

# Digital Storytelling as an Educational Tool

By Carol Lunce

## Telling a Story

Digital storytelling is defined as: ...the original form of teaching (Pedersen, 1995). Originally storytelling was a way of teaching both information and values. Digital storytelling is still a way of communicating, but is more visual rather than oral. Meadows (2003) believes that digital storytelling is the, " ...social practice of telling stories that makes use of low-cost digital cameras, non-linear authoring tools and computers to create short multimedia stories ( p. 189). Ohier (2007) stated that, "A *digital story* can be anything that uses *digital* technology to construct narrative" (pp. 56-58). The Digital Storytelling Association (2002) describes digital as:

...[a] modern expression of the ancient art of storytelling. Throughout history, storytelling has been used to share knowledge, wisdom, and values. Stories have taken many different forms. Stories have been adapted to each successive medium that has emerged, from the circle of the campfire to the silver screen, and now the computer screen. (<http://electronicportfolios.com/digistory/index.html>)

Storytelling has been used as a cultural means to transmit history, culture, and family relationships in the absence of a written language. Digital storytelling is very similar, but has specific characteristics that make it different. One is it should be made from a personal event from the creator and generally includes music, video and a narration, plus sometimes a biography from the storyteller. Bernard Robin (2008) created a PowerPoint that carefully describes the different types of digital stories and even includes a rubric for grading his student's projects. Robin describes three major types of digital stories as, Personal

Narratives (which include character stories; memorial stories; stories about events in our lives; about places in our lives; about what we do; recovery stories; love stories; and discovery stories); Historical Themes and Events ; and Stories that Inform or Instruct.

## Digital Storytelling in Education

Some faculty have produced digital stories to convey best practices in teaching, while others have used this persuasive medium to convince granting organizations to support their projects (Northeastern, 2009). Digital storytelling can also be used to help students organize their thoughts, use reflection in their critical thinking, for portfolio for prospective employers, or as part of a course project. *Fostering Community through Digital Storytelling: A Guide for Academic Libraries*, by Anne M. Fields and Karen R. Diaz, envisions using storytelling not only for teaching and learning purposes, but organizational development, marketing and external development, as well as outreach. Stories created by teachers can serve: as a lesson hook; as a way to integrate multimedia into the curriculum; as a way to make difficult content more understandable; and to facilitate classroom discussion. Digital storytelling can be important for students because it can reinforce their skills in research, organization, writing, presentation, and problem-solving.

Future uses in an academic library might include: digital story instruction, maintaining a digital story repository, monitoring a computer software and hardware center, create inter-department story collaborations, marketing university assets through digital stories, and facilitating campus oral histories. Included here are examples from different websites that have posted their stories. The following are from the Digital Story Center in California:

- *Learning* (<http://www.storycenter.org/stories/index.php?cat=4>): This is a digital story told by a third generation Japanese/Canadian who grew up to become a biologist. His story is of his grandmother and mother's examples of hard work and determination, even though they were lowly beet farmers and how that helped him become the man he is today.
- *Deep Water* (<http://www.storycenter.org/stories/index.php?cat=6>): This story is about a woman's struggle to deal with her mother's ovarian cancer and the impact it had on her life.
- *Monarch Butterflies-From Egg to Adult* (<http://www.mesquiteisd.org/imovie/monarchbutterfly.htm>): This digital story is about the development and growth of the Monarch butterfly.

There are many more sites not included that come from South Africa, Australia, Canada, the United Kingdom and many public school systems in the United States. Digital storytelling as a teaching method has become so common in some educational systems that the State of Missouri offers yearly a Digital Media Camp for the Missouri Family and Consumer Sciences and Missouri FCCLA. According to Bull and Kadjer (2005) there are 7 major steps in creating digital storytelling: Create a script; Plan an Accompanying Storyboard; Discuss and Revise the Script; Sequence the Images in the Video Editor; Add the Narrative Track; Add Special Effects and Transitions; Add a Musical Soundtrack if Time Permits.

### Teaching Digital Storytelling to Faculty

When I first heard about digital storytelling, I was intrigued because I did not understand how it could be done and how complicated (software programming or storyboarding) the exercise would be. However, a fascination with storytelling has been with me since I was a child listening to Chinese stories and fables, and my mother's family stories. I wanted to experience what this concept could mean to others, especially in the context of learning. I researched the topic and decided to learn about digital storytelling and eventually to teach faculty how easy and powerful and

simple the media can be. Digital storytelling can provide a medium whereby faculty can bring their best teaching practices to life in the classroom. Learning objects, teaching portfolios and research projects can all be structured and presented as digital stories. I was asked by the Center for Instruction, Research and Technology (CIRT) at Indiana State University (ISU) to consider teaching digital storytelling to ISU faculty. CIRT has a specific model they follow when conducting a workshop and a rubric to assess the instruction. Their model is one-third definition and purpose of using this technique or software, one-third demonstration, and one-third hands-on experience. The rubric for assessment has the faculty assess the clarity of the instruction, practical applications of the workshop to the faculty curriculum, the trainer's connection with and sensitivity to the audience, and whether the attendee would recommend this workshop to their colleagues. As a faculty member at Indiana State University, I have taught digital storytelling to faculty for two years as a technique to encourage creativity in teaching. Some of the projects created by faculty have included the following: Sequencing of events and language in early childhood education; Nutrition pyramid; Teaching nursing technique through a personal experience; Engineering; Teaching students how to create a short oral history of their family or events important in their family.

Workshop attendees have been inspired by the simplicity and creativity of the method. They were able to create a storyboard in PowerPoint, input video, or graphics and add a narration all in a one and half-hour workshop. This teaching technique does not require a huge expenditure or programming knowledge. All the software and methods were simple to use and were either already provided through the university or free. However, if one wanted to create a more elaborate digital story there are several software packages that could be used. All of these do involve some cost and technical expertise. Examples are *Captivate*, *Camtasia*, *Lectora* and *Flash*. Another example of a program that is a prepackaged version of digital storytelling is *Voice Thread* for higher education that costs approximately \$59. to \$99.00 per year.

## Organization of a Workshop for Faculty

The class was presented in five parts: Definition of digital storytelling and its pedagogical impact; Demonstration of some of the best examples from the Center for Digital Storytelling at <http://www.storycenter.org/stories/>; A discussion about the software needed; Demonstration of how to construct a storyboard to organize the information; and an exercise where each participant actually created a 3-5 minute digital story. During one session a professor decided to create a digital story about the character Madeline from the Ludwig Bemelmans' series popular with children since the 1940's. She created a picture of Madeleine, drew some pictures, created a poem in poetic meter as the original books and added narration. She created this project as a way to teach her students sequencing in story lines and to teach them how to use the power of rhyming language in elementary school education. She immediately grasped the possibilities and power of digital storytelling and commented that she would use this in her class in the future.

Another professor from Family & Consumer Sciences created a fun story about nutrition and what it means to an individual. She started with people's favorite foods and least favorite foods and showed an inverted pyramid of how people eat and then how they should eat. She created her story more as a short cartoon with humor and a fun sense of why one needs to be healthy. She was also fascinated by the power of the media and its pedagogical uses. Yet another faculty from Nursing was trying to relay the concept of technical expertise in giving shots with a bent towards sensitivity to the patients. She had cute cartoons, with people's fears of shots, but tips on how to get the patient to relax and yet get the shot done quickly and efficiently. A professor of history created a digital story that included pictures and music through the last two decades, visually and musically documenting events that persons under twenty-one would not have experienced or even know about. It turned out to be a dynamic and fun digital story.

Each workshop had approximately three to five faculty attendees and was represented

by different disciplines such as Engineering, Education, Nursing, and English. Attendees wanted to learn a technique that would engage their students in learning a concept or encourage self reflection. All faculty attendees came with a curiosity about the topic but with no experience or knowledge of the method. All attendees gave positive comments and an indication that they would integrate this method into their classroom. This ties into ISU's strong initiative to encourage experiential learning at all levels of instruction and so most faculty came just out of curiosity, but left with an appreciation of the possibilities. Examples of the digital stories created by the faculty represent best practices that are applicable to K-12 and higher education, since it engages the student, reinforces organization of thought, writing, a specific goal, all presented in a method that all can enjoy and learn from, especially students of the Gen-X and Millennial generation. It is a visual method that can be used for teaching or explaining a personal experience.

## Conclusion

There are several software packages available free for download. One of the easiest is *PhotoStory3* from Microsoft (<http://www.microsoft.com/windowsxp/using/digitalphotography/photostory/default.msp>), *Mixbook*, (<http://www.mixbook.com/edu>) created for K-12, is very simple and easy to use. *Audacity* (<http://audacity.sourceforge.net/>) is probably the most powerful and yet is also considered not a complicated program to learn. For more information see the book *Digital Storytelling Cookbook* (<http://www.storycenter.org/cookbook.html>) produced by the Center for Digital Storytelling at Berkeley. Digital storytelling is an effective tool or teaching method for faculty, students, K-12 and anyone who has a story or wants to learn about some concept. It does not require any expenditure at the simplest level and very little technical knowledge. It can be a personal story or an entertaining way to teach a concept in a visual multimedia manner. The methods of creating a digital story are specific and documented and there are many resources available as stated in this article. It is a phenomenon that links all of us universally to an earlier time when we had no other ways of communicating and remembering what we needed to survive.

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