Digital Stories in the Classroom: Narratives for the Future

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Abstract

Ultimately, digital storytelling is a positive, useful and engaging teaching tool today and will be in the future, as technology becomes more immersed in the classroom, and learning in less traditional ways becomes more important. The practice and format will develop and change over time, but digital storytelling could become a powerful way for students to connect with their subjects, learn about them and form their own thoughtful analyses to add to the academic conversation. In this way, digital stories stand to become powerful narratives for the future in a variety of ways. This paper explores the power of storytelling, a brief history, the essential parts of a story and its role in education. It will also discuss each and the issues faced when using digital stories. Lastly, possible future developments in this realm will be debated.

Digital Stories in the Classroom: Narratives for the Future

Introduction

As Kansas State University Professor of Cultural Anthropology Dr. Michael Wesch (2009) points out, the structure of the modern-day classroom is changing, particularly within higher education. The format where the teacher stands alone as the sole source of knowledge is being challenged.

> There is something in the air, and it is nothing less than the digital artifacts of over one billion people and computers networked together collectively producing over 2,000 gigabytes of new information per second. While most of our classrooms were built under the assumption that information is scarce and hard to find, nearly the entire body of human knowledge now flows through and around these rooms in one form or another, ready to be accessed by laptops, cellphones, and iPods. Classrooms built to re-enforce the top-down authoritative knowledge of the teacher are now enveloped by a cloud of ubiquitous digital information where knowledge is made, not found, and authority is continuously negotiated through discussion and participation.

He has said as more and more information pours into the classroom and the general realm of knowledge, that it will become less important for students to memorize information and more important for them to find information, critique it, share it and also create new information. He refers to this transition as students moving from being "knowledgeable to being knowledge-able." (Wesch, 2009)

Today's students face challenges not even imagined in previous years. As Wesch (2007) establishes in his well-known YouTube video, "A Vision of Students Today," digital media and students are driving this change. However, these challenges trials extend beyond the classroom.

Daniel Pink (2005) said that we are entering a new conceptual age, one that will require a whole new way of thinking. According to him:

> It is an age animated by a different form of thinking and a new approach to life – one that prizes what I call "high concept" and "high touch." High concept involves the capacity to detect patterns and opportunities, to create artistic and emotional beauty, to craft a satisfying narrative, and to combine seemingly unrelated ideas into something new. High touch involves the ability to empathize with others, to understand the subtleties of human interaction, to find joy in one's self and to elicit it in others, and to stretch beyond the quotidian in pursuit of purpose and meaning. (p. 2-3)

Pink identifies story as one of the six senses needed to survive in this new era and his use of the word narrative indicates a strong connection between story and the future. He says: "The essence of persuasion, communication, and self-understanding has become the ability to fashion a compelling narrative." (p. 65-66) The reasoning for this may be the story's ability to be multifaceted in almost any form. According to the National Storytelling Network (2009), a story is interactive, allowing for immediacy and a close bond between the teller and the audience. It

combines words, actions and gestures to present a clear narrative that encourages the imagination of its audience. A story's power, according to Heath and Heath (2007), exists for two main reasons: it provides simulation, or knowledge about how to act, and inspiration, or the motivation to act. This, the authors argue, is a large part of what makes stories memorable.

One of the more powerful ways students can learn how to think story and create a compelling narrative is by using digital stories in the classroom. Digital storytelling is the "practice of combining narrative with digital content, including images, sound, and video, to create a short movie, typically with a strong emotional component." (7 Things You Should Know About Digital Storytelling, 2007) Joe Lambert and the Dana Atchley helped create the digital storytelling movement in the 1980s when they founded the Center for Digital Storytelling. As Bernard R. Robin (2008) points out, what impressed Lambert the most about digital storytelling was the fact that almost anyone could do it, do it well and do it without spending a large amount of money. (p. 222) That still holds true today, as technology has become cheaper, broadband internet access has grown more prevalent and the Millennial generation's internet use has increased. With a greater emphasis on cloud computing, the availability of more applications and resources online instead of on one's computer, learning and creating digital stories has become even easier.

Digital storytelling, although not widely adopted, has gained popularity in current classrooms, in higher education. It has a number of distinct advantages over traditional assignments, such as the research paper. As the "7 Things You Should Know About Digital Storytelling" article explains:

> "Digital stories let students express themselves not only with their own words but also in their own voices, fostering a sense of individuality and of "owning" their creations. At the same time, digital stories give students an opportunity to experiment with self-representation—telling a story that highlights specific characteristics or events—a key part of establishing their identity, a process that for many is an important aspect of the college years.
>
> Recent data suggest that a majority of U.S. teens use various tools to create digital media, and this proportion is growing. Today's students don't think twice about generating original electronic content and sharing it online, and digital storytelling dovetails well with these modes of student expression. Students creating digital stories develop proficiency with multimedia applications, but the deeper impact comes from their thinking critically about effective combinations among audio and visual elements. Each story challenges a student to cull—from personal collections or from other resources—artifacts that meaningfully support the story and to assemble them in a way that achieves the desired effect. In doing so, students develop a discerning eye for online resources, increasing their technology and media literacy." (EDUCAUSE Learning Initiative, 2007)

These advantages have helped make digital storytelling a favorite of many students and faculty members. Students like the personal nature of the project, the creative process of making a digital story and are more eager to share their finished work, compared to a traditional research

paper. Faculty members see a more positive outlook from students when they receive the assignment, more pride from students in the finished product and a greater willingness from students to share their work.

This paper explores the power of storytelling, a brief history, the essential parts of a story and its role in education. It will also discuss each and the issues faced when using digital stories. Lastly, possible future developments in this realm will be debated.

The History of Storytelling

According to Call for Story, a website about a television program that documents the story's transition from a ancient practice into a modern medium, experts believe that storytelling has existed since man has roamed the Earth. In fact, some argue that storytelling itself defines mankind. Early forms of storytelling existed as a way for people to pass down knowledge from one generation to the next. The stories often made sense of extraordinary events, such as natural disasters. Individuals also passed down moral principles through storytelling, forming the laws and codes that ensured the success of some of the early societies. (The Call for Story, 2009)

These early forms of story had many structures, including text and paintings. However, the oldest and most popular kind was folk tales, myths and legends passed down by word of mouth. The reasons for the stories were multifaceted and often centered around the origins of man, morality and religion. Many tales also existed simply as a form of entertainment. These oral traditions helped a society make sense of where it came from and the knowledge it has obtained along its journey. (The Call for Story, 2009) The Egyptians have the earliest mention of storytelling in history, dating back to 4000 B.C., with a set of stories called "The Tales of the Magicians." (Abrahamson, 1998)

Storytelling in Education

It is easy to see why storytelling makes a beneficial teaching tool in the classroom. The combination of all of these elements hits on many important skills that experts believe that students of all ages and at all levels would find advantageous. The Youth, Educators and Storytellers Alliance, a division of the National Storytelling Network, has said, "In all academic areas, storytelling enlivens the delivery of curriculum, accelerates and enhances curriculum learning, and engages learners." (National Storytelling Network, 2006)

Furthermore, the organization outlines 17 benefits of including storytelling in classrooms. Some of the most notable are:

- Connections and understandings are formed about and between the past, present, and future
- Understanding of and empathy towards other races and cultures is increased
- Auditory processing skills and listening skills are supported and practiced
- Sensory imaging is heightened as all senses are elicited: tasting, touching, smelling, hearing, and feeling
- Order is brought to students' worlds through use of thinking skills
- Decision-making skills are discerned

(National Storytelling Network, 2006)

In his article "Memory, Imagination and Learning: Connected by the Story," Kiernan Egan (n.d.) writes, "If one could code the knowledge to be passed on and embed it in a story form, then it could be made more faithfully memorable than by any other means." In fact, Egan asserts that the story stands strong as one of the most important inventions of all time.

Throughout education's history, famous instructors have used stories as a tool to communicate whatever they were teaching. Plato, Homer and Gandhi all used it masterfully, employing a variety of story forms. In higher education specifically, storytelling happens all the time as students and the instructor often relate the content to their own personal experiences. (Abrahamson, 1998)

One of the biggest impacts of storytelling in the classroom is its ability to connect the subject matter to a personal experience of the learner, allowing for a more powerful exploration of the content being studied. However, these stories must possess a sense of relation between the instructor and students. These connections, to both the content and instructor through the personal experiences of the student allow for the subject matter to truly enter the student's realm of knowledge. (Abrahamson, 1998)

Educators have remained divided over the use of storytelling in the classroom. Some think it takes away from the delivery of the facts, while others see it as a powerful tool to make the educational experience more personal. (Abrahamson, 1998) He concludes that stories "develop an active context for learning and remarkable ownership of learning, both in terms of process and content." (p. 450)

Storytelling also grants students the ability to take a large set of facts and figures, and then make sense of them. This can be accomplished across a wide variety of subjects, including the social sciences and mathematics. (Abrahamson, 1998)

Many similarities exist between storytelling and digital storytelling. They share similar definitions and applications, plus have some commonalities within the history of each format.

The History of Digital Storytelling

Digital storytelling has a rich, but brief history. According to the article "7 Things You Should Know About Digital Storytelling" (2007):

> "One of the earliest large-scale digital storytelling projects is sponsored by the BBC to capture and share stories from around the United Kingdom that reflect different local histories and cultures. A similar initiative out of San Francisco public radio station KQED solicits digital stories from high school students about how they came to live in California, exposing them to the tools and skills of short-movie creation while eliciting a compelling personal story.
>
> Faculty in the College of Education at the University of Houston lead a digital storytelling effort that strives to expose instructors and students to the educational opportunities that the technique provides. Among the initiative's stated goals are, for faculty, to facilitate various learning styles and connect to students' interest in

technology, and, for students, to develop their ability to appropriately evaluate and use online content and electronic tools as a means of personal expression. Carleton College sponsors educational uses of digital stories and has developed a rubric to help faculty evaluate the various aspects of a digital story. The college has also applied digital storytelling techniques to present critical analyses. Many institutions, including Maricopa Community Colleges, offer courses in digital storytelling, and the College of Communication, Information, and Media at Ball State University offers an MA in telecommunications with an emphasis in digital storytelling."

What is Digital Storytelling?

As mentioned previously, digital storytelling is the "practice of combining narrative with digital content, including images, sound, and video, to create a short movie, typically with a strong emotional component." (7 Things You Should Know About Digital Storytelling, 2007) Typically, digital stories run from one minute to five minutes in length. Most experts would emphasize the fact that the main difference between traditional digital stories and journalistic multimedia pieces is the infusion of a personal narrative. However, many journalism outfits have begun to inject elements of personal storytelling into multimedia packages.

In order to successfully produce a meaningful digital story, Joe Lambert and others have outlined seven basic elements of digital stories in the book, "Digital Storytelling Cookbook. (2007) The elements grew out of years of experience teaching digital storytelling workshops, the primary teaching method used by the Center for Digital Storytelling . One thing that Lambert stresses is the workshop/group format. This turns the creative process into a collaborative one, which can be an important part when trying to open up, connect and grow as a result of the process. The seven principles are summarized in the following chart. (Lambert, 9-10)

Seven Principles of Digital Storytelling

Point of View	With point of view, the author, are trying to communicate within the story. Because every part of the story can service this point, it becomes imperative to define this goal in order to direct the editing process.
Dramatic Question	Simply making a point doesn't necessarily keep people's attention throughout a story. However, set up a question with tension and answer it and you have a journey.
Emotional Content	Beginning with content that addresses or couches itself in an emotion like death, love, loss, loneliness, etc. will improve the likelihood that you are going to hold an audience's attention.
Gift of Your Voice	A true gift, a person's voice they tell everyone so much about who we are, both how strong we can be and how fragile.
Power of Soundtrack	It is as if by listening to or imagining a specific slice of music, we are putting ourselves into our own movie, a movie that puts our life into a clearer perspective.
Economy	Economy is generally the biggest problem with telling a story. Most people do not realize that the story they have to tell can be short.
Pacing	This is true secret of successful storytelling. The rhythm of a story determines much of what sustains an audience's interest.

Digital Storytelling in Education

Teachers have experimented with them in different ways, letting students form their own knowledge and share it more easily. Digital storytelling is, of course, one of these ways. (Sadik, 2009) For example, students in the Prince William County school district in Virginia have made digital stories on a variety of topics and some have been entered in film contests. (Shapira, 2009)

The benefits of using digital storytelling in education are multifaceted. Lynch and Fleming state:

> [The] flexible and dynamic nature of digital storytelling, which encapsulates aural, visual and sensory elements, utilises the multitude of cognitive processes that underpin learning-from verbal linguistic to spatial, musical, interpersonal, intrapersonal, naturalist and bodily-kinaesthetic. (as cited in Sadik, 2009, p. 490)

These benefits extend to almost all subject areas. Robin said:

> Educators at all levels and in most subjects can use digital storytelling in many ways to support students' learning by encouraging them to organize and express their ideas and knowledge in an individual and meaningful way. (as cited in Sadik, 2009, p. 490)

However, most higher education classrooms have struggled helping students learn in this way. Wesch (2008) describes the current state of the classroom like this:

> If we accept John Dewey's notion that people learn what they do, the lecture format, which is the mainstay of teaching (especially in large introductory courses), teaches students to sit in neat rows and to respect, believe, and defer to authority (the teacher). (p. 5)

To combat this, Wesch has begun to create a different kind of classroom. He has strived to create an environment that has a different feel than the normal from-the-top-down structure of the average higher education classroom. He has begun to focus on the quality of learning rather than the quality of teaching. He states:

> I have even toyed with the idea of calling what I do "anti-teaching", as I have come to the conclusion that "teaching" can actually be a hindrance to learning, especially when it is assumed that learning requires it. (p.6)

Digital Storytelling and Teachers

Teachers face two main issues concerning digital storytelling and the classroom. These include the fact that many teachers have little experience with the technology required when learning, using and teaching digital storytelling. Some also struggle finding the proper way to grade these new types of assignments. However, solutions exist for both of these obstacles, and the benefits of employing digital storytelling in most cases far outweigh the negatives.

The emergence of technology can intimidate anyone, especially teachers who are

expected to use some of these new tools in the classroom to further the learning of their students. However, Ohler (2008) provides a viewpoint less focused on the technology and more focused on the teacher. He said:

> Technology doesn't make teachers obsolete. Quite the opposite. More than ever, students need the guidance and wisdom that teachers offer to help them use technology with care and to tell stories with clarity and humanity. (p. 13)

Ohler (2008) constantly emphasizes story above all else. In this way, technology takes a back seat to the content. He encourages the use of economical technology tools, including many that come preinstalled on most computers or that can be downloaded for free on the Internet. He insists that he has never met a teacher that failed to create a digital story during his years of teaching them how to create them, and then implement them in their classrooms.

Ohler (2008) notes that during many of the workshops he conducts about digital storytelling for teachers that many are concerned with how to assess the types of stories their students will create. He fears that without forming a reliable grading system for digital stories, they will become just another technology that once showed potential but seldom gets used in classrooms.

Ohler (2008) provides a list of basic recommendations for grading digital stories. And although there are many different kinds of grading rubrics available on the Internet, he does not prefer recommending specific ones for two basic reasons: 1. Most teachers will want to employ their own approach, adding their own knowledge to the process. 2. Given that digital storytelling in the classroom is such a new approach, placing limitations on it may restrict things.

However, Ohler (2008) does set out some clear guidelines teachers can follow:

- **Set clear goals**: Goals are extremely important when assessing digital stories. Without them, teachers have little to fall back on in terms of grading, so the project goals should be clear for students.

- **Assess the story**: This is the heart of a digital story. Not assessing the story would be making the student earn his or her keep on just technology.

- **Assess all of the artifacts used to create the story, especially writing**: Students will create a number of different pieces on their way to a completed digital story. It is smart for teachers to take them all into account and let the students know that they are doing so.

- **Assess student planning and process**: Following the widely-used well understood media production process of story planning, pre-production, production, post-production and performance. This process develops transferrable skills that can be used in almost anything involving media production.

- **Assess media grammar and student use of media**: This part of the process gets

subjective, but students should be able to explain their choices and they should contribute to the story, rather than detract from it.

- **Assess student understanding**: This guideline address the critical thinking part of the project. Did students show that they comprehended the material?

- **Assess student teamwork**: If students worked in groups, this is a good guideline to follow.

- **Assess student performance**: When this happens, students discover if their story worked or not. Also, booking a show time ups the quality of the finished products.

- **Have students self-assess their projects**: This contributes to a huge portion of their learning and causes them to realize their triumphs, struggles and how they got there.

Elon University Assistant Professor Dr. Sophie Adamson has followed many of the guidelines outlined by Ohler. (2008) She teaches French and has used digital stories to help students learn the language. In one project she had students create a digital story around a letter writing experience.

She has employed a detailed grading rubric to assess her students' success with digital storytelling. It includes sections on content, voice, grammar, images/music and an overall outcome. These categories are similar to the ones outlined by Ohler, and also provide her with other metrics she needs to have in place to assess students. For example, her voice category specifically tied into some of the French language requirements students had to master with the project.

She said she always shows example stories and also shares past comments from previous students who have completed the assignment. She is also careful to make sure she outlines all of her learning objectives when she first assigns the project to students.

Dr. Adamson reports a positive overall experience regarding using digital stories in her classroom, especially when compared to traditional assignments. "The reaction is *much* more positive, she said. "There is some nervousness from some students regarding the technology, as well." She tries to combat this by showing students examples of digital stories and discussing tips and tricks on sound, images and other technical aspects.

Overall, the professor has found that students generally display more pride in their finished product, want to share it and can access the piece on different learning levels.

"The students put a lot of time into these projects because they enjoy doing them and will be showing them to the entire class," she said. "… I have been very impressed with the outcomes." (personal communication, October 11, 2009)

Students and Digital Storytelling

Students perhaps have the most to gain from using digital storytelling in the classroom. As Michael Coventry and Mathias Opperman (n.d.) outline three main points in their research, which is distilled down and quoted here:

- Digital storytelling opens up new opportunities for students to work towards expert-like thinking in the humanities.
- Digital storytelling works at the intersection of the emotional and the epistemological aspects of learning, bridging story and theory, intellect and affect.
- Due to their affective involvement with this process and the novelty effect of digital storytelling, students are more engaged than in traditional assignments.

Dr. Rina Benmayor (2008), a professor who has used digital storytelling extensively in her classroom at California State University Monterey Bay, liked the format's hybrid approach and its ability to benefit students. She said, "As a hybrid form, digital storytelling mirrors and enables the conceptual work of constructing new understandings of identity and places of belonging." (p. 200)

Dr. Sharon Leon (2008) sums up the some of the current research on digital storytelling's impact on learning in the classroom nicely, pointing out that "learning is an iterative process, and that asking students to create digital stories can make that interactive process more visible and productive." (p. 222)

Dr. Michele Kleckner and Dr. Shannon Duvall (2007), both computer science professors at Elon University have used digital stories in their classrooms to explain complicated computing concept. They report that:

> Overall, students find "story time" a fun part of class and routinely ask for them. When polled about the stories, all but one student said that some story helped in their understanding and memory of the concepts being introduced. (The student's response for all stories was "Neutral.") Only one student disagreed with the statement, "I found the stories to be a fun part of class" and, interestingly, this student had a computing-related major and found all of the stories helpful in learning and understanding concepts. All students surveyed agreed with the statement "If I were to take the class again, I would like the stories to be a part of the course." One student also commented, "The stories were a cute/fun way to help further my understanding (or clear up some confusions) of certain topics. I would suggest they be used in your next class."

Digital Storytelling in the Classroom and the Future

Dr. Wesch (2008) has created a new kind of learning environment in his classroom, one that engages students to become part of a larger picture – almost like a story. He has taken his past sections of his Introduction to Cultural Anthropology course and created a world simulation. Each student must become an expert on a different part of the world. The students construct a

two-hour simulation of the last 500 years of world history using a variety of props to represent different elements and aspects of the world. The simulation is recorded on digital video cameras, edited collectively and played together along side clips of real world history. Wesch alludes to this kind of a classroom as one where one-way communication gives way to a creative, collaborative environment full of possibilities. He has changed the structure of his classroom and handed over some of the power of learning to his students. The simulations they create are both storytelling and digital storytelling. The students watch their story of the world simulation unfold in various segments and as a whole on the final day. They also edit and assemble it into a digital format.

Could this be the classroom of the future?

Interviews with Digital Storytelling Experts

In my research, I interviewed three experts in the field of digital storytelling and education and asked them questions related to the future of digital storytelling in the classroom. Their observations are collected here, along with a mixture of my own. If their comments do not have direct quotes, then their thoughts are paraphrased.

The experts are:

- Dr. Jason Ohler: Professor Emeritus, Educational Technology, University of Alaska.
- Liv Gjestvang: Coordinator, Digital Union, The Ohio State University
- Joe Lambert: Executive Director, The Center for Digital Storytelling

I also include some insights culled from various interviews with Dr. Wesch.

I have chosen to select the themes and aspects of digital storytelling in the classroom that surfaced the most during the interviews and include quotes from the experts on these topics.

General Thoughts on Digital Storytelling

Dr. Wesch: "There are so many ways to state that we're just in the infancy [of digital storytelling]. The obvious one is that the technology itself is becoming so much easier to use and more widely available. I've been editing video for quite a while. When I started, it would take days to do what it takes me just seconds to do now — something as simple as panning and zooming and adding this effect here and layering and that kind of stuff. This really opens up your creativity to explore and try all these different techniques and ways of expressing yourself. That's where it gets exciting." (Bayne, 2009)

Partnerships

Ms. Gjestvang: Partnerships, between organizations or departments, build a broader base of interests and reach. You have a broader audience base. You also have a more sustainable model if one organization steps back, then one of them can maintain it. (personal communications, October 16, 2009)

On Using Digital Tools

Dr. Wesch: On cloud computing – "I often like to think of the quote from Kevin Kelly,

who says: "Nobody is as smart as everybody." That hangs in my head every time I go into a classroom. I look at the classroom. I look at the students. I start to think about who they are. Throughout the semester, I learn more and more about who they are, and it becomes increasingly evident to me that with all the intelligence and life experiences that they have, they are collectively much smarter than I am alone. Then the goal becomes trying to somehow harness all of that. And I think I've finally found the "secret sauce." It basically comes down to approaching the students as collaborators, co producers, co researchers, or whatever you want to call them — but not as students. So you take away that hierarchy." (Bayne, 2009)

Dr. Ohler: "No one predicted Twitter so who knows where the tools are going to go. I think you can always count on it being faster, cheaper, better, more distributable. I mean all those trends are certainly going to apply."

What won't change is the need for a good story. (personal communications, October 26, 2009)

Ms. Gjestvang: The tools are continuing to become easier and less expensive. There has been less scanning and more digital photo files being put into use in the stories. She has a lot more people thinking more abstractly about images and about the visual component. Those people are using Creative Commons and royalty free photos to capture a more powerful overall narrative sometimes. (personal communications, October 16, 2009)

Web 2.0 and Digital Storytelling

Mr. Lambert: However, Web 2.0 has increased the number of ways people have to share – especially digital storytelling. You have this new kind of connectedness going on. This availability of new media and digital stories means that, in education, it sometimes does not have to be taught to students. Web 2.0 has made a big difference in terms of visibility. [Students] see each other's stuff and want to learn. (personal communications, October 21, 2009)

Digital Storytelling in the Classroom

Mr. Lambert: Students will start seeing the choice between a traditional term paper assignment and a digital story, and begin to choose digital storytelling. Digital nativeness is part of this – both on the student and teacher side of things. That will affect how fast this transition happens. How to grade digital stories is also an issue. Some teachers are more comfortable pointing out grammatical errors in a paragraph than in a digital story. Assessing digital stories does not have to be terribly complicated, but teachers have to know the tools to be able to judge it. Teachers have a long way to go in that regard. This might take a decade for the majority of teachers to be comfortable with the tools and grading stories. (personal communications, October 21, 2009)

Dr. Ohler: He has found that students have no automatic or natural proclivity toward using the technology in a way that really supports their story.

"When it comes time to produce, it's really up to us as teachers to help them craft all this information they have in their lives I a very deliberate, reflective, sculpted kind of way." (personal communications, October 26, 2009)

Ms. Gjestvang: "I actually think that a really big part of it would be having that kind of work and that kind of teaching become incorporated really explicitly into the promotion and tenure process. I feel like until that happens, as long as we have a model based on traditional publication and doesn't necessarily value collaborative work to same degree as individual work and that kind of thing, it becomes a real challenge."

One of the other things that occurs is while younger faculty members may come in with a penchant for multimedia, if they are untenured, they might spend their time focused on traditional teaching, writing and publishing instead of extending on digital storytelling.

Instructional designers and learning technologists are growing on campuses and need to grow more so they can give more support to teachers and faculty who don't have that expertise. That way it gives faculty a space and support to do the work. (personal communications, October 16, 2009)

Digital Storytelling and Mobile Communications

Mr. Lambert: The future is a wallet-sized device that knows everything you've ever shot. This kind of makes you look at approach your memories in a different ways. This mobile way of capturing also allows people to capture the sense of a place. It becomes an easily captured part of the overall narrative. (personal communications, October 21, 2009)

More Use of Digital Storytelling in the Classroom

Mr. Ohler: "It's slow. The enthusiasm is going up and I can only hope that that certainly translates into something." (personal communications, October 26, 2009)

Shorter Digital Stories

Dr. Ohler: "I think we've been wired for quite awhile for the two minute and 20 second song and so shorter, whether we are wired for it or not, will drive it because id I can put five people in a 10 minute segment versus two I can essentially lower everybody's costs and in the end, make more money myself." (personal communications, October 26, 2009)

Conclusions

In the last decade, the proliferation of digital cameras, editing tools and various authoring applications have made their way into classrooms of all kinds. These tools have become simpler and easier to use for the vast majority of students and some teachers. This has lead to the introduction and early development of digital storytelling into the classroom.

Many students, teachers, administrators and others see digital storytelling and become distracted by the word digital. Or they become caught up in the web of ever-changing tools that accompany the new genre. However, it is important to remember what many have pointed out already – story remains paramount. Without engaging stories to tell, digital stories would not exist.

The elements that make up a powerful story will most likely hold for centuries. Stories have always evolved with humans, taking whatever shape they needed to. This is one reason why

I believe digital stories may prove to be almost timeless. Assuming that the digital form of life will continue to grow – such things as broadband Internet, social media, new computing devices, etc. – digital storytelling will be around for years to come.

Ultimately, digital storytelling is a positive, useful and engaging teaching tool today and will be in the future, as technology becomes more immersed in the classroom, and learning in less traditional ways becomes more important. The practice and format will develop and change over time, but digital storytelling could become a powerful way for students to connect with their subjects, learn about them and form their own thoughtful analyses to add to the academic conversation. In this way, digital stories stand to become powerful narratives for the future in a variety of ways.

Many factors will affect the development of digital stories in education. Among them are the continued spread of broadband Internet, the increased emphasis on Web 2.0 technologies, the increased use of mobile computing and the integration of more technology-savvy teachers into the education system. Without faster broadband speeds and a more social web, both of which develop more each day, it almost impossible to share digital stories. Without more advancement in mobile computing and teachers who are comfortable teaching with digital stories, then it impossible to easily learn and create stories digitally.

I believe that in the next decade, it might be possible to gather the assets for a digital story, edit it, view it and share it – all with an iPod-like device that operates almost solely with a touch-screen interface. That is the future of the tools.

I also believe that digital stories will become more widely accepted into the realm of education and learning in general. Perhaps the rise of television, YouTube and online video viewership is a testament to this. People enjoy watching stories in this manner. However, there is something more interesting happening here. Everything has started to blend together.

Look at Dr. Wesch's classroom. He has used a variety of tools to empower his own students' learning. What's not to say this continued introduction and blending of tools slows down? Yes, new tools and theories will have to be tested, but the classroom could become a whole new work where lecture ceases to exist.

In this scenario, digital storytelling might fade away. Not in a literal sense, but a figurative one. In the future, it will become less exotic and more mainstream. Then it will become less about the tools, barriers and knowledge gap between students and teachers and more about pure ideas and questions. And good ideas and questions drive any good classroom or story.

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This report provides an overview and analysis of twenty years of key policy reports addressing the challenges and opportunities involved in integrating technology into K-12 education in the United States. The report summarizes recommendations made in these reports, and comments on the shifting reasons for and expectations of educational technology investments that have shaped those recommendations over time. This report is applicable because it explains the progress made in education, relating to technology. It gives a solid view of the past, which is important when looking into the future.

Abrahamson, C. E. (1998). Storytelling as a pedagogical tool in higher education. *Education*, *118*(*3*), 440-452.

This paper addresses the educational theoretic values of storytelling within higher education. It includes a discussion on the cognitive processing in storytelling, history of storytelling in higher education and implications on learning. It provides excellent background about the subjects.

Alexander, B., & Levine, A. (2008). Web 2.0 storytelling: emergence of a new genre. *EDUCAUSE Review*, *43*(*6*). Retrieved September 13, 2009, from http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume43/Web20StorytellingEmergenceofaN/163262

Web 2.0 can be used to tell stories in many different ways. This article provides a definition of what storytelling in a Web 2.0 format looks like, examples and its uses in higher education. The article also gives a few thoughts on the future of storytelling in the Web 2.0 era. This article is relevant because it shows the possibilities of storytelling digitally, and offers a clear definition and examples.

Bayne, G. (2009). A sense of purpose. *EDUCAUSE Review*, *44*(*5*), 8-9. Retrieved September 13, 2009, from http://www.educause.edu/er/WeschInterview

Bayne interviews Wesch and they talk about the use of video in academic research, students working in groups to learn, teaching in the "cloud" and more. This interview provides some insight into new ways teachers are using digital technologies in the classroom, from one of the foremost experts in the field right now.

Benmayor, R. (2008). Digital storytelling as a signature pedagogy for the new humanities. *Arts and Humanities in Higher Education*, *7*, 188-204.

This essay argues that digital storytelling is a hybrid, multimedia narrative form that enables critical and creative theorizing. As an assets-based social form of teaching, digital storytelling builds a safe and empowering space for cross-cultural collaboration and learning. As illustration, the essay analyzes in detail one student story, using as

primary evidence the story script, visual images from the digital story, and excerpts from a recorded interview with the author. It concludes that the process of digital story making and theorizing empowers and transforms students intellectually, creatively and culturally. Thus, digital storytelling can be seen as a signature pedagogy for the new Humanities in the 21st century. This article provides insight into how digital storytelling can be a valuable learning tool in a variety of ways.

Buege, V (2007) An in-depth look at the cyber phenomenon of our time: Web 2.0. An interview with Mike Wesch. *The Lawlor Review*, Spring 2007, p11-16

This interview with Michael Wesch discusses the many aspects of Web 2.0 as they relate to students and education. These topics directly tie into my research, especially the portion that dives into the future of digital storytelling in the classroom.

Coventry, M., & Oppermann, M. (n.d.). *From Narrative to Database: Multimedia Inquiry in a Cross-Classroom Scholarship of Teaching and Learning Study | Academic Commons*. Retrieved October 8, 2009, from http://www.academiccommons.org/commons/essay/narrative-database

This essay explores how the protocols surrounding particular new media technologies shape the ways we think about, practice, and represent work in the scholarship of teaching and learning. The case study is grounded in several years of research on student-produced digital stories. As part of this project, the authors have gathered evidence of student learning through video interviews and created an online, searchable database of interview clips. This database is not merely a technological add-on to the research process. Building on Gitelman, the authors suggest that we should not just think about a new technology of delivery (such as evidence of student learning stored in a searchable database), but about how that new technology of delivery impacts practice. This essay goes into many aspects relating to technology and education relevant to my research. It specifically discusses how some students have learned while employing digital stories.

Coventry, M. (2008). Cross-currents of pedagogy and technology: a forum on digital storytelling and cultural critique introduction. *Arts and Humanities in Higher Education*, *7*, 165-170.

Over the last decade, relatively sophisticated video production and editing capabilities have filtered down onto the average student's computer. At the same time, widespread access to fast Internet – first in wired dorms and then wirelessly across campuses and coffee shops – and a rapid increase in the availability of historical and contemporary images and video online have brought together these developments in software and the technologies to use them. While previously the production of video might require the reservation of a campus' single production facility, extensive training on complicated and expensive software and the conversion of archival footage or documents to digital formats, today in many academic contexts students can do most of these things on their own computers (and often using their own digital video equipment and digital camera). Within the academy, this general increase in access to video production occurred against a backdrop of faculty interest in (or, of administrative pressure on faculty to be interested in) the use of new media technologies in the classroom. Many of these new media-inclined faculty also began to take seriously the relationship of

learning to teaching, moving from questions about student learning to questions about teaching practice and to considering technologies that might enable particular pedagogies. These cross-currents of technology and pedagogy meet here. Streaming out of involvement with both new media in the classroom and the scholarship of teaching and learning, the essays here explore digital storytelling in humanities classrooms. Digital stories are student-produced multimedia narratives or short films combining text, images and audio files. They exist in a range of genres, from personal or family histories, to short documentary films, to theory-inspired critiques of popular cultural artifacts. Digital stories have proven to be a powerful medium for students to represent a theoretically informed understanding of texts and contexts in a form other than "traditional" writing. Again, this article talks about how technology and education meet in the classroom, and specifically how digital stories are involved. The exploration of these topics are extremely relevant in the above research.

Coventry, M. (2008). Engaging gender: student application of theory through digital storytelling. *Arts and Humanities in Higher Education: An International Journal of Theory, Research and Practice*, *7*(*2*), 205-219.

Enabling students' engagement with gender theory can be difficult. Digital storytelling provides an effective pedagogy that enhances the process of stating and restating, forcing students to express themselves in the "new language" of multimedia. This helps them learn better, according to the article. Through a detailed reading of one student's work, the essay proposes a classification for novice uses of theory, ranging from summary to development of theoretical symbols. It then argues that digital storytelling uniquely enables students to illustrate and apply difficult conceptual material. This article provides value to the above research because it lends credibility to digital storytelling as a means for learning difficult concepts.

EDUCAUSE Learning Initiative. (2007, January 1). *7 Things You Should Know About Digital Storytelling | EDUCAUSE*. Retrieved September 20, 2009, from http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutDigit/156824

Digital storytelling involves combining narrative with digital content to create a short movie. Digital stories can include interactive movies with highly produced audio and visual effects or presentation slides with narration or music. Some learning theorists believe that as a pedagogical technique, storytelling can be effectively applied to nearly any subject. Constructing a narrative and communicating it effectively require one to think carefully about the topic and the audience's perspective. This brief brochure, published in 2007, covers seven different aspects of digital storytelling including a definition, why it's significant and where it's headed. All seven points provide a valuable summary about the topic of digital storytelling.

Egan, K. (n.d.). *Memory, imagination, and learning*. Retrieved October 25, 2009, from http://www.educ.sfu.ca/kegan/MemoryIm.html

As part of this discussion the author argues for the importance of maintaining a clear distinction between the metaphorical sense in which computers are said to have "memories" and what we mean by human memory. Allowing analogies with computer memory to slide over into our thinking about human memory can have seriously

misleading consequences. He also argues for a connection between the importance of memorization in imaginative learning and the story form as an appropriate part of a teacher's professional equipment. The article's inclusion of storytelling in this debate provides some valuable insight into its power in the classroom.

Heath, C., & Heath, D. (2007). *Made to Stick: Why Some Ideas Survive and Others Die*. New York: Random House.

Urban legends, conspiracy theories, and bogus public-health scares circulate effortlessly. Meanwhile, people with important ideas--business people, teachers, politicians, journalists, and others--struggle to make their ideas "stick." Why do some ideas thrive while others die? And how do we improve the chances of worthy ideas? Educators and idea collectors Chip and Dan Heath reveal the anatomy of ideas that stick and explain ways to make ideas stickier, such as applying the "human scale principle," using the "Velcro Theory of Memory," and creating "curiosity gaps." The theories communicated in this book relate to storytelling and why it's a successful method for learning.

Jones, S., & Fox, S. (n.d.). *Generations Online in 2009 | Pew Internet & American Life Project* . Retrieved October 24, 2009, from http://www.pewinternet.org/Reports/2009/Generations-Online-in-2009.aspx

A report of the generational use of the Internet.

Kleckner, Michele & Duvall, Shannon. (2007, October). A Picture is Worth a Thousand Words: Using Digital Storytelling in the Classroom. Paper presented at the proceedings of the 48th Annual Meeting of the International Association for Computer Information Systems, Vancouver, CA.Retrieved from http://jonah.cs.elon.edu/sduvall2/publications/duvallklecknerIACIS2007Final.pdf

Digital storytelling is the use of multimedia presentations to convey information in a way that is logical, yet often deeply emotional. Through the use of global media like images and music, stories can be told that span language, culture, and disciplinary boundaries. In this paper, the authors describe the ways that digital storytelling can be used in the classroom, both as a learning assessment method and as a teaching tool. They show how the use of digital storytelling in classes can make computing skills relevant in a non-computing class, as well as attract non-technical students to the computing field. The paper provides a good example of the benefits of using digital storytelling in the classroom as a learning device for students.

Lambert, J. (2006). *Digital Storytelling Cookbook and Traveling Companion*. San Fransico: Digital Diner Press.

In all communities, in all cultures, stories evolve from the culinary experience. This book shares the experience of digital story making, some ingredients for success and some humour to help people get started with their own storytelling experience. It includes a section of principles of digital storytelling, which outline the basics of the art form. This provides a how-to framework and definition for digital stories, which is imperative to the above research.

Leon, S. M. (2008). Slowing down, talking back, and moving forward: some reflections on digital storytelling in the humanities curriculum. *Arts and Humanities in Higher Education*, *7*, 220-223.

Humanities teachers in higher education strive to locate and implement pedagogical approaches that allow our students to deepen their knowledge, to make significant intellectual connections, and to carry questions and insights across the curriculum. Digital storytelling is one of those pedagogical approaches. Digital storytelling can create can create new learning experiences for students in a variety of ways. The process of creating with intent in the new medium of the digital story, through timing, imagery, music and narrative, has enabled students to position themselves in the cultural and theoretical conversation. Claiming that space of authority, they are not only better situated to read and respond to others' work, but also to create their own. This article explains one of the biggest benefits to digital storytelling.

Mayall, H. J., & Robinson, R. S. (2009). Investigating visual literacy integration: :Lida's legacy?. *TechTrends*, *53*(*2*), 48-49.

This article discusses the obstacles of developing visual literacy among teachers in classrooms. It also includes the results of a small survey of teachers in regards to implementing visual literacy standards in the classroom. One of the major findings is that teachers have the skills and knowledge about software and hardware relating to visual literacy, but not the theoretical knowledge to appropriately promote and integrate visual literacy principles. This is important because in order for digital storytelling to be effective, teachers must understand the principles behind it.

McGee, P., & Diaz, V. (2007). Wikis and podcasts and blogs! oh, my! what is a faculty member supposed to do?. *EDUCAUSE Review*, *42*(*5*), 28-41. Retrieved September 13, 2009, from http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume42/WikisandPodcastsandBlogsOhMyWh/161907

This article discusses the widening technology gap between college students and professors. It also breaks down many of the emerging technologies available for use in the classroom. A strategy is discussed for helping Instructional Design professionals select new technology for faculty members. This is relevant because it breaks down categories of tools, as well as provide a list of challenges professors face in regards to technology in the classroom.

Mclellan, H. (2007). Digital storytelling in higher education. *Journal of Computing in Higher Education*, *19*(*1*), 65-79.

Digital storytelling has great potential as an instructional strategy and is 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 goes 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. This paper examines the origins and practice of digital storytelling, highlighting a range of applications in higher education. This article offers a clear view of digital

storytelling's applications in education.

National Storytelling Network. (n.d.). Retrieved October 25, 2009, from http://www.storynet.org/index.html
This site has a number of resources and articles related to general storytelling. It provides a good definition, history and background on storytelling as a broad practice and in education.

Ohler, J. B. (2008). *Digital Storytelling in the Classroom: New Media Pathways to Literacy, Learning, and Creativity*. Thousand Oaks, CA: Corwin Press.
This book forms a solid foundation toward understanding the value of digital storytelling in education, as well as instructing teachers on the basics of digital storytelling. The author covers the basics of the subject, including principles, terminology, applicable media theories and laws and creative approaches to the field. He also defines how to evaluate digital stories for educational purposes. The text will fill in some of the background on how digital storytelling and the classroom connect, as well as informing how it may be practiced in the teaching environment.

Oppermann, M. (2008). Digital storytelling and American studies: critical trajectories from the emotional to the epistemological. *Arts and Humanities in Higher Education*, *7*, 171-187.
In recent years, digital storytelling has emerged as an alternative form of learning for students. A growing number of faculty are creating assignments which combine methodological markers of traditional studies and reinvented notions of critical pedagogy in a multimedia learning environment. Based on an analysis of student learning and interviews with student producers of digital stories, this essay investigates the potential of digital storytelling for the development of voice and intellectual depth at the intersection of affective and cognitive dimensions of learning. Evidence from student-produced digital stories suggests that affective developmental processes can enable expertise instead of opposing it. In the same way, the multimedia authoring process does not obscure traditional forms of expert research and scholarship, but makes expert strategies visible and clear. This article provides insight into a huge benefit of digital storytelling: the fact that it helps students learn on many levels.

Pink, D. H. (2005). *A Whole New Mind: Moving from the Information Age to the Conceptual Age*. New York: Riverhead Hardcover.
The era of "left brain" dominance, and the Information Age that it engendered, are giving way to a new world in which "right brain" qualities-inventiveness, empathy, meaning-predominate. That's the argument at the center of this book, which uses the two sides of our brains as a metaphor for understanding the contours of today's world. One of the six senses that Pink outlines in this book is story. He argues that story will be an important skill to have in the information age and that many people already possess the power to communicate in stories.

Rainie, L. (2007, April 13). *The New Media Ecology of Students: How the marketplace of ideas and learning is different for 'digital natives' | Pew Internet & American Life Project* . Retrieved September 13, 2009, from

http://www.pewinternet.org/Presentations/2007/The-New-Media-Ecology-of-Students.aspx

This presentation covers the technology world of teenagers and college students and discusses six realities of the lives of "digital natives" that are especially important for their institutions and their teachers to know: 1. Media and gadgets are ubiquitous parts of everyday life 2. New gadgets allow people to enjoy media, gather information, and carry on communication anywhere and any time. 3. The Internet (especially broadband) is at the center of the revolution 4. Multi-tasking becomes a way of life 5. Ordinary citizens have a chance to be publishers, moviemakers, artists, song creators, and storytellers 6. Everything will change even more in the coming years. This report sheds light on how students access information and it is relevant to how they might process digital stories.

Sadik, A. (2008). Digital storytelling: a meaningful technology-integrated approach for engaged student learning. *Educational Technology Research and Development*, *56*(*4*), 487-506.

Although research emphasizes the importance of integrating technology into the curriculum, the use of technology can only be effective if teachers themselves possess the expertise to use technology in a meaningful way in the classroom. The aim of this study was to assist Egyptian teachers in developing teaching and learning through the application of a particular digital technology. Students were encouraged to work through the process of producing their own digital stories using MS Photo Story, while being introduced to desktop production and editing tools. They also presented, published and shared their own stories with other students in the class. The stories and data were examined to determine whether on not students learned using digital stories. The findings from the analysis of students-produced stories revealed that overall, students did well in their projects and their stories met many of the pedagogical and technical attributes of digital stories. The findings from classroom observations and interviews revealed that despite problems observed and reported by teachers, they believed that the digital storytelling projects could increase students' understanding of subjects. This article provides insight into a similar experiment as the one to be performed for the above research. It zeros in on an exact reason for the effectiveness of digital storytelling in the classroom.

Schank, R. C. (n.d.). *eLearn: Feature Article: The Story-Centered Curriculum* . Retrieved October 24, 2009, from http://www.elearnmag.org/subpage.cfm?section=articles&article=47-1

The author argues that the subject-based curriculum used in schools today is outdated and should be scrapped for a more story-centered type of curriculum.This very idea is central to my research.

Schneider, B., & Caswell, D. (2003). Using narrative to build community and create knowledge in the interdisciplinary classroom. *History of Intellectual Culture*, *3*(*1*), 1-12. Retrieved October 21, 2009, from http://www.ucalgary.ca/hic/issues/vol3/4

This paper tells two stories about interdisciplinary: one is a practical story about interdisciplinary teaching in an acoustics course for students from both music and engineering; the other is a theoretical story about how Walter Fisher’s ideas about narrative can be combined with principles of participative inquiry to provide a

conceptual framework for the interdisciplinary classroom. We call on Fisher's idea that all forms of human communication are narrative at heart to advocate the use of storytelling in the classroom. The use of narrative makes it possible to initiate students from different disciplines into abstract knowledge in a field of study, create a classroom community that encourages the participation of all students, and produce new interdisciplinary knowledge that is unique to the members of that class. This paper includes information on how storytelling positively impacts a classroom, which is relevant to my research.

Shapira, I. (2009, May 10). In County Schools, High-Tech Art; Students Produce Videos and Albums . *Washington Post*, pp. Pg. PW03.
This newspaper articles touches on several different schools in the Washington, D.C. area that are using digital storytelling in the classroom. One class has created documentaries while another has concentrated on creating music. This article includes quotes from teachers, but not students. It provides a very recent, real-world example of how digital storytelling has made it into the classroom.

Shaw, B. R. (2008). Digital storytelling: a powerful technology tool for the 21st century classroom. *Theory Into Practice*, *47*(*3*), 220-228.
Digital storytelling has emerged over the last few years as a powerful teaching and learning tool that engages both teachers and their students. However, until recently, little attention has been paid to a theoretical framework that could be employed to increase the effectiveness of technology as a tool in a classroom environment. A discussion of the history of digital storytelling and how it is being used educationally is presented in this article. This article helps establish a formal way of measuring how digital storytelling is taught in the classroom, which will aid in linking it to educational use. It also discusses the art form's history, which is helpful is solidifying a background on the topic.

Sheridan, B. (2008, May 12). New Ways Of Telling Tales. *Newsweek*, *151*, 0.
This article provides a unique example of digital storytelling, using Google Maps to tell a fiction story. It also tells of a few online projects that exist solely to push the edges of storytelling online. This article represents the possibilities out there in terms of digital storytelling, and these types of ideas could certainly be applied to the classroom.

Society for Storytelling. (n.d.). Retrieved October 25, 2009, from http://sfs.org.uk/
This site has a number of resources and articles related to general storytelling. It provides a good definition, history and background on storytelling as a broad practice and in education.

2020.2: Student Views on Transforming Education and Training Through Advanced Technologies. (2002, September 1). *Educational Technology Reports*. Retrieved September 13, 2009, from http://www.ed.gov/about/offices/list/os/technology/techreports.html
This report talks about many learning technologies and what the educational system

should do to take advantage of them in the classroom. It talks about the New Millennials, the group of students that have grown up with technology and how they might want to learn. This report is applicable because it has a lot of future-oriented ideas on digital technology in the classroom.

Technology and Education. (2008, November 1). *Harnessing Innovation to Support Student Success: Using Technology to Personalize Education -- November 2008*. Retrieved September 13, 2009, from http://www.ed.gov/technology/reports/roundtable.html
This paper grew from a series of three roundtable discussions with representatives from across the education and technology landscape, from teachers to CEOs, and a fourth roundtable with students. The conversations were frank and informative and provided a view into the potential, and the challenges of harnessing technology to help transform education. This paper is based on feedback from the roundtables. It identifies five areas where federal, state, and local governments can collaborate to build on the success of NCLB and accelerate the transformation of our education system. The paper has some elements of future predictions and the opinions of a variety of experts.

Technology Fact Sheet. (n.d.). *Office of Educational Technology (OET)*. Retrieved September 13, 2009, from http://www.ed.gov/about/offices/list/os/technology/index.html
This fact sheet has statistics on Internet use and public schools. Some of them are dated in terms of technology, however, the stats still show the prevalence of technology in student's lives.

The Call of Story. (n.d.). Retrieved October 25, 2009, from http://www.callofstory.org/index.html
This site has a number of resources and articles related to general storytelling. It provides a good definition, history and background on storytelling as a broad practice and in education.

Thierstein, J. (2009). Education in the Digital Age. *EDUCAUSE Review*, *44*(*1*), 33-34. Retrieved September 13, 2009, from http://www.educause.edu/EDUCAUSE+Review/EDUCAUSEReviewMagazineVolume44/EducationintheDigitalAge/163578
Education is moving into the digital age. Pedagogies have changed to engage the latest digital technologies. The methods of distribution are now a blend between face-to-face and some other combination of virtual interfaces. The content is moving from traditional text-based learning to text-plus-multimedia. This article describes Connexions, one of the leaders in this transition. Connexions is an open-source platform and open-access repository for open educational resources, enabling the creation, sharing, modification, and vetting of open educational material accessible to anyone, anywhere, anytime via the World Wide Web. This is an interesting example of possible distribution of digital storytelling.

Wesch, M. (2008). *Anti-Teaching: Confronting the Crisis of Significance*. Retrieved October 24, 2009, from http://www.scribd.com/doc/6358393/AntiTeaching-Confronting-the-Crisis-

of-Significance
The author reflects on the issue of significance as it relates to modern educational systems. The types of questions asked by students in classrooms are discussed. Particular focus is given to the creation of a learning environment, which may produce thoughtful questions and students with a desire to learn. The author's philosophy of "anti-teaching" is explored. The philosophy of anti-teaching relates to how classrooms of today have changed and how they might continue to change in the future. This provides some insight into the future of digital storytelling in the classroom.

Wesch, M. (2009). *From Knowledgable to Knowledge-able: Learning in New Media Environments | Academic Commons*. Retrieved October 24, 2009, from http://www.academiccommons.org/commons/essay/knowledgable-knowledge-able
The new media environment can be enormously disruptive to our current teaching methods and philosophies. The author argues that as we increasingly move toward an environment of instant and infinite information, it becomes less important for students to know, memorize, or recall information, and more important for them to be able to find, sort, analyze, share, discuss, critique, and create information. They need to move from being simply knowledgeable to being knowledge-able. This article covers the topic of how new media and technology have impacted education and the types of processes students need to learn for the world of tomorrow. This relates to the future portion of my research.

Wesch, M. (2007). *YouTube - A Vision of Students Today*. Retrieved October 25, 2009, from http://www.youtube.com/watch?v=dGCJ46vyR9o
A YouTube video containing the results of a survey of 200 university students about how technology and the Internet have impacted their education. It provides a valuable view of the student and classroom today.

Worth, S. E. (2008). Storytelling and Narrative Knowing: An Examination of the Epistemic Benefits of Well-Told Stories. *Journal of Aesthetic Education*, *42*(*3*), 42-56.
People love to tell stories. When something scary, or funny, or out of the ordinary happens, we cannot wait to tell others about it. When people are bad storytellers people tend not to pay as close attention to their stories; our minds drift, and we hope for a swift conclusion. People tend not to remember those stories as well as the ones that were carefully constructed and skillfully delivered. Storytelling is one of our primary forms of communication with other people. Narrativity is the principle way that human beings order their experience in time. It is also one of the primary ways that humans make coherent sense out of seemingly unrelated sequences of events. What is argued in this article is that reading, telling, and hearing well-constructed narratives are not just idle pastimes that we have created for entertainment purposes or even as a mere means of communication. Rather, there are epistemological benefits to reading, hearing, and telling well-constructed narratives. In particular, by practicing narrative reasoning, people develop this skill, just as by practicing discursive reasoning we develop discursive reasoning skills. In turn, we develop an enhanced reasoning ability that arises from narrative reasoning and narrative meaning construction. Ultimately, the article argues that those who are able to develop the

capacity to reason narratively will be able to have a more comprehensive understanding of the human experience.

Youth Educators, and Storytellers Alliance, T. (2006, August 1). *www.storynet.org/resources/images/YES%20Position%20Paper.pdf*. Retrieved October 24, 2009, from www.storynet.org/resources/images/YES%20Position%20Paper.pdf
This paper outlines the benefits of including storytelling in educational curriculum. Specifically, it gives 17 reasons for the inclusion of storytelling. Many of these reasons tie into or are similar to the reasons behind including digital stories in classrooms.