Do You Jing? How Screencasting Can Enrich Classroom Teaching and Learning

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Abstract

Teachers K-16 need to integrate the new digital literacies into their teaching. Screencasting is one of these new literacies, and we believe it offers special appeal for engaging and motivating students in learning. This paper provides a rationale for integrating the new digital literacies into classroom teaching, discusses how the new literacies differ from conventional ways of reading and writing, provides examples of screencasts that our own students and their pupils have authored, and concludes with step-by-step procedures for creating screencasts. Throughout the paper we argue that all teachers need to be teachers of the new digital literacies, and these literacies must be integrated with conventional ways of reading and writing.

Introduction

The new information and communication technologies (ICT) are now part of our everyday lives. Many of today's children use these technologies as easily as they read conventional books or write with paper and pencil. Whenever they need to find a particular fact, they 'Google' it. If they want to know about the weather, they use their cell phones or look online at the Weather Channel. A large majority of them routinely use email, YouTube, Facebook, and many of them Twitter. Some even have tablet computers for listening, viewing, reading, and writing. These ICTs are so natural to this young generation that they have been called, "digital natives" (Prensky, 2005/2006, p. 9).

It seems that every few months newer, more powerful, and lighter devices become available. Only two years ago *The Horizon Report* (Johnson, Levine, & Smith, 2009), which provides information on emerging technologies, predicted that mobile devices would be used to connect online, but many of us thought that was unlikely to happen. Yet, now many of us regularly use smart phones and tablet computers to communicate, acquire information, and to view and listen to videos and podcasts. The idea of making digital videos once awed most of us, but they are now common-place as we use cell phones and Flip cameras to capture events and upload them to Facebook or YouTube. All of these technologies have become part of the fabric of our everyday lives and are called "digital literacies" (Gilster, 1997). In this paper we argue that the new digital literacies must be integrated into our methods of teaching, and that screencasting tools (i.e., a digital video recording of a computer screen with audio), such as Jing, have special benefits and appeal for teachers and their students.

A Rationale for Integrating Digital Literacies into Classroom Teaching

Throughout history literacy has changed as new technologies appeared. The makers of clay tablets must have lamented when papyrus became the preferred source for writing. Monks must have despaired when they discovered that their biblical transcriptions were no longer

needed after the invention of the printing press. Similarly, the hardcover book publishing industry probably felt threatened when paperbacks appeared in the 1930's. Today, the new technologies are ubiquitous in our lives. The demands of the 21st Century necessitate that teachers enthusiastically embrace and integrate the various digital literacies into their lessons and such that students become critical consumers, collaborators and creators using these new literacies.

State education departments and professional educational organizations have argued for the integration of the new technologies into classroom teaching. In January 2011 New York's Board of Regents adopted the Common Core State Standards (CCSS) requiring students to strategically use the "new media" (NYS SED, 2011, p.2). The CCSS explains that an important characteristic of today's successful students is that "They use technology and digital media strategically and capably" (NYSED, 2011, p. 5). More specifically the CCSS requires that:

> Students employ technology thoughtfully to enhance their reading, writing, speaking, listening, and language use. They tailor their searches online to acquire useful information efficiently, and they integrate what they learn using technology with what they learn offline. They are familiar with the strengths and limitations of various technological tools and mediums and can select and use those best suited to their communication goals. (NYSED, 2011, p. 5)

The International Reading Association (2009) developed a position statement about the importance of integrating of the new literacies into classroom instruction:

> The Internet and other forms of information and communication technologies (ICTs) are redefining the nature of reading, writing, and communication. These ICTs will continue to change in the years ahead, requiring continuously new literacies to successfully exploit their potentials. Although many new ICTs will emerge in the future, those that are common in the lives of our students include search engines, webpages, e-mail, instant messaging (IM), blogs, podcasts, e-books, wikis, nings, YouTube, video, and many more. New literacy skills and practices are required by each new ICT as it emerges and evolves.

For over a decade the International Society for Technology in Education (ISTE) (2000) has been recommending the integration of the new technologies into schools by explaining that education must leave industrial models of teaching and learning behind and embrace the digital world. ISTE envisions technology as transforming education with explicit standards for students (NET*S for Students, 2007), teachers (NET*S for Teachers, 2008), and administrators with the guiding principle of creating communities of dynamic learning opportunities.

Given that the new technologies permeate every aspect of contemporary life, and their integration into classroom teaching is now required by New York's CCSS and recommended by various professional organizations (e.g., IRA, ISTE), there should be little doubt that the digital literacies are critical to 21st Century communication and essential skill sets for students to access information. All teachers, regardless of their subject areas, must meet the challenge of integrating the digital literacies into their lessons, and their students must have the opportunity to use them in their learning activities. The integration of these digital literacies is essential if our country is to remain globally competitive and our schools are to be relevant and meaningful in the lives of our children.

Differences between the Conventional and Digital Literacies

The old axiom that "every teacher is a teacher of reading" is as pertinent today as in the past, but today it needs to be revised to that of "every teacher is a teacher of the digital literacies." (Leu et al 2009b) argue that the digital literacies must be viewed as a literacy issue rather than simply access to technology, and, moreover, that all teachers, classroom and specialist, must actively use them in their teaching. Students need to see how the digital literacies can be used as a way of thinking across the disciplines, but this will only occur when classroom and specialist teachers model their use for students to see and require students use them to compose and collaborate to problem solve.

There is increasing research about how the new literacies compare and contrast with conventional ways of reading and writing, and teachers should be aware of their differences. Reading online (Leu et al., 2009a; Leu et al., 2009b) requires skills and strategies that are commonly used with offline reading, but it also depends on unique ones, too. Leu et al. (2009b) recently summarized some of their findings about reading online:

- Struggling offline readers may excel when reading online because of its multimodal and interactive characteristics;
- Prior knowledge may be less essential for online reading because access to prerequisite knowledge is easily found online;
- Although the digital generation may be skilled with the new technologies, children often lack critical thinking skills for evaluating information obtained online.

Coiro (2009) identified five ways that online reading differs from conventional. The first is that online reading requires new skills and strategies such as generating searches (e.g., Google), sifting through a variety of digital texts that are produced from these searches, synthesizing information among websites, and responding with an online communication tools such as emails, blogs, etc. The second difference between digital and conventional reading is that students' attitudes and dispositions about the new technologies have great impact on their success when reading online; students who are confident and eager to use the Internet comprehend better than those who find digital reading unfamiliar or awkward. The third difference between online and conventional reading relates to its social nature; students tend to collaborate when reading online by sharing sites and interpreting information with others, whereas conventional reading is more individual, personal, and linear. The fourth difference is that online reading requires students to scroll down a computer screen to find relevant information, select from a variety of websites that are returned from an online search, and discriminate sites containing relevant and authoritative information from those that might only be opinion or propaganda. The final difference is that the processes for digital reading are constantly changing as new technologies emerge. Although new theories of comprehension have always informed our understanding of reading conventionally, the rate of change in the digital world is much more rapid than that of the conventional literacies. Thus it is important that teachers provide students opportunities to develop their online critical reading skills, which will impact their thinking and composing.

Online writing is different from composing with pencil or pen, too (Herrington, Hodgson, & Moran, 2009; National Writing Project, 2010; Wilbur, 2010). Online writing is more social in its nature than conventional writing (Knobel & Lankshear, 2006); when composing online students can easily collaborate with others through wikis, blogs, Google docs, and other technologies (Bledsoe, 2009). Online writing fosters integration of multimedia files. That is, with

a few clicks of the keyboard students can integrate audio, video, and visual texts into their writing (New London Group, 2000). Consequently, meaning construction is no longer restricted by writers' skills with spelling, grammar, and vocabulary, because today's authors can integrate their compositions with audio and video files with quick links to networks for others to respond (e.g., Vook).

Conventional writing skills and strategies are still needed in the digital world (Hicks, 2009), but the new technologies involve additional and more dynamic ways of constructing meaning. Today's digital students can easily integrate multimedia files to enrich the meaning of what they have written. Examples of integrating multimedia information into writing are the following:

- Podcasts (Davis & McGrail, 2009)
- Photography and imagery (Riddle, 2009; Zenkov & Harmon, 2009)
- Music (Rodesiler, 2009)
- Video (Ranker, 2010)
- Blogs (Wilbur, 2010; Witte, 2007)
- Digital stories (Kajder, 2009; University of Houston, 2009)

Screencasting in Classroom Teaching

Screencasts are digital recordings with narration of a computer screen. Typically, screencasts, as described here, are quick, 3-5 minute videos with specific purposes—they can be used to answer questions, provide information, present a point of view, or tell a story. We have found screencasts to be especially helpful and exciting in our own teaching, and our students, graduate level and school-aged alike, enjoy producing them. We create screencasts of minilessons so that students can view at home, and we often use screencasts for online teaching to introduce students to concepts and skills that they are studying.

Graduate students in our literacy courses have developed a variety of different screencasts. In one of our courses students composed screencasts about their favorite literacy website (e.g., www.ncte.org; www.reading.org), including how to navigate the site and evaluate its content and use for other teachers. In another course, students composed screencasts of family stories and wrote process papers (I-search) explaining how they prepared their narratives (Lyman, 2006). In one of these narratives (Dickey, 2010), for example, Lunette tells the story of her father's life as skilled machinist who specialized in making parts for rare gasoline engines (babbiter). Another student, Mark, developed a screencast (Jackson, 2010) about a near family tragedy caused by budget cuts to his community's emergency rescue squad. In both cases the students integrated the new digital literacy (screencasting) with conventional writing by preparing I-search papers explaining their reasons for selecting these topics, how they found the images used in the screencasts, the steps they used to prepare their slide shows, and the challenges and successes they experienced in completing their projects. The I-search assignment served as a natural way to integrate screencasting with first-person narrative writing. Figure I displays the checklist students followed to complete the I-search assignment that accompanied their screencasts.

Figure 1: *Checklist for Essay about Your Digital Narrative*

Write a descriptive essay about your digital narrative. This essay should address the following issues:

1. Why did you select this topic and who do you think would be interested in viewing it?
2. Describe the images uses in the digital story, e.g., Did you find them on Google, did you take your own photos? Did you edit the photos?
3. Describe the processes (steps) you went through in composing and completing the digital project. Did the steps used vary from what your instructor suggested? Where did the content for the project come from? What items in the project changed from the early stages of selection through completion? Any other information you would like to share about this project?
4. Discuss the major challenges in creating this project and how you overcame them.
5. Discuss the most significant things you learned from completing the final digital storytelling project.
6. Discuss how you might use digital storytelling in your own teaching.
7. Include attribution for all images, quotes, etc.

In another course new teachers prepared screencasts of mini-lessons that their middle and secondary level students could view at home. The topics of their screencasts included historical issues, such World War II, the Eisenhower years, and the history of Rome. English language arts teachers prepared screencasts of book talks, author introductions, and strategies for storyboarding. Art teachers prepared screencasts about principles of design, the illustrated works of Eric Carle, and the steps for composing online comic pages by using one of the new Web 2.0 technologies. Math teachers prepared mini-lessons on the Pythagorean theorem and greatest-common-multiples. These are just some of the countless curricula topics that can be turned into screencasts for making school curricula interesting and engaging for students and their families.

Classroom teachers can produce their own screencasts to explain new content, elaborate on difficult lesson concepts, and for helping parents work with their children on nightly homework. Screencasts can be linked or posted onto school websites for students and parents to view at home. Ultimately, students can learn to create their own screencasts for other students to view.

We have successfully used screencasting with elementary students who were participating in an afterschool literacy program. These children were struggling readers and writers, but they found the digital literacies and screencasting to be motivating and engaging. Below is a sampling of the screencasts that these children prepared with the help of our graduate students who were completing their masters degrees in literacy education:

- First grade students recording retellings of books they have read with their own drawings to represent the beginning, middle, and endings of stories.
- Second grade students developing multimedia acrostic poems, which included a word and image for every letter in a targeted word (e.g., Alaska) that are then developed into Power Points, which are captured via screencasts.
- Third graders presenting images developed from an online paint program to illustrate their responses to reading and then recording their thoughts digitally using a screencasting program.
- Fourth grade students creating comics using online comic generators and then recording the characters' narrations as they zoom in on each comic panel while capturing through screencasts.

- Fifth graders developing interactive whiteboards that incorporated digital animation, video, audio that was captured and explained to the audience via screencasting.

The specific examples are not as important as the overarching point that these were struggling students, often reading 1-3 years below level, and yet they were actively engaged in purposeful development of multimedia literacy projects to showcase their knowledge through the use of screencasting.

Screencasting Tools

Screencasting has tremendous potential for teachers and students alike. Making a screencast while narrating a Power Point is an easy way to begin. The University of Houston (2009) posts an excellent resource about digital storytelling, and its website offers many examples for composing, recording, and evaluating screencasts.

There are two kinds of screencasting tools: The first involves use of Web 2.0 technology to compose and store the videos, and this is the one we recommend to classroom teachers and their students. Users of this kind of screencasting create and store their videos into online accounts in Jing, Screencast-o-matic, or other screencasting sites (e.g., Screenjelly). These online storage accounts are part of the new cloud technology, which circumvents the need for large storage space on a personal. Cloud technology is often free for basic storage space, although fees are charged when extensive space is required.

The second kind of screen-casting tool are those that convert a screencast into a QuickTime movie or Flash video that can be stored on personal computers and/or posted to a website. ScreenFlow, a paid software program, is an example of this kind of screencasting. The advantage of this kind of screencasting tool is that the actual video is stored on one's computer or disk drive, and the video can be edited and reworked again and again for many purposes. On the other hand, creating too many videos will stretch the memory capacity of most computers and an external drive might need to be purchased. One way around such challenges is to use free cloud storage for videos; we particularly like Dropbox, which provides 2Gb of space for no cost. Regardless of choice of screencasting tool (we like both), we recommend that classroom teachers learn Jing because it is free for up to five minutes of recording time and easy to learn.

Steps in Making a Screencast

The steps in preparing for screencasting are straightforward. First, prepare visual content to appear in the screencast - this is where a PowerPoint might be used. The teachers with whom we work usually prepare PowerPoint slides containing some amounts of text that are integrated with images, photos, and graphics. Second, narratives for each of the slides are rehearsed or written. Third, they create a Jing account by entering an ID and password (http://www.techsmith.com/jing/).

The actual recording process begins by opening the PowerPoint slideshow, turning on Jing's recording button, and narrating each of the slides in the show. Background music and sound effects can be added as the producer become more skillful with screencasting. There are videos posted to YouTube that may be helpful in learning more detailed information about Jing, but the specific steps for creating a Jing screencast are the following:

1. Become a member of Jing by entering an ID and password. Then download the program onto your computer. The program installs a "Sun" image onto your computer.
2. Select the Jing image (sun), click the "capture" button, and you are ready to start.
3. Then select the "capture a video" icon in the Jing window that appears on your desktop. Next a countdown timer appears on your computer screen and the recording begins!

4. When finished, click the stop button in the Jing window and save the screencast by clicking on the Screencast button. Save the URL to insert into your document or hyperlink on your website or learning management system (e.g., Blackboard, Moodle, etc.). We prefer saving to screeencast.com because the link (URL) can be selected at any time for later use. It is also possible to save the Jing screencast on the computer.

Summary

Throughout this paper we have recommended that the digital literacies be integrated into our teaching, and this should be done in K-12 and college/university classrooms. Screencasting is one of the new literacies that offers many exciting ways to engage and motivate elementary and secondary students in learning. Our work is consistent with Sylvester and Greenidge's recent findings (2009) who reported success in using digital storytelling to motivate and scaffold children's literacy learning. Screencasting presents information in both audio and visual form, and its multimodal framework may be particularly helpful at motivating and engaging students with learning difficulties. The integration of the new digital literacies into classroom teaching is needed if students are to see relevance and meaningful connections between how literacy is used in and out of school. We would like to think that whenever students from our teacher education programs are asked, "Do you Jing?," they would be able to enthusiastically say, "Yes, and we love screencasting and how it engages and motivates our students in learning!"

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