

Digital Storytelling in Integrated Arts Education

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Abstract

Computer technology has progressively transformed modern societies into a virtual space where digital devices are now indispensable. Over the past decade, arts educators have begun to adopt appropriate computer technology in the search for meaningful and relevant classroom practices. The application of digital storytelling to arts education offers tremendous potential for promoting multiliteracy, aesthetic sensitivity, critical faculty, and integrated arts pedagogy. This paper thus reports on the development and implementation of an innovative university course through which pre- and in-service art teachers at the University of Houston learned about and experienced the application of digital storytelling to integrated arts education. The author proposes that digital storytelling is a powerful and relevant way to teach integrated arts in the age of digital technology.

Keywords: digital storytelling, integrated arts education, computer technology, teacher education

Introduction

The development of computer technology has progressively transformed modern societies into a virtual environment where digital devices are now indispensable. Students of the digital generation are constantly immersing themselves in “cool” computer devices and gadgets, such as portable DVD players, cell phones, iPods, PlayStations, Pocket PCs, and Blackberries. Computer technology also plays an increasingly important role in the arts world, where artists are transforming their artistic practices with the help of computer devices. In the contemporary arts classroom, arts teachers are using PowerPoint presentations and numerous software applications to enrich their arts programs, for example, teaching students how to manipulate images, make movies, record sounds, design graphics, and create animations on the computer. In the age of virtual environment, integrating computer technology with arts education is essential to preparing arts students and future arts teachers alike to function in a rapidly-changing world (Heise & Grandgenett, 1996).

Over the past decade, arts educators have begun to adopt appropriate computer technology in the search for meaningful and relevant classroom practices. This paper reports on the development and implementation of an innovative graduate course that integrates computer technology with visual arts education at the University of Houston in Texas. This graduate course is offered every summer to pre- and in-service visual arts teachers to guide them in applying digital storytelling to teaching integrated arts in K-12 settings. In concert with increasing concerns about promoting multiliteracy, aesthetic sensitivity, interdisciplinary pedagogy, and a critical faculty through visual arts education (Duncum, 2004; Freedman, 2003), the author proposes that digital storytelling is a powerful and relevant way to teach integrated arts in the age of computer technology.

Potential of Digital Storytelling for Integrated Arts Education

The application of digital storytelling to arts education offers tremendous potential for integrating and teaching contemporary visual culture, greater issues of concern, and multimedia arts to the digital generation. The Digital Storytelling Association (2002) has defined

digital storytelling as “the modern expression of the ancient arts of storytelling...Digital stories derive their power through weaving images, music, narrative and voice together, thereby giving deep dimension and vivid color to characters, situations, and insights.” With the help of computer networking technologies, digital storytelling allows and empowers arts learners to cultivate and apply their multiple literacy, artistic, and critical skills to voice their concerns or address greater issues of significance to an ever larger global audience.

Storytelling is a natural way of human communication and is prevalent in all aspects of human social interaction. People tend to tell stories when they are interacting or socializing with others, and through storytelling, we tend to make better sense of complex ideas, concepts, or information. Indeed, communication seems to be more effective and personal when it occurs via storytelling. Stories vary in nature; they may be biographical, familial, ethnic, commercial, or instructional. A story is a narrative and a mostly historical account of or about an incident, event, person, or condition involving who, when, what, where, and how the story evolves. Meadows (2003b) has described digital stories as “short, personal multimedia tales told from the heart.” As he has asserted, “digital storytelling isn’t just a tool; it’s a revolution” (Meadows, 2003a). According to Livo and Rietz (1986), a story is a restructured everyday experience through which people come to make sense of, know, remember, and understand their surroundings. Through stories we explain, interpret, and assess situations, experiences, and ideologies, leading in turn to the creation of new meanings and knowledge. Storytelling connects generations of the past with the present and future to form, pass on, or reformulate wisdom, values, and beliefs, whether such telling is through oral, written, or art forms.

Digital stories can be presented in a variety of formats (Paul & Fiebich, 2002), for example, an all-text Web page, a nonlinear interactive Web site, a digital song, or a digital video/movie. The notion of digital storytelling may be new to many arts educators, but in fact it has been practiced by media professionals for over a decade, ever since Dana Atchley and his followers initiated digital storytelling and founded the Center for Digital Storytelling in Berkeley, California. Here workshops are held to produce digital stories for different purposes (Lambert, 2002). Digital storytelling refers to the practice of

incorporating digital text, imagery, video, and audio into the aesthetic presentation of a computer-mediated, multimedia story. Like a digital movie or video, a digital story is typically composed of still and moving images, text, sounds, music, and voice narration to depict an important event, person, position, or condition. These multimedia components should be integrated properly so that they complement one another to deliver a story successfully. Certainly, computer technology has made this integration even more efficient and has greatly enabled school participants to direct, film, act, produce, and edit movies that tell their own stories. With Internet technologies, digital storytelling makes it possible for individuals to produce their own knowledge. It especially allows students to develop and present their own ideas to the real world. In arts classrooms, the processes of making a digital story propel students to move beyond simply making art for its own sake, because for a story to make sense, it must entail certain contextual meanings to which the audience can relate. Incorporating digital storytelling into arts education is a powerful way to integrate school subjects, teach life issues, and create postmodern works of art that are inspiring to the digital generation.

Context of Curriculum Study

An increasing number of teacher preparation programs in most technologically advanced countries have begun to require teacher candidates to have substantial exposure to instructional technology. Most of the technology-related courses in university arts education programs teach students how to create PowerPoint presentations, WebQuests¹, Web sites, and computer animations, or to perform computer imaging. Because the development or implementation of digital storytelling in arts education has not yet been reported in the literature, this paper details the implementation of a university course that has integrated digital storytelling into visual arts education. In summer 2005, pre- and in-service art teachers at the University of Houston learned about education technology through a graduate-level

1 For information about WebQuest, go to <http://webquest.org/>

course that focused on the application of digital storytelling to visual arts education. This course explored the potential of digital storytelling for teaching contemporary visual culture while expanding the technology skills and knowledge of the students for teaching interdisciplinary arts and humanities to the new generation. The learning goals of this course were (a) to experience digital storytelling as a powerful tool for artistic inquiry, production, and instruction and to create an instructional multimedia story that addressed current issues of art and arts education; (b) to participate in class discussions and collaborative inquiries into digital storytelling as it relates to arts education; and (c) to evaluate digital stories created by both class participants and others ranging from elementary-aged children to media producers. The course ran 3 hours per session for a total of 48 hours.

In the first class session, the instructor facilitated a class discussion about what a story is and what storytelling does in everyday life. This allowed the students to give concrete examples and share their understandings and experiences. The instructor further elaborated on how humans are social animals who make sense of their immediate world by listening to and telling stories, and gave examples of how media commercials (especially television) are constructed by a dedicated profession that manufactures and conveys persuasive stories within 5–10 seconds. To ensure the digital stories created by the students had further instructional application, the instructor requested that their digital stories be used as short presentations to teach students (kindergarten–adults) about an important event, theory, approach, style, person, or practice related to art/arts education. Additionally, their stories would incorporate copyright-free materials such as digital images, video clips, artwork, sound, music, text, and voiceovers, because their final products were meant to be disseminated in the classroom and published in virtual space. In the following, I describe the processes of creating a digital story in this curriculum study from topic exploration, scripting, and storyboarding to production stage and imagery preparation.

Topic Exploration

Before getting to the creative process of digital storytelling, the participants viewed several completed digital stories created by grade-school children and adults to analyze the characteristics of a digital story². This motivated the participants to actively discuss and explore the nature and pragmatic applications of digital storytelling for integrated arts teaching and learning. The participants were guided to articulate types of stories that are related to art or arts education. For example, when applied professionally to arts education, a story can be a documentary or an essay conveying an important artistic or art educational development, theory, or philosophy. Afterwards, the class brainstormed relevant topics. First, they individually filled out a 6" x 9" paper by jotting down all possible topics related to art or art teaching practices and then shared three that interested them most with the class. This particular paper size gave the students a workable space on which to explore topics within a limited time period (about 10 minutes). During topic exploration, the students were reminded that their topics should be interesting, informative, and important since not all stories are interesting, make sense to others, or are worth the time and effort of an education professional.

As the class shared their topics, the instructor listed them on the blackboard to help students expand topic possibilities and further develop their ideas. The topics the students came up with included (a) biographical-type stories about a local folk artist, an art collector, an arts education contributor, and an art educator, and about personal experiences with arts education; (b) philosophical-type stories describing a teacher's personal philosophy of arts education, examining aesthetic questions (e.g., What is art? How does an artist think? What is the purpose of art? How does art contribute to society?), and investigating theoretical developments such as color theory and children's artistic development; (c) informational-type stories about art program funding, state and national visual arts standards, potential art careers, and class instructional material for beginning art teachers; and

2 The Scott County Schools in Georgetown, Kentucky, have posted many examples created by their students and teachers on their web site at <http://www.scott.k12.ky.us/technology/digitalstorytelling/ds.html>

(d) other stories related to art curriculum development, including public/environmental art sites, contemporary art, studio demonstrations, community-based art projects, and ideas about modern and postmodern art pedagogy.

Scripting: A Working Script

After defining and deciding a topic of interest, the students began writing individual stories 6 to 10 minutes long in natural narrative speed³. To do so, they conducted research both online and in the library on their chosen topics to gather professional literature for writing references, and they completed a working script within two class sessions. The term working script was used purposefully to indicate that they could make minor changes to their scripts until they finally used them to record voiceovers for their stories. A working script was necessary for visualizing or structuring a multimedia digital story into a storyboard format. The students were given several questions to help them develop their scripts: Is the chosen topic educational, informative, or significant? What is the story's purpose (e.g., advocacy or instruction)? Who is the audience? Does the story have a central point of view (argument)? What characters, events (what, how, where, and when), settings, and plots are involved with the story? Does the story raise other issues? Are other issues related to the story? Once the students completed their working scripts, the instructor and student peers also used these questions to critique student scripts. Peer-debriefing might take longer than the time allowed in the classroom if it engages the whole class as a group. Therefore, immediately after completing their working scripts, the students formed into pairs to critique each other's scripts. It was essential that each working script be as complete as possible, if not final, for the next phase involving visualizing the working script, namely, storyboarding.

3 Like television commercials, digital stories are meant to be short, yet convey an important message in a most persuasive manner. A long story may bore the audience easily or be unable to capture their full attention.

Visualizing Script: Storyboarding

Storyboarding is the process of visualizing how a movie, animation, or digital story will look. In other words, a storyboard is a sketch or blueprint for a movie production, theatrical performance, multimedia digital story, or animation. Storyboarding involves planning the sequence of scenes, transitions, and special effects, as well as the interaction of the incorporated media components. When making a digital story, creators use storyboards to help them efficiently organize the development or evolution of a story and keep it focused within certain parameters (e.g., time duration, image transitions, special effects, and planning out of types of music, imagery, audio and video to be used). Indeed, the storyboard is the place to tentatively figure out what media to use and how they might best work together to depict an important, engaging, and informative story. Ways of drafting storyboards vary and can be done on paper or computer. Software programs for professional storyboarding are available. The instructor should encourage students to finalize their working scripts as much as possible before making storyboards to avoid making major changes later (this will be time consuming). Ideally, a final script should be ready before sketching a storyboard. This helps creators easily visualize and finalize content in terms of character, setting, and plot.

Students need to consider several components when sketching storyboards for a digital story; these include imagery (e.g., photos, art work, graphics, and maps), video, text, voiceover, audio (music and sounds), slide transitions, and image effects⁴. In this curriculum study, the students received letter-sized photocopies of a storyboard template for their storyboarding (see Figure 1). To simplify changes, students pencil-sketched their storyboards and wrote page numbers on them for tracking scenes. Figure 1 shows a student example to help explain the process of storyboarding. First, students broke down their working scripts into key phrases and jotted them down in the script area of the template following the sequence of the story. Because each phrase was likely to contain two or more images, which would require two or

4 Depending on the type of software used, different software applications (PowerPoint®, iMovie™, and Windows® Movie Maker 2.1) have slightly different slide transitions and image effects.

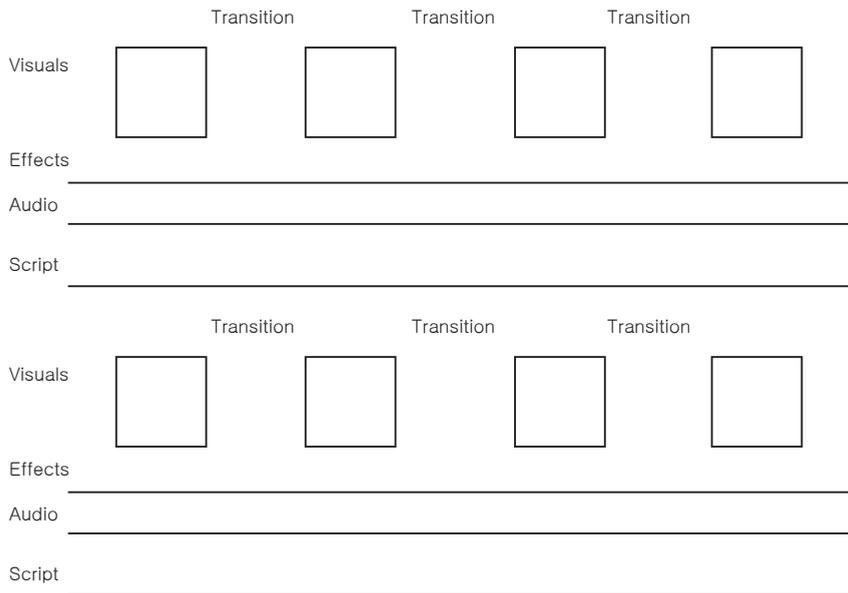


Figure 1. Storyboard template

more squares on the template, the students put down and visualized one to two phrases at a time and then sketched images and made scribbles and/or short notes in the square to indicate what to include. These instructions should be given to the students before sketching their storyboards. I have found that some students will jot down an entire script in the script area of the template and eventually be unable to find enough space (squares of the template) to indicate the images needed. Slide transitions and computer-mediated image effects were determined according to the type of moving-making software (such as iMovie™ or Windows® Movie Maker 2.1) individual students were using. The students understood that the success of a digital story was more about its delivered message than the extravagant use of computer-slide transitions and image effects.

Production Stage: Storyboards in Action

After completing their storyboards, the students proceeded to the production stage, using multimedia-enabled, Internet-ready computers equipped with speakers and microphones. Numerous movie-making

Software	Platform
Microsoft® Photo Story 3	For Windows only (free download) Ideal for grade-school children and for creating stories from still images
Windows® Movie Maker 2.1	For Windows only (free download) Ideal for grade-school children
Apple iMovie™	For Mac only (free download) Ideal for grade-school children
Adobe® Premiere®	For Windows and Mac
PowerPoint®	For Windows and Mac

Figure 2. Popular software applications for creating digital stories.

software applications can be used to produce multimedia digital stories. Software must be chosen according to the types of computer in a computer lab (see Figure 2). For example, a software application designed for the Apple Macintosh computer may not function on the Windows platform at all. Free movie-making, sound-editing, or imaging software is available online. Because the school used Windows XP computers, the instructor introduced Microsoft® Photo Story 3, a free software application for Windows XP that is ideal for beginning computer users and can be downloaded online. Microsoft® Photo Story 3, as its name suggests, is specifically designed to create stories from still digital images. For stories without a video component, the instructor recommended using Microsoft® Photo Story 3. To cater to individual needs and varied technology skills, the students explored other movie-making software applications such as Adobe® Premiere®, PowerPoint®, iMovie™ (for Apple Macintosh only), and Windows® Movie Maker 2.1. Based on my teaching experience, except for Adobe® Premiere® and PowerPoint®, the other software programs are user friendly, straightforward, and easy to learn. Teachers and students can easily master Microsoft® Photo Story 3 and Windows® Movie Maker 2.1 in a 20-minute self-exploration. In this study, one or more students

used each set of software mentioned above. Some created digital stories on their computer notebooks, while most used school computers and saved files to a USB flash drive⁵. The class used Adobe® Elements® or Adobe® Photoshop® for image editing and Goldwave®, another free tryout application, for sound editing. Because the class was using different software applications, peer assistance was critical in making the course a success. In addition, the instructor realized that troubleshooting might be needed at any moment in any computer-mediated classroom; therefore, he sought class input and assistance whenever a student was experiencing computer-related trouble.

Still and Moving Imagery Preparation

Images, photos, and video are central to a digital story and can be obtained online or in print or by taking digital pictures; students can also produce them with a scanner connected to a computer. Because one of the main goals in creating digital stories is sharing them with a larger population via the Internet, the students either obtained copyright-free material or secured written permission for using copyright-protected material. They read and discussed articles on copyright laws and fair use standards for the proper use of copyright-protected images.⁶ Like most university libraries, the University of Houston school library subscribes to a fee-based image online database available to students and faculty. Images obtained from this type of database are less of an issue in terms of copyright infringement. Popular search engines like AOL, Google, and Yahoo offer image-search tools. Students can combine a keyword and file type to search for relevant images, sound files, and video clips. For example, to locate a tree image, one might combine the keywords tree or trees with a file type, such as tree.gif, tree.jpg, tree.bmp, or tree.tif; for a tree video clip, one might use tree.mov or tree.avi; and for a tree-

5 A USB flash drive acts like a portable hard drive. It is about the size of an eraser and is capable of storing and transporting large amounts of data.

6 Linda Starr's online article *The Educator's Guide to Copyright and Fair Use* offers helpful information on this topic at http://www.educationworld.com/a_curr/curr280.shtml

related sound file, one can search on tree.wav⁷. Students must be further reminded that any material such as images, sound files, or video clips obtained from these popular search agents may be illegal to copy or use in their digital stories. They must get release permission even if they are unsure whether or not such materials are copyright protected.

In addition to gathering images online, the students checked out scanners, digital cameras, and camcorders from the school's technology center to obtain images or video clips they could not find online or elsewhere. To avoid unforeseen issues of using any copyright-protected materials, the students were particularly encouraged to produce their own images. Those wishing to videotape an interview were required to secure release permission from their interviewees, because any content included in the digital story would be published online. With images, video clips, and music files at hand, the students were ready to compose their stories with a chosen movie-making software application. They manipulated, inserted, and modified the various media components, adjusted slide transitions, and added image effects.

Guidelines for Evaluating Digital Stories

When producing digital stories, students should know the instructor's expectations in each learning phase and be clear on the criteria by which the instructor will evaluate the stories. These criteria or guidelines should be given at the same time the students are producing their stories. As the students in this course composed their stories, they paid attention to the following guidelines on the elements of an effective digital story. Exceptions to these guidelines could be made if they added a constructive attribute to the story.

1. An effective and engaging digital story incorporates the appropriate amount of images, audio, video, text, and image effects.

⁷ Bernard Robin, Associate Professor of Instructional Technology at the University of Houston, has compiled a list of resources for searching images, video clips, sounds, and music online at <http://www.coe.uh.edu/digital-storytelling/tools.htm>

The prime consideration should be the meaning of the story, not fancy or overwhelming use of image effects or slide transitions. All incorporated media should be integrated appropriately to achieve cohesion.

2. A successful story should achieve a sense of visual-auditory harmony. In other words, a scene leading the audience to contemplation and reflection should avoid using fast-bite sounds, music, or transitions.

3. Students should choose appropriate background music and avoid mixing lyric music with voiceover, which may distract from or conflict with the meaning conveyed. They should pay attention to how music conveys feelings and emotions. Instrumental music is usually more appropriate for story segments containing narration.

4. Video can add a dramatic emphasis to the story, such as breakthrough, transformation, or action. Still images can convey feelings and emotions and are ideal for emphasizing a viewpoint.

5. Personal voice is essential to a digital story. All students should narrate their own stories. Personal narration adds greater authenticity and emotional substance to the story. Interesting narration uses appropriate pauses and is spoken in a conversational style (not reading or reciting the script). When narrating, students should relate to images or video clips and coordinate with background music. They should also practice before formal recording. Sound-editing software (e.g., Goldwave®) is available for modifying voiceover, sound, and music.

6. With respect to pacing, a fast-paced scene normally conveys strong emotions such as excitement and tension, while a slow-paced scene indicates reflection and relaxation. Music tempo and image transitions (slow or fast) may also affect the audience's emotions.

7. Lambert (2002) has maintained that "the rhythm of a story determines much of what sustains an audience's interest" (p. 59). A more interesting and engaged story will typically use a more dynamic pacing (i.e., pause for reflection and action for revelation), meaning that a successful story contains an appropriate combination of fast- and slow-paced scenes. Mechanical pacing may bore the audience and should be avoided.

Sharing Stories

The final class session was devoted to sharing and peer evaluation. Each student presented a completed story to the class, elaborating on both its personal and professional meaning. Class participants evaluated each story based on key criteria given during their story production. These criteria included (a) creativity (is the story aesthetically or artistically interesting?), (b) cohesion (are multimedia elements integrated appropriately?), (c) success (is the story persuasive or engaging?), and (d) meaningfulness (is the story informative or educationally significant?). The students' stories included an advocacy of arts education, a questioning of standardized tests and their impact on arts education, a biographical account of a Houston arts philanthropist, an aesthetic inquiry into the purposes of art, an introduction to campus public art at the University of Houston, a historical account of making ancient manuscripts, and a piece on art careers⁸.

The following summarizes three student stories:

The significance of public artwork on campus was manifested in Amy's story. Amy⁹ recognized that most college students might be unaware of the public art pieces on their University of Houston campus. So she created a story using iMovie™ on her notebook to show the campus public arts collection. Her story began with a brief history of public arts collection at the university and discussed how funding and arts purchase committees are formed. Throughout the story, Amy acted as a tour guide walking the audience to three different pieces of art while providing details about their creators, the materials used, associated costs, and historical information. She interviewed students who happened to be near the art pieces, asking them for their thoughts about these works on campus. At the end, Amy challenged the audience to think about what the campus would look like without public artworks to illustrate the importance of their existence. Amy's

⁸ Words are too inadequate to describe these digital stories. Some student works will be available on the arts education program Web site at the University of Houston at <http://www.coe.uh.edu/arted/>.

⁹ Amy is a pseudonym.

completed script used to narrate her story is given in Appendix 1.

Barbara was already familiar with PowerPoint® and decided to use it to produce her story. Her piece, intended for adolescents, was titled “What is art for?” Her intent was to present it to her high school classes to discuss this important question of aesthetics. The work began with video interviews of college students on campus as she approached them with the key question, “What is art for?” She depicted numerous examples of art as she articulated how art communicates “symbolic, religious, spiritual, and ceremonial messages.” She also talked about modern arts and their practices. Barbara concluded with a list of emerging aesthetic questions to provoke further discussion. While creating her story, Barbara encountered numerous frustrations and problems with the computer (e.g., failing to find a file she had saved). This should not be unexpected when it comes to using technology in the classroom. Nevertheless, Barbara was very pleased with her final accomplishment.

Produced with Windows® Movie Maker 2.1, Jerita’s story consisted of a series of video interviews with her school principal, an art teacher, an art director, and a retired university art educator, in which she asked them how arts education benefits children. The class thought that her interview with her school principal was a productive way to promote arts education in her school. As a couple of her interviewees responded, “Kids need to think critically and imaginatively and art gives them that opportunity,” and “In art you have multiple solutions to problems.” Jerita summarized the benefits of arts education and cited research findings to urge better funding and support for arts education in public schools. She also offered practical strategies to help both parents and the public become involved in supporting arts education.

During peer evaluation, the class of seven rated highly each digital story presented. Two students were initially uncomfortable narrating their stories. It should be noted that some students might ask others to voice narrate their stories for them. Educators should explain how a person’s voice represents a unique identity and encourage students to voice narrate their own stories. In the course evaluation for this study, most had positive things to say about this learning experience. They all considered the amount of time (48 hours) dedicated to this project to be appropriate; they also appreciated having an opportunity to learn

about digital storytelling and to apply it to their art teaching. Most students agreed to make their works available on a university Web site to share them with other art teachers. The instructor was impressed that, although most students were first-time users of Adobe® Premiere® , Microsoft® Photo Story 3, or Windows® Movie Maker 2.1, their multimedia stories showed a professional execution (see student works at <http://www.coe.uh.edu/arted/>).

Conclusion

The application of digital storytelling to arts education is an interdisciplinary and inquiry-based pedagogy with a hands-on project that integrates the arts, education, local communities, technology, and storytelling. It allows students to develop and apply multiliteracy skills and funds of knowledge, aesthetic sensitivities, and critical faculties to address greater issues of importance to a larger audience, a practice in concert with the recently advocated Visual Culture Art Education in the United States and the Arts and Humanities paradigm in Taiwan.

While making a digital story, students perform multiple tasks as researchers, playwrights, designers, media producers, and educators. They explore topics of significance, compose a narrative, create computer images, record a personal voiceover, apply contextual knowledge, and analyze ways in which information and mood effectively convey a story. The processes of making a digital story and expressing themselves through digital storytelling provide arts students a stimulating aesthetical means of developing hands-on critical-thinking and problem-solving skills, of addressing relevant social issues and personal concerns, and of cultivating aesthetic sensitivities. All these faculties are crucial in the age of computer technology. The implementation of digital storytelling offers tremendous potential for integrative arts teaching and provides arts educators another avenue to innovate their programs for the technology-savvy digital generation. Moreover, with the availability of Internet technology, digital storytelling allows and empowers individual students to voice greater issues and concerns through their own lenses to an ever-widening audience.

Digital storytelling is a meaningful and powerful tool for integrated artistic inquiry, production, and instruction in the postmodern arts teaching arena.

References

- Digital Storytelling Association. (2002). *Digital storytelling*. Retrieved November 28, 2005, from <http://www.dsaweb.org/01associate/ds.html>
- Duncum, P. (2004). Visual culture isn't just visual: Multiliteracy, multimodality, and meaning. *Studies in Art Education*, 43(3), 252–265.
- Dunn, P. (1996). More power: Integrated interactive technology and arts education. *Art Education*, 49(6), 6–11.
- Freedman, K. (2003). *Teaching visual culture: Curriculum, aesthetics, and the social life of arts*. New York: Teachers College Press.
- Heise, D., & Grandgenett, N. F. (1996). Perspectives on the use of Internet in arts classrooms. *Art Education*, 49(6), 12–18.
- Lambert, J. (2002). *Digital storytelling: Capturing lives, creating community*. Berkeley, CA: Center for Digital Storytelling.
- Livo, N. J., & Rietz, S. A. (1986). *Storytelling: Process and practice*. Littleton, CO: Libraries Unlimited.
- Meadows, D. (2003a). Digital storytelling: Research-based practice in new media. *Visual Communication*, 2(2), 189–193.
- Meadows, D. (2003b). *Capture Wales BBC digital storytelling*. Retrieved July 22, 2005, from <http://www.bbc.co.uk/wales/capturewales/conference/danielmeadows.shtml>
- Paul, N., & Fiebich, C. (2002). *The elements of digital storytelling*. Retrieved November 28, 2005, from <http://www.elements.fiebich.biz/index.php>

Appendix 1. A student script in voice narration.

In the fall of 1966, Dr. Guenther began the University of Houston public art collection. He was of German descent, and the artworks that he chose reflected his background. He decided that 1% of a building's construction costs would be used towards the commission of an art piece. In 1968, the first public art piece was purchased.

In 1970, the collection began to expand. A committee appointed by the university decided on what artist they would be commissioned. The committee members include the Art Department's chair, the director of the Blaffer Gallery, a student representative, a representative for the architect, one member of the Art department faculty, and an art historian or studio representative. There is also a representative for

whoever is getting the new building.

In the early years, the committee commissioned more public art that would be placed outdoors. The committee believed that these pieces would have a greater impact on all students, not just the ones who entered the building.

As someone enters the Fine Arts building on campus, they pass many public artworks. We find ourselves in front of Luis Jimenez' Plower, made of fiberglass and urethane finish. How would you react if you had to walk by an artwork, on your way to class, of a man plowing the soil?

As we continue to walk through the building and towards the Moore Opera House, we come across another artwork that is part of the University of Houston collection. The Moore Opera House houses a mural by Frank Stella, Euphonia, which means "pleasant sounds to the ears." The mural was a collaborative artwork that was created during January to September of 1997. Many people were involved in creating the mural; some participants included University of Houston students and faculty. Overall, 5000 square feet of canvas was used for the mural. This artwork was the highest profiled piece added to the collection, and cost around \$180,000.

As we leave the Moore's Opera House, we can cross the street towards the athletic field. On the corner of Cullen and Elgin, there are many large chairs that are spread across the area. Are these artworks, or are they to be used by the people waiting for the bus? It is an environment piece, Untitled, that was created by Mary Miss and completed in December 1997. When Mary Miss was commissioned to create this environmental work of art, she began to research the area and the communities. Mary Miss wanted to create an inviting environment, which would bring the community together and want to "pull up a chair."

As we finish looking at some of the artworks that are part of the University of Houston public art collection, you might want to consider what the campus would look like if the collection did not exist. How would the campus look without any artwork inside or outside the buildings?