

Digital Storytelling

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When a person thinks about reading a story, a hard-covered book full of paper pages may come to mind. An individual may also think of a photo album full of printed pictures with tiny captions beside each photo. However, these are no longer the only ways to share a story. In today's world, there is an increasingly popular way to tell a story. It is called digital storytelling. Digital storytelling uses technology tools and the Internet to share pictures, words, thoughts and feelings. It is a new approach to share one's story. Digital stories can easily be shared with family, friends, and the rest of the world using YouTube, podcasts, email, or other forms of electronic distribution. Millions of stories are shared every day through social networking in the virtual world. Digital stories are not only for personal use. Teachers find digital storytelling an interesting and motivating tool to implement in the classroom, too. In this paper, I will explain what digital storytelling is and how to create a digital story. Then, I will describe how educators are using digital storytelling with students. Next, applications to several distinctive situations will be portrayed. Finally, I will provide reasons why digital storytelling should be implemented into the classroom.

What is Digital Storytelling?

The idea behind digital storytelling goes back to why people started telling stories in the very beginning of time, to teach beliefs and values to others (Educause, 2007). Human beings transfer knowledge through education. The transfer of knowledge can occur verbally or in written form, and digital storytelling includes both of these with the added benefit of images. According to Educause (2007), "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.” Digital stories can be instructional, persuasive, historical, or reflective depending on the author’s reason for creating the story. Therefore, digital storytelling could be integrated within any content area of the curriculum. Some areas may require more creative thinking, but nonetheless, there is a story or presentation to be shared.

Storytelling helps people process information easier, especially if it is more complex. Students must think deeper about the content in order to create and share knowledge learned or express feelings on a certain topic. Digital storytelling “encourages [students] to communicate, collaborate, and research as well as to infuse media into the process” (Edtechtteacher, 2012). The Center for Digital Storytelling developed the “Seven Principles for Digital Storytelling” which states an effective digital story must have the following elements: 1. A point of view expressed in the first-person perspective; 2. A question that is answered throughout the story; 3. Emotional content connected to the author’s feelings; 4. The storyteller’s voice in a recorded voiceover; 5. A powerful soundtrack to set the mood of the story; 6. Small number of images and video with a short amount of text; 7. Well established pace throughout the video (Benick, 2011).

Creating a digital story begins with writing a storyline or storyboard. Orech (2007) clarifies that storyboarding “allows students to structure their story and sync images to words.” A good digital story has words that work *with* the images (Orech, 2007). The author must write a script to follow for the dialogue portion of the video. Next, the author will find media to insert into the digital story such as, pictures, text, audio, images, or videos. Everything is then imported together into a digital storytelling tool. Most tools are

available online for free. For primary or intermediate education, Story Kit, Story Patch, and Zoo Burst are popular ones to try with younger children. The layout is already created; all a child has to do is insert text or voice and select pictures to go along with the text or voice. Higher education students may want to try Voice Thread, Animoto, Glogster, or Windows Movie Maker. These tools are more open-ended and allow the designer multiple formats to create a story. After editing and revising the video, the digital story is now ready to be shared with other people.

Using Digital Storytelling in the Classroom

One of the most important aspects of creating a digital story is writing the story. Since many students struggle with this form of communication, digital storytelling can be a motivating project. It secretly promotes writing skills while entertaining at the same time. Whether the story topic is fiction or non-fiction, students are empowered to create a story in their own unique way. This provides a sense of ownership in a student-centered environment. Baek, Park, and Xu (2011) explain a research study conducted on sixth grade students' writing and their attitudes towards writing. One group was asked to write a digital story using Photo Story. The other group wrote a story on a word document then uploaded it to the class online website. The second group only checked their spelling and counted words. The digital storytelling group edited their stories by choosing more interesting words, adjusting the sentence structures, or removing sentences. Researchers concluded that the students in the experimental group were more engaged in digital storytelling and paid more attention in revising their writing compared to the control group who did not create digital story (Baek, et al., 2011).

Baek, et al. (2011) directed a research experiment with undergraduate students

to examine the effects of writing for digital storytelling on writing self-efficacy and on flow of writing in the virtual world of Second Life. In this study, one of the groups created their digital stories in Second Life, and the other group created their digital stories off-line with Windows Movie Maker. Before and after the activity of digital storytelling, students' writing self-efficacy and flow were measured. Following the experiment, researchers found the virtual environment in Second Life provided players balanced challenge and skill. This made players more motivated and engaged in the activity of digital storytelling. In virtual worlds, students can see their stories intuitively, which is in the whole process of creating digital stories. Thus, they can find problems in their stories, and make revisions more easily. Students are intrinsically motivated rather than extrinsically motivated. Baek et al. (2011) concluded that digital storytelling in Second Life was more effective in promoting self-efficacy and flow in writing than digital storytelling off-line.

Based off these research studies, a teacher could implement various writing projects using digital storytelling. Edtechteacher (2012) reports High School students at the Urban School of San Francisco have produced three remarkable oral history interviews featured at this site: Holocaust Survivors and Refugees, World War II Camp Liberators, and Japanese-American Internees. These students directed, filmed, and recorded interviews, and then posted the full-text, full-video interviews on a public website (Edtechteacher, 2012). This project alone integrated the reading, writing, and social studies curriculum. Digital stories could easily be created to describe a science topic such as a life cycle, metamorphosis, photosynthesis, the water cycle, and integrate technology skills at the same time. Students may be more motivated to do well

on the project if they know it will be shared on the web. Digital storytelling could be especially beneficial in math since memorizing an equation process sometimes takes precedence over *understanding* a process. If fourth grade students had to explain mean, median, and mode and give various examples, their own understanding and learning increases. For younger students, second or third graders could explain why carrying or borrowing sometimes has to occur when adding or subtracting. This would aid their metacognition and comprehension of the process.

An example of how a teacher in the classroom could use digital storytelling can be found in a middle school math class taught by Tyler Binkley. This first year teacher is creating digital stories that teach critical math concepts to share with his students via YouTube (Dreon, Kerper, & Landis, 2011). Binkey's effective implementation of technology has his students engaging in crucial math concepts while developing a deeper understanding of the topics. This teacher's videos are instructional while telling a comical story with several characters and a distinct plot (Dreon et al., 2011). As an extension activity, his students could be asked to create a math video of their own, incorporating characters, a plot, and a setting to make it into a digital story.

Why it Should be Implemented

Technological instruction is important to use with today's learners. Students are constantly online outside of school so in order to capture their attention and engage them in the learning process, technology must be brought into the classroom. The students need to be using and manipulating the technology, not just watching a teacher use it. It is important to note that, in order to assign students projects and assignments that use technology, a teacher must make sure all students have equal opportunity and

access to use the technology. According to Chun-Ming, Huang, & Hwang (2012), digital storytelling is project-based learning, an instructional strategy in which students create a project based on problem solving, collecting data, and group discussion, then present their findings as a report. Therefore, students are working at the highest level of Bloom's Taxonomy, which is creating. Digital storytelling in the classroom also creates a student-centered environment. Chun-Ming et al. (2012) explain the reason digital storytelling is effective is because it increases student motivation, performance, and enhances memory by allowing learners to build upon previous knowledge while encouraging collaboration amongst classmates.

Students in the twenty-first century need to learn how to collaborate and work with others effectively to solve problems. The more a teacher can incorporate project-based learning in the classroom, the better off a student will be. When they enter the workforce, these learners will have a strong ability to communicate, collaborate, and work with others on a team to complete a project. Digital storytelling can be a fun and rewarding activity for students, too. Developmental theorists argue that play allows individuals to enhance cognitive development and intelligence, based off of a Piaget (1959) proposal that play allows children to practice newly acquired skills in a relaxed and comfortable environment (Crow & Robins, 2012).

Another benefit of using digital storytelling with students is that it "can be an effective mechanism for preserving a culture of one's own, an opportunity not only to collect invisible histories but to authenticate them" (Benick, 2011, p. 40). Creating a digital story allows students to connect the visual arts to other curriculum areas thus drawing attention to the permeable boundaries of art education (Benick, 2011). Thus,

digital storytelling is a tool that can be creatively used with any area of the curriculum: language arts, mathematics, social studies, science, art, physical education, or music.

Conclusion

Recently, teaching strategies have focused on meeting the expectations of a society fixated on test scores. In turn, these strategies have restricted student creativity, problem solving, and deep thinking which damages the ultimate goal of the education system-creating a flexible population of life-long learners who can adapt to the fluctuating needs of society and the workplace (Crow & Robins, 2012). 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” (Educause, 2007). It is a technology tool that can promote creativity, problem solving, and deep thinking while still meeting the educational standards. Digital storytelling essentially integrates several areas of the curriculum in one project since reading and writing are necessary no matter what subject is used.

Digital storytelling can promote active student participation and greater motivation in the classroom. Allowing students to create digital stories constructs a student-centered learning environment, which allows for higher student engagement, reflection for deep learning, project-based learning, and technology integration across the curriculum (Baek, et al., 2011). Students who engage in digital storytelling with peers work on collaboration skills and improve their ability to work as a productive team member. These are crucial skills needed for today’s society and for the future. Thus, digital storytelling is a powerful tool that can be used to help create well-rounded individuals ready for today’s current and future society.

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