Chapter 11

"What's Your Story?" Using Digital Storytelling to Enhance 21st Century Skills

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It makes sense to begin this chapter on digital storytelling with a story of our own. Serendipity brought us together. In 2005, during our first year working together as teachers at Trailblazer Elementary in Highlands Ranch, CO, we had the opportunity to attend a teaching and learning conference in downtown Denver. Excitement about learning new ways to integrate technology into classroom instruction was palpable for both of us as we walked through the seemingly endless hallways of the convention center. We walked into a Discovery Education session about using digital media to create stories. The room was packed and we were lucky enough to grab a seat on the floor to see the magic happen. The presenters took a simple Discovery Education video on hurricanes, and pulled it into iMovie, and then asked an audience member to come up to tell a story that related to hurricanes. They recorded her voice as the video played, and our first digital storytelling experience was born. We instantly knew that this exciting tool would transform our teaching forever! And while serendipity brought us together…. storytelling keeps us connected.

Our journey with digital storytelling has evolved and grown over the years. We have been students, teachers, and presenters of digital storytelling. We have implemented some best practices into our own K-5 classrooms while sharing with many others—including other K-12 teachers, corporate trainers, undergraduate and graduate students—how to use digital storytelling to meet their own needs. Digital storytelling has become a way of life in our classroom and helped us to reach and engage our 21st century students in a way that traditional methods could not. In the following chapter, we explain how we use digital storytelling in our K-5 classrooms—which focuses on having students create their own digital stories—but many of the strategies can and should be used in the undergraduate or graduate classroom as well.

What is Digital Storytelling?

So what is digital storytelling? Well, digital storytelling is, "a first person narrative told in the writer's spoken voice. It is combined with a variety of media including images, audio, and sometimes video to convey an instructional objective as part of a larger instructional unit." And while technology and media are needed to create digital stories, digital storytelling begins and ends with a first person narrative. But while "the intention of digital storytelling is to stimulate reflection and deeper learning" (Sandars, Murray, & Pellow, 2008), using technology in the classroom can also serve as a "hook" to get students excited about their learning and the products they will create.

National Educational Technology Standards & The 21st Century Student

The International Society for Technology in Education, also known as ISTE, is responsible for the National Educational Technology Standards (NETS). While these standards are written to guide K-12 teachers, they can and should serve as an indicator

to institutions of higher education of changes coming down the line. In 2007, ISTE updated these standards placing more emphasis on creativity, collaboration, critical thinking, information fluency and innovation than on the ability to operate the technology.

ISTE, like many others, no longer sees technology as a separate product—rather, it is something that should be integrated into all areas of student learning. The 21st century student comes to us with a different background and different experiences than even a student from 10 years ago did. We believe that because of this (as well as the changing world around us) our teaching methodologies need to change and adapt to meet their ever-changing needs and learning styles. We are preparing our students for jobs that may not exist yet. Because of this, we need to make sure that we arm our students with the skills needed to succeed in the future.

But if we want our students to be creative and innovative learners, then we as educators need to model the types of skills and abilities needed as well as to develop the types of learning environments that can make this happen. In other words, our pedagogy needs to promote digital aged literacies, and digital storytelling is a perfect way to do this.

Digital Storytelling & Digital Aged Literacies

Digital storytelling is a powerful instructional strategy because it addresses things like creativity and innovation, communication and collaboration, research and information fluency, critical thinking, digital citizenship and technological proficiencies to name a few (which are all aspects of the NETS). In the following paragraphs, we will point out how digital storytelling can do just this.

Creativity and Innovation

Digital Storytelling fosters creativity and innovation by putting the author into a first person point of view. Students must envision and describe emotions, decisions, and moments of change. While facts are easy to find, creating scripts for digital stories allows a creative outlet for students to interact with the material. Students' work on creating a first person script that follows a story line rather than a documentary-style movie.

Communication and Collaboration

Part of the digital storytelling process is recording one's script with one's own voice. This brings an entirely new element to the work changing the writing process into a performance. The voice needs to convey emotions as well as reading fluency through pacing and economy of words used. To help bring the story script to life in the most effective way possible, a collaborative story circle can be used as part of the editing process. A story circle is a small group of authors who read and share their rough draft of their story in preparation for the final recording. Within the story circle, authors are given direct feedback and suggestions from their peers. The script can then be revised into its final version. This collaboration and communication with others is an essential part of the digital storytelling process we use in our classrooms.

Research and Information Fluency

In order to write creatively about a topic, students need to have a deep understanding of the curriculum that they are developing a story about. It is at this stage in the writing process where students must research and develop their ideas and

structure. Students must evaluate and organize their data and information to help them build a better understanding of their topic.

Critical Thinking, Problem Solving, and Decision Making

Typically in education we have taken ourselves out of the curriculum and worked on restating other people's facts and impressions. With digital storytelling we are asking our students to put themselves firmly in the middle of the topic, and share with us their impressions, emotions, and opinions of the subject area. This is a stretch from the ubiquitous summaries that are found in the average classroom. When creating scripts for digital stories, students are in charge of demonstrating their learning by combining their background knowledge and research with critical thinking and decision making skills to produce a story of the events as they see them happening. Rather than regurgitating facts, students have to create their own understanding of the facts learned in a creative way.

Digital Citizenship

Many students see online sources as unlimited and available for any use. When creating digital stories, fair use and ethics must be modeled and used. We always say, "Just because you can, doesn't mean you should." In this digital age, it is easy to take any song, movie clip, image, sound, etc., and use them in your digital projects. Creating digital stories though gives educators an opportunity to talk to students about these issues and to make sure students understand the importance of copyright and intellectual property.

Technology Operation and Concepts

Once the script is finished, the digital story creation begins. Considerations for hardware and software come in to play. Time is an important factor in determining which road to take. See Table 1 for detailed information and technology considerations.

Table 1: Software and Hardware Considerations

Software	Time Considerations	Final Product
Movie Making Software (iMovie, Final Cut, Movie Maker, Adobe Premier)	The most time intensive way to create a digital story	Professional looking movie that can include titles, effects, transitions, video, and images; it has the ability to be burned to DVD
Podcasting (KidPix, Garageband, Photostory)	Somewhat intensive-less than movie creation, but time is still required for media selection	A slideshow-like feel with basic editing capabilities
Web 2.0 (Voicethread, Slideshare, Gcast)	Time to gather resources, but the final product should be done in one sitting--potentially no saving)	Variety of online embedded final stories with limited editing capabilities
Presentation Software (Powerpoint, Keynote)	Time to gather resources, could be done in as few as one or two classroom sessions depending on preparation	It will look like a slide show presentation, and can be exported to movie format

The Creation Process

So we have talked about what digital storytelling is and the benefits of using it in the classroom. We are now going to quickly go over the digital story creation process and then conclude with some best practices we use when using digital storytelling in our classrooms.

Once students have identified a topic, done significant research on the topic, written a rough and final draft of their script and recorded their story, it's time to start developing their digital story. We aren't going to go into too much depth about this process because the technology you choose to use will change this process to some degree. But generally after the script has been written and recorded, students find images and music to compliment the story and they add these to the tool they are using and then export the final story into a format that others can view (typically as a movie).

Best Practices

It is easy to get enamored with the technology but we strongly believe that it's the pedagogy and not the technology that makes the difference. Before we integrate digital storytelling into a unit, we begin with the essential question. The essential question is the big idea that students should be able to answer through the development of the digital story. Once our essential question is developed, we then focus on developing the task and sample writing prompts. We have included an example of these in Table 2. These are focused on a unit about the American Revolution.

Instructor modeling is very important to the process. At the beginning of every digital storytelling unit, we create our own digital story sample for students to see a model. If multiple writing prompts are used, then an instructor sample is made for each of the prompts.

Table 2: Digital Storytelling Sample Unit with the American Revolution

	Writing Prompts
Essential Question: How have events from the past influenced the present?	**Persuasive Letter:** Write a letter that persuades someone of your point of view of the war and for independence. For instance, if you are writing as a colonist, you would write a letter to King George or a redcoat persuading them why you should be able to be independent from Britain. If you are writing from the point of view of King George or a redcoat, then you would persuade the colonists why they would stay with British rule. As you write your script, think about how life would have been different if we would have stayed with British rule.
Task: You will be creating a digital story that centers around the events of the American Revolution. You will be using media from the Library of Congress including music and images.	**Event Diary Entries:** Write a diary from the perspective of someone involved in the American Revolution like a colonist, a redcoat, a Native American, etc. In your diary, explain what happened in the event from the American Revolution from the point of view of the person that you have chosen and how that event affected the American Revolution.

Resources: **Patriotic Melodies from the Library of Congress** http://lcweb2.loc.gov/diglib/ihas/html/patriotic/patriotic-home.html **Pictures of the Revolutionary War from the National Archives** http://www.archives.gov/research/american-revolution/pictures/	**Declaration of Independence:** Tell the story from the point of view of someone who helped to write the Declaration of Independence like Thomas Jefferson, John Adams of Benjamin Franklin. Explain their struggles with writing the document, why they chose the four sections that they did, and why their involving helped to change the history of the United States of America.

Historically, digital stories are between 275-375 words so that the finished story is no longer than 2-3 minutes in length. We try to keep our students' stories within this timeframe because it helps them tell a concise, but powerful story.

We also strive to have each story include certain elements. The Center for Digital Storytelling teaches that every digital story needs to have seven elements included (See Table 3). Thus, we strive to make sure that each of these seven elements are included in our students' stories. The difference between a digital book report and a digital story often is related to whether students have done things such as taken a point of view or included emotional content.

Table 3: The Seven Elements of Digital Storytelling

Element	Description
Point of View	The narrator of the story.
Dramatic Question	A moment of change.
Emotional Content	The way people connect to the story. The use of real, human emotions within the script.
Pacing	The time spent in the story including the pausing within the script and the amount of pictures used.
Economy	Using just the right amount of media to support your story.
Voice	Your voice telling the story in a natural way.
Soundtrack	The music behind your story.
Scene (An additional element)	Focusing and narrowing in on one aspect of the story.

Adapted from Lambert (2007

We also spend a good deal of time focusing on assessment. Digital storytelling is more than just a fun activity—it is meant to address instructional goals. Therefore, we have developed a rubric to assess students' final project. We share this rubric with students before the script writing process begins to help provide expectations for the final project (See Table 4).

Finally, we believe in celebrating each other's work. At the end of the digital story creation process, all participants take part in a celebration and story viewing. Every digital story needs to be viewed, acknowledged, and celebrated for the effort and content that is shared. Depending on your age group and audience, this might include posting your students' stories online for others to view.

Table 4: Sample Digital Story Rubric

Script Writing			
4	**3**	**2**	**1**
The script establishes a purpose early on and maintains a clear focus throughout. It is evident that the writer researched their topic and used that research within his/her script. The writing includes many vivid supporting details. The script is written in first person.	The script establishes a purpose early on and maintains focus for most of the presentation. It's evident that the writer researched their topic and used that research within the script. The writing includes many supporting details. The script is written in first person.	In the script there are a few lapses in focus, but the purpose is fairly clear. The writer may have not shown his/her research in the writing. The writing includes few supporting details. The script is written in first person.	It is difficult to figure out the purpose of the presentation. The student does not show any relevant research. The writing has few to no supporting details. The script is not written in first person.
Grammar			
4	**3**	**2**	**1**
Grammar and usage were correct (for the dialect chosen) and contributed to clarity, style and character development.	Grammar and usage were typically correct (for the dialect chosen) and errors did not detract from the story.	Grammar and usage were typically correct but errors detracted from story.	Repeated errors in grammar and usage distracted greatly from the story.
Voice-Pacing			
4	**3**	**2**	**1**
The pace (rhythm & voice punctuation) fits the story line and helps the audience really "get into" the story.	Occasionally speaks too fast or too slowly for the story line. The pacing (rhythm and voice punctuation) is relatively engaging for the audience.	Tries to use pacing (rhythm & voice punctuation), but it's often noticeable that the pacing doesn't fit the story line. Audience isn't consistently engaged.	No attempt to match the pace of the storytelling to the story line or the audience.
Images			
4	**3**	**2**	**1**
Images create a distinct atmosphere or tone that matches different parts of the story. The images may communicate symbolism and/or metaphors.	Images create an atmosphere or tone that matches some parts of the story. Image choice is logical.	An attempt was made to use images to create an atmosphere /tone but it needed more work.	Little or no attempt to use images to create an appropriate atmosphere/tone.

Soundtrack-Emotion			
4	**3**	**2**	**1**
Music stirs a rich emotional response that matches the story line well.	Music stirs a rich emotional response that somewhat matches the story line.	Music is ok, and not distracting, but it does not add much to the story.	Music is distracting or inappropriate,
Bibliography			
4	**3**	**2**	**1**
All pictures and music are correctly cited (using Noodletools) at the end of the movie.	Most pictures and music are correctly cited (using Noodletools) at the end of the movie.	Pictures and music are incorrectly cited.	No bibliography used.

Conclusions

We have tried to briefly describe what digital storytelling is, the benefits of using it in your classroom, and finally some best practices to consider when using digital storytelling for instructional purposes. But perhaps the best way to see the power of digital storytelling is to start watching some digital stories at the Center for Digital Storytelling (http://www.storycenter.org/stories/) or better yet—create your own!

Digital storytelling has changed our teaching and in many ways changed our lives. We hope it can do the same for you!

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Bios

Sherri Clemens is a technology instructor at Trailblazer Elementary in Douglas County School District. She has been working with digital storytelling since 2005 and received in-depth training from the Center for Digital Storytelling. Sherri has also participated in digital storytelling workshops through the Museum of Colorado History to create neighborhoods of Denver story exhibits. Sherri was selected as an Apple Distinguished Educator for the class of 2007, and is a Google Certified Teacher and SMART Exemplary Educator. She works with students and teachers by bringing best practices of digital storytelling to their classrooms and works as an instructional technology leader in Douglas County which allowed her to earn the DCSD Apple Digital Educator Grant in 2006. She mentors and trains teachers across the district in effectively using technology in the classroom. Sherri's Bachelor's degree is in Elementary Education from the University of New Mexico, and her Master's degree is in Information and Learning Technologies from the CU Denver, 2002.

Melissa Kreider is a technology instructor at Cottonwood Creek Elementary in Cherry Creek School District. Melissa's Bachelor's degree is in Communications from Kent State University. She earned both her teaching degree and Master's degree from CU Denver (Information and Learning Technologies - 2004). Melissa was awarded a SmartBoard, projector and "clickers" from the Morgridge foundation and earned the DCSD Apple Digital Educator Grant in 2006. She has also presented sessions on Digital Storytelling with Sherri at the Technology in Education (TIE) conference in June 2006, 2008 and 2009, at the CU Online Faculty Conference on Digital Storytelling, May 2009, and for the AORN nursing conference in 2010. Melissa teaches staff development courses for Douglas County School District on the topic of digital storytelling.