The Convergence of Digital Storytelling and Popular Culture in Graduate Education

Abstract: Digital Storytelling is being used in a variety of ways in the University of Houston's College of Education. This article provides and overview of an innovative approach that two instructors developed to use Digital Storytelling by pairing an Instructional Technology graduate course with another graduate course that focused on Popular Culture in Education. The processes used by the instructors in this collaboration are described and results of the students' work are also presented and discussed.

Background on Educational Uses of Digital Storytelling

For the past several years, students and faculty members at the University of Houston College of Education have been exploring the educational uses of Digital Storytelling through a variety of undergraduate and graduate courses offered through the College of Education's Instructional Technology Program (Robin & Pierson, 2005). In addition, a website titled The Educational Uses of Digital Storytelling has been established (http://www.coe.uh.edu/digital-storytelling) that provides an introduction to Digital Storytelling, educational goals and objectives, tutorials to help users get started, evaluation materials for educators and a large number of example stories.

There are numerous ways that Digital Storytelling can be used as an effective teaching and learning tool. Educators can create their own stories as a way to present new material to students, enhance and contextualize content, or facilitate discussions.

Digital Storytelling can also be a potent tool for students who create their own stories. The process can capitalize on the creative talents of students as they begin to research and tell stories of their own, as they learn to use the library and the Internet to explore rich, deep content while analyzing and synthesizing a wide range of information. Students who create their own digital stories develop enhanced communications skills by learning to organize their ideas, ask questions, express opinions, and construct narratives. As they learn to create stories for an audience, the process allows them to present their ideas and knowledge in an individual and meaningful way. Ohler (2206) suggests that the process of creating a digital story helps students "tap skills and talents in art, media production, storytelling, project development…" and that "helps students become active participants rather than passive consumers in a society saturated with media." These concepts were used as the foundation for our approach to teaching not only how to create digital stories, but also how to connect the stories to personal and educational themes that are important to each student.

Combing Digital Storytelling with Popular Culture

During the fall 2006 semester a graduate course on Digital Photography and Digital Storytelling was offered for the first time as half of a 6-semester hour block in conjunction with a course on Popular Culture in Education. In the popular culture course, students, many of them first year teachers, critically analyze issues and trends regarding popular culture in education and select a specific theme that they will use throughout the semester. A list of popular culture themes selected by students is shown in Table 1 below.

Art	The Berlin Wall	Fast Food
First Generation Americans	Heroes	John Lennon
Guns and Violence	Hollywood's Portrayal of African Americans	September 11th Terrorist Attack
The Palestinian Conflict	Marathon Running	Tattoos

Teen Pregnancy	The American Dream	Football
Television	Childhood Obesity	Vietnam
Race and Prejudice	Print Media	Dealing with Disease

Table 1: Popular Culture Themes

In the Digital Photography and Digital Storytelling course, students create and collect media (such as images, speeches, interviews, music, video clips), write scripts and design and develop digital stories based on the popular culture theme they selected and explored in the Popular Culture in Education course. The students that enrolled in one course were informed that they were required to enroll in the second course and since the two courses were held on the same day, the students could earn six hours of credit by taking the two linked courses.

The Digital Storytelling Process

The First Version of the Script

Students are first asked to write and submit the first draft version of the script for a digital story based on their selected Popular Culture theme. Students were allowed to select topics and some chose historical events, current issues in the news or entertainment media such as film, television and music. The students were asked to include a personal element in their script so that the digital story they created would have a strong connection to something important in their own lives. Since many of the students in the courses were teachers, many of those students also integrated instructional elements in their stories tied to content they planned to use in their own classrooms.

Concentrating our efforts on writing a script as the first task differed from our previous experience teaching Digital Storytelling. In the past, our emphasis had been on finding images to illustrate the story, but we found that selecting a meaningful topic and spending more time on the "storytelling" instead of the "digital," especially early in the process, made a significant difference and gave students an opportunity to take ownership of the story through the personal nature of their writing. Daniel Meadows (2005), a leading proponent of Digital Storytelling in the UK, writes that almost half the time in a five day workshop is spent working on scripts. And his belief that time spent writing and revising a script is time well spent, proved to be true for our students as well.

Example Script 1: *The Challenger Explosion:* Can you make a difference in this world? I remember the moment when I first realized I have something that could make a difference. It all started in the cafeteria, which also functioned as an assembly hall, when a TV was being wheeled in front of the crowd. My school, Henderson Elementary, felt it was important for us to view the first teacher ever selected for launch into space. We anticipated, we watched, and excitement mounted; and then in a split second it was gone. Throughout the cafeteria tragedy unfolded before our eyes and shock sank in. The "Challenger" shuttle had exploded during launch, lives were lost forever, and my heart was broken. This is my first recollection of feeling heartache for others and desperately wanting to help make it better. I walked home from school that afternoon trying to figure out what I could do. Later that evening, as I listened to President Regan console the nation, it hit me…I can draw! I decided I would draw a picture of the shuttle and write a letter explaining my actions for those involved in the tragedy. Then I would send it to the one person in charge of it all, the President himself. Looking back, I can see how art has influenced decisions in my life from this moment up to the present day. Although unaware, I brought reality to the saying "a picture is worth a thousand words" as a small child. But I was not the first, nor would I be the last.

Example Script 2: *Melanoma:* Schoolteacher Jessica S. was days away from getting married when a seemingly nondescript mole on her arm was diagnosed as advanced Melanoma. Just 27 years old at the time, she seemed an unlikely skin cancer patient. She had always been athletic and healthy, proud to have never having the flu. She was a marathon runner and extremely conscious of her diet. She never drank sodas, was not a sunbather, nor a tanning bed junkie. She was an athlete and a strong woman. Her days at the beach were with sun block and when playing outdoor sports with waterproof block. Yet the skin cancer was so insidious that it spread from her mole on the left fore arm to her lymph nodes in her right armpit. She went through an entire year of chemotherapy, two major surgeries, hair falling

out, bed ridden for most of the year, suffers from lymphedema, and has sustained damage to her thyroid and serotonin production. Her plans to have children are still up in the air and will be kept on hold for the time being.

Example Script 3: It was a far off war in a far off place that came to visit that sunny mild day in February of 1967. I was only 7, but very aware of the disparaging mood that blanketed our house at 3920 Sunnycrest Lane in Charlotte NC as the morning hours approached mid-day. Mammaw and Pampaw were visiting from Atlanta which was an exceptional treat as we usually visited them. I don't remember why they were visiting us, but I'll never forget the frantic call from Uncle Randy from their home in Atlanta. Uncle Randy, my strapping, strong, fearless, fun-loving, always coming and going teenaged-uncle who was driven to near hysteria by a visit from the brown, non-descript government car and two solemn members of the United States Army. They would tell him nothing and only asked for the location of his parents, my Mammaw and Pampaw. The officers left straightaway and hit I85 north which in 5 hours would take them to Charlotte and our house and Mammaw and Pampaw and my mom and dad and me and my brothers, carrying a message that no one wanted to hear……
And I remember I saw my father cry for the first time.
And I remember the flag on the coffin.
And I remember it's the first time I ever saw a dead person.
And I remember that Pampaw smelled funny a lot after that.
And I remember things were different after that – even though I was only 7.

After the initial versions of the scripts were written, students participated in small group "story circles," in which students meet in small groups and share their ideas for their stories, read draft versions of their scripts and provide constructive criticism and suggestions that can be used to improve the scripts and the overall plan for the final stories. Describing the importance of story circles, Lambert (2007) writes: "students that share their stories in our circles recognize a metamorphosis of sorts, a changing, that makes them feel different about their lives, their identities." And we found that this indeed was the case with our own students, many of whom were not familiar with a story circle and had not participated in one.

De Craene (2006) provides a helpful strategy for improving what she calls "literature circles," especially when students are learning to create digital stories. De Crane suggests assigning specific roles to members of a group to help keep students just beginning to use Digital Storytelling on task. Some of the roles she recommends include the following:

- Discussion Director – leads the group discussion
- Summariser – provides a synopsis of the main ideas and character generation
- Investigator – researches the topic for useful background information
- Illustrator – creates visual sketches, concept maps, flow charts, etc.

Although these suggestions were not known at the beginning of our semester, they will be used in future versions of the course to see how they might improve our use of the story circle process, especially with students who are learning about Digital Storytelling for the first time.

The Oral History Component

As part of the Digital Storytelling development process, students were asked to integrate an oral history component into their story. Their task was to locate someone to interview that could add meaningful material to the story they were creating. This gave students an opportunity to learn how to conduct an interview and collect interesting and useful information from people who they considered content experts. Through this process, students became more immersed in the story they were developing by hearing and recording the personal memories and first person accounts of others. The students had to learn how to research the background of the person they selected, formulate the questions, conduct the interview and then transfer the recorded material to the computer and edit it into short, meaningful clips.

In some cases, the students focused on the impact of significant events by interviewing people who experienced those events. The interviewees were often family members or friends, former teachers, or others who the students already knew. But other students were more creative and selected people who they thought would be good interview subjects. For example, one student whose story focused on his reaction to the death of John Lennon, reconstructed an imagined interview with Lennon by using pieces of audio interviews that were made more than 25 years ago, prior to Lennon's death. And another used quotes by Andy Warhol to conduct an imaginary interview with the late artist about his views on pop art. And in one

of the most powerful uses of this type of "virtual interview" a student had an associate read the letters that a deceased family member had written to his family before he was killed in battle.

Collecting Images and Creating a Storyboard

Images are an integral part of the Digital Storytelling process and our students spend time finding and scanning images in books, magazines and newspapers and downloading images they find on the web. They also spend a good deal of time learning to increase their skills using a digital camera and then using an image editing software program such as Adobe Photoshop Elements to improve the quality of the images they want to include in their story. Students are also required to develop a storyboard, which provides a rough visual sketch of the proposed story. Storyboards may be simple or complex, but either way, they can help students organize their ideas and plans for how images, text, and audio will be used in the creation of the story, and they can also inspire new ideas as the student begins to see any gaps in the story that need to be filled. Storyboards can be drawn on paper or constructed on the computer using specialized storyboard software or just a word processing program.

An example of a storyboard created by a student for her story on how African Americans were portrayed in early Hollywood films appears below.

Figure 1: An Example of a Storyboard on African American Stereotypes in Hollywood

Recording the Narration, Adding Music and Edited Audio

One of the most neglected areas in the development of digital stories involves the quality of the audio that is used. In our classes, we emphasize to our students how important it is for the audio in their digital stories to be of high quality. In our class meetings that deal with audio, we cover the use of different types of microphones, digital voice recorders and older analog audio recording devices such as cassette tape recorders. Students are required to learn to use digital audio production and editing software to record their narration and interview clips and edit them so that they fit in their digital story. Additionally, some student were interested in learning more sophisticated features of audio editing software so they could mix multiple audio tracks that combined their own narration, the interview and more than one piece of music. Digital audio editing programs we use are shown in Table 2.

Audacity	http://audacity.sourceforge.net/
Goldwave	http://www.goldwave.com/
Adobe Audition	http://www.adobe.com/products/audition/
Adobe Premiere Elements	http://www.adobe.com/products/premiereel/
Adobe Soundbooth (beta)	http://labs.adobe.com/technologies/soundbooth/

Table 2: Software Programs Used for Editing Digital Audio

Copyright and Educational Fair Use

We have found that when the topic of Popular Culture is merged with the creation of digital stories, students are very interested in using music, images and video clips from books, television shows, movies and music retailers such as iTunes. Many students are confused by the complexity and ambiguity of which materials they may use in their projects and which they many not. Consequently, we spend considerable time discussing the issues of copyright infringement associated with these media, as well as if and how use of these materials fall under the concept of educational fair use. As part of the course, students are introduced to the Creative Commons (http://creativecommons.org) and some of the many current websites that provide royalty-free media, especially ones that provide music that students can legally use in their digital story projects. Table 3 below shows some of the royalty-free music sites students explore.

Magnatune	https://magnatune.com/today
JamGlue	http://www.jamglue.com
ccMixter	http://ccmixter.org
Jamendo	http://www.jamendo.com/en

Table 3: Royalty-Free Music Sites

Evaluation of the Completed Digital Story Project

At the end of the semester, students submit a final version of the digital story they created. They are graded on the degree to which their work meets the requirements of that were outlined and discussed throughout the semester. These requirements are based on the Center for Digital Storytelling's Seven Elements (Center for Digital Storytelling, 2004) and include the purpose of the digital story, the point of view, the pacing, the meaningful use of audio, the quality of the images, and proper use of language.

Students are also required to submit a Final Project Report along with the final version of their digital story. The report provides students with an opportunity to describe the process they went through creating the digital story and includes the following specific items:

1. What is the main topic of your digital story?

2. Why did you select this topic?
3. Who is the intended audience?
4. Describe how this story might be used in an educational setting?
5. Briefly describe the process you went through in completing your digital story. This should include such information as: the software programs you used, where the content for the project came from, what items in the project changed from the early stages of selecting the topic through completion, and any other information that describes your work on the story.
6. Describe the major challenges, if any, that you faced in creating this digital story?
7. What were the most significant things you learned from completing the final project?
8. Please add any other information you feel should be included in the report.

Selected comments from the Final Project Reports are shown below, and demonstrate how students answered some of the eight items they were asked to address in the report.

How this Story Might be Used in an Educational Setting: I would present this story to my class to model writing the Personal Narrative. The first time my students wrote a personal narrative they had a hard time choosing a moment in their life that changed them. Another part of this writing process that I hope to convey better is the importance of detail. I have always tried to analyze movie scenes to emphasize the importance of detail and now I will have the entire process of brainstorming, to writing to making a movie of it to show my students.

Biggest Challenge 1: Each day as I look at my class I see the differences and similarities amongst my students. I have been assigned the inclusion class and as a first year teacher, it has been very challenging. This is why I chose the topic of special needs children. The most challenging part of creating this story was hearing my student's opinions about their special need. I have since altered my demeanor towards my students and I now understand that most of their needs are not their fault. Some were born with special needs and others are the result of environmental factors. Creating this digital story has made me a better teacher overall because I have developed an in depth connection with my students. We can move forward while helping each other as we become more successful.

Biggest Challenge 2: I think the most significant thing I learned in this class is that doing an oral history and creating a digital story out of it is really interesting, but very difficult and challenging. It is difficult to do justice to the oral history and the person behind it. Doing such a history is interesting because you are bringing together your own viewpoint and beliefs with the person you are interviewing and you are trying to produce a balance between them. I think the most important things from this course are not necessarily technological. They are mostly about valuing other people and wanting to preserve their history in some way. It is also about allowing your inner psychological feelings to have expression.

Most Significant Things Learned 1: I now understand what it is like to create a digital story in an organized and multiple-leveled fashion; therefore, my students will be enriched by this experience as well because I can carry on this learning with them. Because the actual content, the digital story, was infused with something relevant to my life, teaching and working, and some control over my learning was present, the learning and acquisition of information was possible. We always talk about making the learning applicable and relevant to students' lives, and I thank you for making this class one of those venues.

Most Significant Things Learned 2: The most significant thing that I learned from this course and completing the final project is that digital storytelling can be a powerful medium that can be utilized in the classroom. I am looking forward to integrating this type of learning into my classes. It's not just a new and improved version of PowerPoint…it is meant to tell a story and to encourage critical thinking.

In addition to submitting the formal Final Project Report, students were also asked to reflect on how they might be able to use Digital Storytelling in their teaching and how their students might be involved in the process. Some of their reflections are shown below.

Reflection 1: I cannot wait to use digital stories in my teaching. I think digital stories would be a great way for students to show what they have learned about a particular subject. It gets them to go beyond the basic

reciting of information for a test and actually put their knowledge to use. They also get to show off what they can do, which all of my students would love to do. I think their parents would be very impressed as well.

Reflection 2: I think this is a great project to have students engage in, especially at the conclusion of the unit. It would be interesting to have the students make a digital story of their prior knowledge and then at the end of the lesson they can make another story-comparing and contrasting their exploration and learning.

Reflection 3: My students can feely browse the site where our digital stories will be posted to get ideas and training on building their own digital story. Allowing them hands on practice to teach themselves encourages active learning, but it allows students to take responsibility for their own meaningful learning. I see Photostory as a tool in art class for the students to express themselves through creativity. They can share information about themselves and their culture.

Reflection 4: I will be using my current digital story project as an anticipatory set for art history or a unit on designers for media/products. It can also be used as an introduction to art for the beginning of a semester to allow insight into what art contributes to our society. I think digital storytelling is a great tool for the classroom, for teachers and students. I plan on using it and in the future allowing students to create their own digital stories as an art project using technology. I feel I could use the stories for introductions or to add depth to the topic of study. They could also be used for closure and reflection at the end of a unit. I also think these are great alternative texts because they play out as a movie segment would. They can be entertaining and informative at the same time, while not being too long and boring.

Reflection 5: I intend to use the digital story that I created in this course as an anticipation guide before reading The Great Gatsby. The digital story should provide some necessary background information about the life and culture of the 1920s, as well as a "teaser" about the main character, Jay Gatsby, that will hopefully spark some interest to read and find out more about him. The digital story will also introduce the theme of "The American Dream" and pose the question of whether it is largely illusory in nature. This theme would be discussed in greater detail at the completion of the novel (and I might perhaps show the digital story again).

Reflection 6: I will use digital storytelling to assess personal narratives or any writing that we do. We are doing Poetry right now and a digital story would really compliment the vocal aspect of poetry; poetry is meant to be read aloud. In fact, the "it" thing for contemporary poets today is to create moving/visual poetry. Their poems are like little music videos; the poet reads while images, pieces of movies appear that relate the feeling and images in the poem. I would show some of these visual poems by contemporary poets, then create a story with the class using a poem we write as a class and allow us to create the digital story as a class. Then we can move on to individually creating digital stories of our poems.

Distributing the Completed Digital Stories

At the end of the semester, when the digital stories had been completed, students investigated the different ways that their work could be saved and shared with others. This included how to save their stories for playback on a computer. During this part of the discussion, students discovered that stories created with Microsoft Photo Story 3 software (which most students used) only played on PCs running the Windows XP (or later) Operating System. Consequently, this led some students to learn how to convert these files to another video format that could be played on both PCs and Macintosh computers. Students were also shown how their stories (and associated materials such as copies of the scripts, storyboards and project reports) could be uploaded to a server so that they could be viewed by a larger audience of web visitors. Some of the stories were added to the Educational Uses of Digital Storytelling website and may be viewed at: http://www.coe.uh.edu/digitalstorytelling/2007/index.htm

We also examined how digital stories could be saved for other devices by using specialized software. For example, we discussed the use of programs such as Videora, a free application that allows stories to be converted to a format that can be played on a video iPod. Although many of the students were

not at the point where they were able to do this, they nonetheless were interested in learning how it was done so that they might try it in the future.

Students were also very interested in learning to save their stories on DVD, especially when they learned that these discs would allow their stories to be viewed on either a computer (with a DVD drive) or a television set connected to a standard DVD player. In our course, students were able to use Sonic's MyDVD Studio program to create DVDs that include interactive menus, as shown in the figure below.

Figure 2: Three of the Sub-Menu Screens of the DVD Containing Twenty Digital Stories

Next Steps

The 6-semester hour dual course offering of Digital Photography/Digital Storytelling and Popular Culture in Education was deemed a success by both the students and the instructors and has already been scheduled to be offered again during the fall 2007 semester. Modifications will certainly be made to improve the in-class activities and based on the feedback from students, more hands-on time in the computer lab will be included in the next offering. In addition, optional lab time will be added to the schedule, with teaching assistants available to help students with technology topics as well as with script-writing, storyboarding and planning interviews. As a final activity at the end of the semester, the students were asked to describe their next digital story and the answers included a wide variety of topics such as AIDs, genocide, World War II, Iraq, the changing face of government, and animal adaptations. The excitement among these students was dramatic and highlights the fact that Digital Storytelling is a powerful teaching and learning tool that engages and motivates students in almost every content area.

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