Today’s students live in a world that has been transformed by technology, and they are often referred to as “digital natives” because their exposure to digital resources begins at birth. The increased exposure to technology has changed the way students respond to instruction and has led to a new need for teachers to integrate digital resources in the curriculum. Unfortunately, some teachers do not use enough digital resources for students to derive the full benefits of technology. One easy way to avoid this problem is by assigning students projects requiring the creation of digital stories. This article discusses why it is important for teachers to use digital resources and how digital storytelling projects can be used to help students improve in reading and writing. Resources are included to help instructors implement digital storytelling projects, and the article discusses how to overcome common obstacles when using this teaching strategy.

Using technology effectively in school has many benefits. It keeps students motivated, helps them function well in their digital world, promotes academic gains in literacy, and facilitates the learning of a subject matter because technological tools allow students to perceive and create content through various formats including graphic images, audio, video, music, etc.

Unfortunately, for various reasons, some teachers do not use enough digital resources for students to derive any benefits (Hicks, 2011; Starr, 2012). One way to use technology in the classroom is to assign students projects requiring the creation of digital stories. Although these types of projects lead to many academic benefits and are relatively simple to implement, instructors may face a few obstacles when attempting to use a digital story project with their students. However, teachers can use a few strategies to circumvent common problems with technology to help students gain the numerous benefits of stimulating technology projects.
The Importance of Technology

Students need to be prepared to function well in the digital world they live in, and if teachers refrain from implementing technology effectively, their students will likely face problems later in life. Preparing students to be adept with digital resources, however, is only one of the many reasons for them to use digital storytelling in school.

As a result of constant exposure to technology, today’s students are extremely tech savvy, and even very young children can manipulate technology (Hicks, 2011). Thus, when teachers implement lesson plans requiring the use of technology, such as the creation of a digital story, they teach in a manner that matches students’ environment and often their preferred way to learn. Hicks (2011) states that “the saturation of technology in students’ lives has produced an entirely different type of student, shaping the way they think, learn, and experience the world around them” (p. 188).

Furthermore, instruction devoid of digital resources increases chances of student boredom. Prensky (2001) says that the constant exposure to technological resources leads today’s students to develop hypertext minds that are physiologically different from the minds of students from previous generations, which often leads them to unpleasant experiences when teachers eschew digital resources. He argues that today’s students are habituated to a graphic-first, multitasking way of getting information digitally that leads them to be frustrated with many of their teachers’ approach of instruction.

Neuroscientific studies of the brain support the idea that digital natives tend to be more responsive to digital resources than to print format. A recent study, for example, done at UCLA’s Semel Institute for Neuroscience and Human Behavior revealed that when digital natives were reading a print text, their brains were less engaged than while navigating a web page (Herther, 2009).

Although effective use of technology can benefit students in various ways, some teachers avoid it out of fear of appearing unprepared in front of their students (Starr, 2012). Their lack of confidence is often caused by insufficient professional development and a lack of support for troubleshooting problems, and this problem leads many of today’s students to know more about digital resources than their teachers (Hicks, 2011).

Although technology implementation is sometimes intimidating for some teachers, once they gain awareness of the multitude of free resources available for guidance, they will likely be more open to using more digital resources in school. Some of these resources are listed in this article to help teachers learn to start a digital storytelling project with students ranging from primary school to high school.

What is Digital Storytelling?

While all cultures have used traditional storytelling, digital storytelling is a new method teachers can use to motivate students, promote learning, and encourage them to develop 21st century skills. When students create digital stories, they first proceed the traditional way by writing using pencil and paper. However, in the final phase, their composition becomes digitized and can include images, photographs, music, narration, and text that are integrated into a movie.

Between these steps, students combine the text from their stories with technological features that complement the words. Sylvester and Greenidge (2009) indicate that the steps for creating a digital story include:

1. Writing a story.
2. Sketching scenes to match the narration on a storyboard.
3. Numbering sections of text to correspond with scenes on the storyboard.
4. Collecting graphics that complement the scenes, such as photographs and clip art.
5. Recording the narration.
6. Combining the files into a movie with a video-editing program such as Movie Maker or iMovie.
7. Adding a title frame.

Sylvester and Greenidge also recommend for teachers to use Lambert's (2002) model for creating effective digital stories, which is based on the following seven elements:

1. Point of view—The author's perspective.
2. Dramatic question—A question that will capture the viewer's attention.
3. Emotional content—Effective stories deal with serious issues involving powerful emotions.
4. The gift of your voice—Using one's own voice to personalize the story.
5. Soundtrack—Using music that is congruent with the story.
6. Economy—Using the right amount of information without overloading the viewer.
7. Pacing—Progressing at the right pace in order to maintain the audience's interest.

When instructors use digital storytelling following these guidelines, students often make progress in various ways.

**Improvement in Writing, Creativity, and Motivation**

In addition to helping students gain 21st century skills, the process of creating digital stories leads students to a plethora of academic benefits. Mullen and Wedwick (2008), for example, found that a digital storytelling project with eighth grade students helped students to create a customized product, think critically, and use programs that encourage creativity. Creating digital stories also helps students make content relevant, adds meaning to their schoolwork (Dreon, Kerper, & Landis, 2011), allows students to express themselves through an alternate format, promotes confidence, and motivates and engages students (Sylvester & Greenidge, 2009).

These types of projects also help struggling writers in several ways. When struggling writers create a storyboard, they gain a better understanding of the story sequence, which helps them realize parts of the story they may have omitted in the traditional draft (Sylvester & Greenidge, 2009). This realization allows them to add missing components of the story before including the narration. Additionally, the process of narration helps struggling writers in spelling and capitalization, and the use of graphics and photographs allows students to express themselves more easily by allowing them to use visual detail to convey ideas often omitted when writing the traditional way. Students also gain an awareness of purpose and form because an audience usually views the digital story upon completion. These components of digital storytelling motivate struggling writers and create opportunities for them to become competent writers (Sylvester & Greenidge, 2009).

**Improvement in Reading**

Digital storytelling also helps students improve in reading. One of the ways teachers can use this teaching method for this purpose is by using digital storytelling circles (DSCs). Traditional literature circles promote reading improvement because they encourage dialogue and discussion, crucial aspects of comprehension instruction (Reutzel & Cooter, 2012). DSCs also provide this support and help students enhance their reading knowledge and skills by allowing
them opportunities to share information (Tobin, 2012). When teachers use DSCs, they break students in small groups (three to five students per group) to read the same text, and then students create a digital story of the text. After all the students in the DSC have finished reading, the teacher assigns group members specific roles (director, producer, and editor), and students benefit because they exchange ideas, decide on the purpose of the story, and gain or improve the skills needed for digital moviemaking (Tobin, 2012).

Additionally, teachers can use digital stories to help students improve in other important components of reading such as fluency and vocabulary. Fluency—the ability to read expressively with accuracy and speed—is developed if instructors assign students to work one-on-one with peers to rehearse their narratives until they can read them well, and students can enhance their vocabulary when teachers encourage them to use new, accurate, and powerful words in their stories (Royer & Richards, 2008).

Digital storytelling can also be used to help reluctant readers become excited about literacy. When students lack motivation to read as a result of being poor readers, they often avoid reading and consequently fail to improve as much as those who read more. This phenomenon, often referred to as the “Matthew effect,” increases the gap between good readers and poor readers on various components of reading (Cain & Oakhill, 2011; Pfost, Dorfler, & Artelt, 2012). To avoid this negative trend that poor and reluctant readers may experience, educators can implement digital storytelling as an intervention strategy to get students excited about literacy and encourage them to read more often.

Kajder (2008) used book trailers successfully to motivate reluctant readers to read. Book trailers are two-to three-minute digital stories designed to persuade viewers to read a text. The trailers need to include the title and author of a book, and students are also required to analyze the book. The process of making book trailers requires students to read and reread a text, select images representing the content of the book, and write a script reflecting the content of the book and the message students want to convey (Young & Kajder, 2009). Teachers can also use digital stories to help students understand content.

**Improvement in Understanding Different Subjects**

In addition to assigning students to create digital stories, teachers can show digital stories to teach content to students and capture their attention (Robin, 2008). This form of instruction is beneficial because integrating images with text improves student comprehension. Some teachers have even created their own digital stories in an effort to engage students and make content more understandable. For example, Tyler Binley, a teacher at Palmyra Middle School, in Pennsylvania, uses digital storytelling to capitalize on his students’ interest in digital video to teach math concepts, and his students find this strategy very helpful and go to his YouTube site when they struggle with a math task (Dreon, Kerper, & Landis, 2011).

Viewing digital stories created by others also helps teachers who want to implement digital story projects, and the websites listed in the following section can be used for this purpose. After gaining familiarity with how good digital stories appear, teachers can use the strategies discussed in the section entitled “Getting Started” to begin a project with their students.

**Websites with Examples of Digital Stories**

- **Educational Uses of Digital Storytelling**  
  (http://digitalstorytelling.coe.uh.edu)
This website was designed to serve as a useful resource for educators and students who are interested in integrating digital storytelling with educational activities. It was created in 2004 at the University of Houston College of Education and includes numerous digital stories on various topics.

• **Creative Narrations**
  (http://www.creativenarrations.net/stories)

Creative Narrations is an organization that uses storytelling for self-discovery and strengthening relationships. It was founded in 2001 to support organizations with multimedia tools to document perspectives of change and includes a gallery of digital stories.

• **The East of England Broadband Network**
  (http://clips.e2bn.org/browse)

The East of England Broadband Network (E2BN) is organized by the government of England to improve teaching and learning by the use of broadband technology. Numerous digital stories produced by children can be viewed on this website.

**Getting Started**

Digital stories can be very simple in design, consisting only of photographs, text, and narration, or they can be much more elaborate and include more content including video, music, and special effects. Therefore, teachers who have limited technology skills may wish to start a project with their students by modeling how to create a simple story using a few tools and then include more digital resources as they increase their proficiency.

Another strategy teachers can use is to model a simple digital story but to encourage students to explore and create their own version using more sophisticated methods. As students create their projects, teachers can observe how students are using technology to learn from their students. This method promotes creativity, encourages a student-centered approach, and also helps teachers improve their proficiency in technology. Hicks (2011) mentions that this method is valuable because many students are more tech savvy than their teachers.

In order to encourage creativity, teachers can offer students a variety of topics to choose for their projects, but instructors need to remember that the digital story needs to match specific concepts and skills students need to learn. Gabel (2011) recommends the following choices:

- Advertisement
- Personal narrative
- Short story
- Summary
- How-to directions
- Historical events
- Biography
- Parody

For teachers who have technological difficulties or need guidance on how to make digital stories, a variety of websites and videos available on the Internet offer information and step-by-step directions. A list of useful tutorials is included in the following section. Educators can also search YouTube to find additional tutorials on specific aspects of creating digital stories.

**Tutorials**

- **How to Create a Digital Story in iMovie**
  (http://www.youtube.com/watch?v=WBaLjtRwca4)
In this short video, instructors or students can view the basics of creating a digital story using iMovie. The video contains information on opening iPhoto and iMovie, importing photos, adding narration, fixing mistakes, and exporting and saving the movie.

- **Atomic Learning**
  (http://www.atomiclearning.com/k12/moviemaker2)

  Atomic Learning is a website providing technological support to help educators to integrate technology and includes numerous short clips on how to use Windows Movie Maker 2. The clips include guidance on getting started, applying video effects, and working with clips.

- **How to Create a Digital Story in Photo Story 3**
  (http://www.youtube.com/watch?v=c6-NuHdpC4Q)

  This tutorial explains how to create a digital story using Microsoft's Photo Story 3 software. The tutorial explains how to download Microsoft's Photo Story 3 for free from the Internet and includes information on uploading images, cropping pictures, using special effects, adding titles to pictures, changing font of text, and more.

- **Kids’ Vid**
  (http://kidsvid.4teachers.org)

  Kids’ Vid is an instructional website that gives teachers and students the tools necessary to implement video production in the classroom. The website includes information regarding scripting, editing, video shooting, and showing a movie.

### Obstacles with Digital Storytelling

One reason teachers will resist implementing a digital story project is fear of the unknown and unfamiliarity with technology. This fear is often unwarranted, and the technology needed to create this exciting approach is available on most computers in schools. Most PCs and Macs are now made with their own video-editing software. PCs generally come with Windows Movie Maker, and Macs with iMovie. The problem of inadequate training with technology can be minimized through practice. Teachers can practice by using the aforementioned resources to become proficient in creating digital stories, and they can find more free guidance on the Internet, especially by using YouTube, to help them with specific areas that may be difficult.

Additionally, teachers should not be afraid to rely on students for help. Allowing students to explore and use their expertise in technology will promote creativity, and teachers can learn from students by asking about aspects of digital storytelling they may not be aware of.

This strategy frequently leads to a positive classroom climate and often makes students feel important (Hicks, 2011). Instructors can also rely on experts at their schools who are skillful in technology. By taking advantage of media experts, who often enjoy helping students with these types of projects, any potential obstacles will be reduced (Sylvester & Greenidge, 2009). Teachers can set up an appointment in a computer center or lab for guidance.

### Conclusion

Assigning students digital story projects can be beneficial for various reasons. Such projects are motivating and often help students improve in writing because this process encourages them to think about how stories are created. Students also improve in reading when teachers use DSCs, book trailers, and
other strategies designed to enhance important components of literacy. Additionally, these projects provide students with an opportunity to gain more awareness of many elements of the media that surround them (Wawro, 2012).

Although effective implementation of digital story projects will provide students with multiple benefits, some teachers avoid them because they are afraid they lack proficiency in technology. However, such projects can be relatively simple to implement when free Internet tools are used for guidance. Furthermore, many teachers are unaware that the technology needed for digital storytelling is already on their computers, and their students frequently know how to use it and enjoy sharing this knowledge.

Certain uncontrollable circumstances, however, make technology projects difficult for teachers to implement. One of these, and probably the most important reason, is lack of administrative endorsement. In an age of accountability, when district personnel often visit schools to observe that teachers adhere to scripted programs, many teachers have little, if any, freedom to decide on using such a strategy to help students.

For those teachers who enjoy this freedom, implementing digital projects can make an important difference for today's tech savvy students. These students often feel frustrated when teachers avoid the use of technology because instruction without it frequently lacks the stimulation they need to work to their potential. If more teachers or administrators integrate technology into the curriculum through the use of creative projects such as digital storytelling, the end result should benefit many students.

References


