginning of the lesson. The words describe the emotion and meaning of the image.
Commentary:

Student Example…Process

Here is another view of the artwork in process after about two weeks of 55 minute periods. Medium is pen and ink on paper. Method is micrography or words.

Approximate size 12x18 inches.
Commentary:

Student Example…Final Artwork, 10th Grader

Here is another view of the artwork in process after about three weeks of 55 minute periods. Medium is pen and ink on paper. Method is micrography or words.

Approximate size 12x18 inches. Self-portrait.
Commentary:

Student Example…Process

Here is another view of the artwork in process after about two weeks of 55 minute periods. Medium is pen and ink on paper. Method is micrography or words.

Approximate size 12x18 inches.
Commentary:

Student Example…Process

This student is using the grid method to transfer an image to drawing paper. She is keeping the image at the original size.
Commentary & Discussion:

When introducing this lesson, show students some “emotional images” so they have some idea of what to start brainstorming what kind of image works best for them. The following four slides are used to motivate discussions and show examples.

What kinds of emotions does this image depict?

How does it make you feel?

What makes this image emotional?
Commentary & Discussion:

What is happening in this image?

What makes the crop of this image interesting?

How does it fill the space?
Commentary & Discussion:

What kinds of emotions does this image depict?

How does it make you feel?

What makes this image emotional?
Commentary & Discussion:

What different emotions are shown in this image?

What makes this image emotional?
Commentary & Discussion:

What kinds of emotions does this image depict?

What makes this image emotional?

Give examples of as many words that you can come up with that describe this image.
Commentary:

At the conclusion of every Power Point the students must take notes in their journals of all the requirements of the project. There are always three categories of focus for each Power Point: Product (Content), Process (Craftsmanship), and Studio Time. This slide and the following two describe the requirements of the assignment. Read them out loud and monitor that the students are taking notes by walking around the room. After students have written down these requirements review the rubric with students (see Appendix F, Rubric) so they can grasp the quantitative aspects.

**How the project will be GRADED…**

**Emotional Portraits**

**Product (Contents):**

- Portraits must contain at least 4 different values from light to dark!
- The portraits that you choose must be based on REAL PHOTOGRAPHS with emotional content
- Medium: Pen/Ink & Paper 12x18 inches
- The photograph must either be personal or historical
Process (Craftsmanship):

- The entire portrait MUST contain ONLY the letters and words taken from your writing brainstorm.
- The entire portrait MUST take up the entire page of the paper (This means THINK about your backgrounds ahead of time!)
- You must use a ruler and correct measuring techniques (free hand or grid method) to enlarge your portrait to fit the paper.
- Take care in your work; KEEP it neat and organized.

Commentary:

Project requirements.
Commentary:

Project requirements.

Studio time:

- Stayed on task
- Worked continuously throughout the class period
- Must participate in clean up & put materials AWAY
- Make up any missed days
- Excused or unexcused, 3 tardies = 1 absence
XPLANE

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Anna Gianakos

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134
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