

# Digital Storytelling in Higher Education

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## ABSTRACT

**D**IGITAL STORYTELLING is a promising instructional strategy as well as an emerging field of study in higher education. Courses on digital storytelling are offered in communications and creative writing programs at a number of universities. However, the potential for digital storytelling extends far beyond the fields of communication and media studies across many fields of study, including history, American Studies, business and leadership, knowledge management, community planning, and much more. In addition, digital storytelling has been used to help students prepare for college. Digital storytelling applications include personal stories, digital story archives, memorial stories, avocational stories, educational stories, and stories in medicine and health. This paper examines the origins and practice of digital storytelling, highlighting a range of applications in higher education. (*Keywords: digital storytelling, narrative learning, digital media, media studies, self-representation, hypertext, interactive games, blogs, podcasts, digital movies, oral history, creative writing, Dana Atchley, Joe Lambert, Center for Digital Storytelling, Capture Wales*)

## DIGITAL STORYTELLING: AN EMERGING FIELD

**D**IGITAL STORYTELLING is a significant emerging field of study in higher education. Courses on digital storytelling are offered in communications and creative writing programs at a number of universities, including the University of California Berkeley, Carnegie Mellon University, the University of Minnesota, Empire State College, and many more. Ball State University recently established a Masters of Arts in Digital Storytelling in its College of Communication, Information, and Media. The potential for digital storytelling extends far beyond the fields of communication and media studies across many fields of study, including history, American Studies, business and leadership (Stepanek, 2000), knowledge management (Weinberger, 1999), community planning, and much more.

Digital storytelling is the art and craft of exploring different media and software applications to communicate stories in new and powerful ways using digital media. Since the new digital tools are inexpensive and widely accessible, digital storytelling tends to be highly personal and at the same time, universal. As a result, it is a very powerful form of communication. Digital storytelling applications include short (three-to-five minutes) movies featuring images, video clips, soundtrack, and narration; storytelling performances and talks supported by media slideshows or interactive presentations; and Web-based applications, including streaming media, podcasts, and blogs. Other applications include hypertextual narratives and interactive games. But the main focus of digital storytelling is the creation of personal narratives rather than interactive stories or games.

At this point in time, digital storytelling is an emerging field; people are exploring how to develop new forms of narrative to take advantage of the capabilities of digital media. The term "digital storytelling" was coined by Dana Atchley.

In the 1980s, Atchley, performing as a storyteller, saw the potential of computers and multimedia. He began using multimedia as a prop in his performances, and he went on to adapt storytelling techniques in several creative ways. Using software tools that included

Apple QuickTime, Adobe Premiere, and Macromedia Director, he devised a system that allowed him to tell stories through film, video, music, and photography and to fashion a new show for each performance. Dana Atchley's storytelling performances used the theme of storytelling around a campfire. In his performances, Atchley included a digital campfire on a small television screen, surrounded by real logs, together with a large screen projection of images, stories, and family photos and movies that he wove into a moving tapestry of life stories, combining the power of digital media with the immediacy of oral storytelling.

Starting in the early 1990's, Dana Atchley, Joe Lambert, and other media artists, designers, storytellers, and theater people in the San Francisco Bay area came together to explore their shared interest in how personal stories and storytelling could inform the emergence of a new set of digital media tools. This exploration resulted in the creation of the Center for Digital Storytelling in Berkeley, California. The Center for Digital Storytelling is the international leader in promoting digital storytelling, through workshops, consulting, and collaborations.

Over the past decade, the Center for Digital Storytelling has been built around a unique training workshop, the Digital Storytelling Workshop. This workshop offers a highly effective method of assisting people in learning very quickly the process of producing short media pieces using a combination of digital image manipulation and digital video editing software. Over three days, the workshop provides participants with focused time to organize the raw material for their story (photographs, movie clips, storyboard, etc.), learn procedures and approaches for crafting the story with digital media, and time to listen to feedback and improve upon their efforts as they develop and create their stories. (Lambert, 2002, p. 21) During the workshop, participants use digital media tools such as Adobe Premiere and iMovie to develop and create their digital stories. The short pieces, usually three-to-five minutes long, combine a recorded narrative, still images, a soundtrack, and occasionally moving images. Over 5,000 people have participated in hundreds of workshops. This approach to storytelling encourages the storytellers to approach their stories from a personal perspective.

Along with numerous collaborators, the Center for Digital Storytelling has inspired an international interest in the methods and principles used in their training programs, as well as the many applications of digital storytelling that are possible. For example, the BBC has sponsored the "Capture Wales" digital storytelling project (<http://www.bbc.co.uk/capturewales/>), implemented in partnership with the Cardiff School of Journalism, Media and Cultural Studies. This project is designed to offer workshops and capture the stories and heritage of ordinary people throughout Wales. Since 2001, more than 500 people across Wales have made Digital Stories that have been broadcast via the BBC (<http://www.cardiff.ac.uk/jomec/en/research/315>).

Many educators have recognized the potential of digital storytelling. In addition to serving as a valuable tool in subject areas—history, language arts, social studies, teacher training, etc.—digital storytelling can help promote skills such as visual literacy, collaboration, and mastery of technology—all skills needed for the 21st century. Digital storytelling can also promote creativity and problem solving while encouraging self-direction and personal initiative, all valuable skills.

For many community activists, educators, business professionals and artists, the Center for Digital Storytelling's Digital Storytelling Workshop has transformed their thinking about story, media, and culture. In the last few years, the Center for Digital Storytelling has become involved as principal consultants and trainers for several sizable projects involving a series of theme-related workshops to capture stories across entire countries or regions—like the Capture Wales project—as well as groups such as young people, World War II veterans, cancer survivors, and residents in rural areas. In addition the Center for digital Storytelling has partnered with a number of university programs, providing training and assistance with program planning. The Center for Digital Storytelling's approach to digital storytelling is well documented on the Center for Digital Storytelling Web site (<http://www.storycenter.org/>) and in Joe Lambert's book, *Digital Storytelling* (2002).

## FORM AND PRACTICE

**S**IGNIFICANTLY, Lambert (2002) contrasts digital storytelling with digital spectacle. Spectacles such as the circus, opera, and film, create total sensory immersion, and in that state the audience members become fairly pliant observers—but they are only observers. This model encourages passivity on the part of the audience. Multimedia in presentational environments often follows this tradition and leans heavily on spectacular events, loud pulsating music, lots of projections, fast-moving edits, and flashing lights. (Lambert, p. 89)

By contrast, digital storytelling is far more intimate and participatory, with less flamboyance, yet with deep and lasting power. Ultimately, digital storytelling seems to reach people more profoundly than spectacle. As digital storyteller and business media consultant Ken Harper (1999) explains, “with digital storytelling, the audience is also a storyteller. The whole notion of audience is changed.” Similarly, according to John Seeley Brown (quoted in Kahan, 2003),

stories have always been a kind of dialectic or conversation between the storyteller and the listeners. Brown goes on to explain, In the past, I tended to think of narratives as being basically linear, but they aren't necessarily . . . part of the power of a narrative is its rhetorical structure which brings listeners into active participation with the narrative, either explicitly or by getting them to pose certain questions to themselves.

Brown points out that stories have always been a kind of dialectic or conversation between the storyteller and the listeners. That is certainly true with digital storytelling, where the technological dimension adds tremendous new potential to the ancient art of storytelling.

Lambert (2002) emphasizes the power of the first-person voice that is central to digital storytelling:

We, as information consumers, are becoming increasingly sophisticated at discerning the authenticity of information. In general, we prefer the frank admission of responsibility that

the first-person voice provides to the authoritative, seemingly neutral, but nevertheless obscure stance of the third-person voice. (p. 49)

Related to this, Lambert (2002) uses the metaphor of “conversational media” to illustrate the unique power of digital storytelling. “We approach the storytelling part of our work as an extension of the kind of everyday storytelling that occurs around the dinner table, the bar, or the campfire.” (p. 17)

The premise of digital storytelling is very simple: It is designed to help people tell stories from their own lives that are meaningful to them and to their audience, using media to add power and resonance, and to create a permanent record. Digital storytelling is in sync with the current recognition of the importance of capturing personal, family, and organizational memories. Lambert (2002) explains: digital storytelling helps you document “Your own desires in life, the kinds of struggles you have faced, and, most importantly, the number and depths of realizations you have taken from your experience all shape your natural abilities as an effective storyteller” (p. 21). Digital stories often take the form of essays and memoirs.

Beyond the Center for Digital Storytelling, the concept of digital storytelling encompasses a number of other practices and forms of expression. These include the interactive narrative forms from hypertext, Web-based narratives combining image-sound-animation-video, the virtual cinema of narrative games or game like conceptual pieces, and other practices of using digital media tools (video, motion graphics, animation, etc.) to explore both nonfiction and fictional narratives (Gergen, 1997; Murray, 1997; Bernstein, 1998; Montfort, 2003; Wardrip-Fruin & Montfort, 2003).

Currently there are digital storytelling programs in 16 countries and 45 of the 50 U.S. states. Lambert (2005) reports, “Sixty per cent of these programs are based in educational environments, and 35 per cent in community or civic settings.” Only a small percentage of these applications are business-related at this time. According to Lambert, a number of companies have explored digital storytelling at some level over the past decade. This includes executive training, knowledge

management, presentation media, internal brand and product development, and the creation of marketing tools. In one case, it is part of a major attraction exhibit for the product. In this case, the World of Coke Digital Storytelling theater in Las Vegas, has been examined as a case study at Dana Atchley's Web site, <http://www.nextexit.com/dap/woc/woc.html>." Museum designers are adapting digital storytelling methods (Kirsner, 2000). A primary example of this is the Abraham Lincoln Presidential Library and Museum in Springfield, Illinois, that was recently redesigned by BRC Imagination Arts (<http://www.brcweb.com/museum-design.htm>).

Stories offer a powerful tool to promote learning and engagement. Stories speak to both parts of the human mind—reason and emotion. John Seeley Brown (quoted in Kahan, 2003) explains,

stories talk to the gut, while information talks to the mind. You can't talk a person through a change in religion or a change in a basic mental model. There has to be an emotional component in what you are doing. That is to say, you use a connotative component (what the thing means) rather than a denotative component (what it represents). First, you grab them in the gut and then you start to construct (or reconstruct) a mental model. If you try to do this in an intellectual or abstract way, you find that it's very hard, if not impossible, to talk somebody into changing their mental models. But if you can get to them emotionally, either through rhetoric or dramatic means (not overly dramatic!), then you can create some scaffolding that effectively allows them to construct a new model for themselves. You provide the scaffolding and they construct something new. It doesn't seem to work if you just try to tell them what to think. They have to internalize it. They have to own it. So the question is: what are the techniques for creating scaffolding that facilitate the rich internalization and reconceptualization and re-contextualization of their own thinking relative to the experience that you're providing them? Put more simply: how do you get them to live the idea?

## THE IMPORTANCE OF STORIES

**P**SYCHOLOGIST AND INTERACTIVE DESIGN EXPERT, Donald Norman (1993) explains, “Stories are marvelous means of summarizing experiences, of capturing an event and the surrounding context that seems essential. Stories are important cognitive events, for they encapsulate, into one compact package, information, knowledge, context, and emotion” (p. 129). Renowned scientist Edwin O. Wilson (2002) takes this a step further:

We all live by narrative, every day and every minute of our lives. Narrative is the human way of working though a chaotic and unforgiving world. The narrative genius of *Homo sapiens* is an accommodation to the inherent inability of the three pounds of our sensory system and brain to process more than a minute fraction of the information the environment pours into them. In order to keep the organism alive, that fraction must be intensely and accurately selective. The stories we tell ourselves and others are our survival manual. (p. 10)

According to Peter Giuliano, CEO of the Executive Communication Group, “Using a narrative approach is what helps make the information tangible and memorable” (“Corporate Storytelling,” n.d.).

Stories serve many purposes. Stories show us patterns; they help us to make connections. They are tools for empowerment. Stories originate in problematic situations; they show the way out of these situations. Great stories provide us with a road map or treasure map, which outlines all of the actions and tasks we have to accomplish in order to complete the journey successfully. Stories also provide a toolkit for solving all of the problems that have to be solved along the way. Stories are a form of “expert system” for remembering and integrating what we learn. Stories are thought machines, by which we test out our ideas and feelings about some thing and try to learn more about it. Stories help us to identify and understand the forces impacting upon us. All of this—and more.



Digital media offer a tremendous tool for storytelling. Digital storytelling makes it possible to capture, archive, and retrieve stories with greater ease and flexibility than ever before. And digital storytelling techniques make it possible to present and share stories with exceptional power. For example, digital storytelling offers a creative format for student portfolios (<http://electronicportfolios.com/digistory/purposesmac.html>).

Lambert (2005) reports that the Center for Digital Storytelling worked with the Institute for the Future to create databases of stories to illustrate points of view. The Institute for the Future viewed this approach as a natural evolution beyond PowerPoint indices of bullet points and notation in presentation. However, digital storytelling offers more power than presentation tools such as PowerPoint, although these tools being upgraded with features that bring them closer to the potential of digital storytelling. As one goal for this project, the Center for Digital Storytelling wanted to see if story could become one of the metaphors for organizing one's knowledge database. This proved to be highly effective.

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## DIGITAL STORYTELLING APPLICATIONS

**D**IGITAL STORYTELLING APPLICATIONS include personal stories, digital story archives, memorial stories, avocational stories, educational stories, and stories in medicine and health. In addition, there are a number of applications in history, business, and a range of other fields.

### PERSONAL STORIES

Personal storytelling is a powerful force that is driving storytelling via digital media. People have stories to tell, as they have throughout the ages, and the new media offer promising new possibilities for telling, sharing, and preserving personal stories. With digital storytelling, it is possible to bring to life the stories behind the photographs

in a family photo album: stories that might fade away with the disappearance of the older people who remember the stories. This power of preserving personal and family stories is a wonderful benefit of digital storytelling. People want to create their digital stories to communicate with themselves but also to communicate with others, now and in the future. We all have stories about the events, people, and places in our lives—stories we want to come to terms with and wish to share. Personal Web sites and electronic journals on the Web, including blogs, are new forms of expression that connect authors to others throughout the world. Personal storytelling is at the heart of the Center for Digital Storytelling's workshops and many of the projects that the Center for Digital Storytelling sponsors. The Center for Digital Storytelling has several examples of personal stories on its Web site at <http://www.storycenter.org/understanding.html>.

At the University of Oslo in Norway, the Mediated Stories Project (<http://www.intermedia.uio.no/projects/research-projects-1/mediatize>) explores how people use self-representation in digital storytelling to shape and share their lives. There is a particular focus on youth, and on understanding these self-representation processes through theories of mediation and mediatization across media studies and the field of education.

Laguardia Community College offers an innovative course, Communication and the Nonnative Speaker, that features digital storytelling. This course is designed to help students develop facility with English when it is not his or her native language. Students create personal stories as one strategy for improving their language skills ([http://faculty.lagcc.cuny.edu/eheppner/hul\\_stories/home.htm](http://faculty.lagcc.cuny.edu/eheppner/hul_stories/home.htm)).

## DIGITAL STORY ARCHIVES

One form of digital storytelling consists of Web sites (including, but not limited to blogs) where people can share stories on different themes and topics. One of the oldest examples of this type of Web site is Bubbe's Back Porch (<http://www.bubbe.com/>), which focuses upon the themes of birth stories, death stories, education stories, food and recipe stories, grandmother stories, journey stories, and romance

stories. The Capture Wales project is another example that deals with all sorts of stories—stories that tell about Wales from the inside. The Capture Wales project features two Web sites, one with stories in English and the other with stories in Welsh.

## MEMORIAL STORIES

Individuals and groups are exploring different possibilities via digital media, especially the World Wide Web, for memorializing individuals and groups of people. There is a Web site featuring stories and testimonials about those who died in the Vietnam War (<http://www.thevirtualwall.com>), providing an eloquent digital complement to the physical memorial in Washington, D.C., designed by Maya Linn. Another Web site, Stories of September 11 (<http://911digitalarchive.org/stories/>), commemorates both those who died and those who survived the terrorist attacks of September 11, 2001, with stories and testimonials. Still another Web site, Densho: The Japanese American Legacy Project (<http://www.densho.org/>), seeks to preserve the testimonies of Japanese Americans who were unjustly incarcerated in the United States during World War II. Stories of Service (<http://www.stories-of-service.org/>) commemorates the stories of people who served the United States during World War II. What is unique about this program is that it partners young people who can easily be taught the necessary technology skills to create digital stories with the storytellers, in many cases their grandparents. Another Web site, <http://xroads.virginia.edu/~hyper/wpa/wpahome.html>, features American Slave narratives. The City Stories Project (<http://citystories.com/>) features stories from cities across the globe. These are just a few of the many Web sites that feature memorials in the form of digital stories. Some of these Web sites feature only text, while others include pictures, streaming audio, and streaming video. The interest in this type of digital storytelling application is sure to grow as the baby boom generation seeks to come to terms with individual lives, legacies, and heritage.

## AVOCATIONAL STORIES

Some digital storytelling programs are designed to serve people with special needs or life issues. Silence Speaks (<http://www.silencespeaks.org>) is one example of this. Silence speaks works with victims of domestic violence, including adults and children, to provide them with opportunities and technical training to tell their stories in their own words. Silence Speaks connects survivors of abuse with their creativity and makes their voices the centerpiece of violence prevention and social justice efforts.

## DIGITAL STORYTELLING IN MEDICINE AND HEALTH

One of the areas where digital storytelling is having a very promising impact is in medicine and health. Digital storytelling provides an electronic forum for medical professionals and patients and their loved ones to share stories and moral support. Stories are shared experiences, and people with medical problems can benefit from sharing their concerns, the lessons they have learned, and the hands-on expertise of others who have faced similar problems. When people are faced with a serious medical problem, either for themselves or loved ones, they want to find information and kindred spirits who can understand what they are going through and provide guidance and sympathy. Andrew Groves, the head of Intel, faced cancer a few years ago, and as a result, Intel is sponsoring a digital storytelling initiative called Internet Health Heroes. One other health-related Web sites are Mothers Supporting Daughters with Breast Cancer (<http://www.mothersdaughters.org/>). Matsunaga (2005) reports on a digital storytelling program for young people exiting foster care as they entered college. This workshop, implemented by the Center for Digital Storytelling, helped students come to terms with the past and move ahead toward a promising educational future.

Digital storytelling offers a rich tapestry of possibilities across a range of media. Overall, digital storytelling is a powerful, exciting approach to capturing, sharing, and preserving stories. The potential of digital storytelling is only starting to be tapped. Over a very short time we have seen the emergence of blogs, YouTube, MySpace, and

many other resources that expand our repertoire of tools for creating and sharing digital stories. And as the Capture Wales project demonstrates, there is a potential role for universities to implement partnerships with communities and K-12 schools. Middlebury College has implemented a digital storytelling partnership with Shoreham Elementary School ([http://wl.middlebury.edu/irishF03/stories/storyReader\\$136](http://wl.middlebury.edu/irishF03/stories/storyReader$136)). Another example comes from the Center for Reflective Community Practice at MIT (<http://crpc.mit.edu/>) that gathers individuals from diverse circles of influence and helps them become highly creative, collaborative teams focused on forging innovative solutions to complex social justice problems. Digital storytelling is one strategy utilized in this program.

There are a number of resources to help you get started with digital storytelling. For example, the Center for Digital Storytelling features a “Digital Storytelling Cookbook” on its Web site. And Joe Lambert’s book *Digital Storytelling*, expands upon this. Some key Web links are listed below.

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## WEB RESOURCES

Tech Head Stories

<http://tech-head.com/dstory.htm>

Center for Digital Storytelling

<http://www.storycenter.org/>

Digital Storytelling Cookbook

<http://www.storycenter.org/memvoice/pages/cookbook.html>

Educational Uses of Digital Storytelling

<http://www.coe.uh.edu/digital-storytelling/default.htm>

Digital Storytelling Association

<http://www.dsaweb.org/>

Digital Diner Interviews with digital storytelling practitioners

<http://www.storycenter.org/diner.html>

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