

## **Missing the Chalkboard: Using Screencasting in the Online Classroom**

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*This article describes the use of screencasting in online education courses. It defines and explores screencasting and how it can be used in online class environments. It also defines and gives a history of screencasting as well as examines how it can be used in a college online classroom. The article explains the step-by-step process for creating a screencast and the reasons why it would help online educators. Moreover, it presents how screencasting can be applied to various teaching settings and provides links to various free and fee-based online screencasting tools. This hands-on approach to education provides teachers with a creative and timely way to promote 21st-century learning in and out of the classroom.*

**KEYWORDS** *screencasting, online education, technology*

As I started teaching online courses, I found that the one thing I struggled with the most was not being able to verbally explain a process while writing on a chalkboard. Often, I found myself frustrated and limited by the online format of using text-based directions for all assignments. Basically, I missed my chalkboard. Without the ability to talk and write at the same time, I wondered, “How do I explain a process to the students?” “Is there a way I can go over information the way I used to in a traditional classroom?” In a face-to-face situation, it is easy to make notes on the board or to have the students take out a handout and examine it with them step-by-step. In an online environment, a teacher can type instructions or create handouts to explain various tasks. However, I found that many of my students struggled with

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these written instructions. I received many e-mails asking for clarification on assignments and processes, such as submitting assignments and checking grades. The students needed a different form of direction. Eventually, I began creating audio podcasts for various assignments and found that the audio helped many students. Yet, some still wanted more guidance.

Even with the addition of podcasting, I still found that the students needed more direction to complete many online tasks. I found that the visual of writing on the blackboard was the missing piece that many students desired. They desired an image to go along with voice instructions. Although I considered videotaping myself, I feared my students would be as bored with the “talking head” videos as they were with the audio podcasts. This is when I discovered screencasting. I attended a workshop on flipping the classroom where the presenter showed us how she used screencasts in her teaching. I immediately knew this was a technology that I could use in my online courses. The screencasting program allowed me to record and synchronize the computer screen with my voice narration. The technology I use is called Screencast-o-matic, which is free and easy to use. Furthermore, there are other free and paid screencasting sites, such as Camtasia, Screencast.com, Jing, and Screenr. Recently, I started using screencasting in my online courses for many functions. I use it to explain assignments, show presentations, and give feedback to students.

## USING SCREENCASTING TO ENGAGE ONLINE LEARNERS

In an online learning environment, educators work hard to engage distance learners and build a strong sense of academic community (Chena, Lamberth, & Guidry, 2010). Recently, newer technologies have been developed to assist in connecting digital learners and distance educators (Prensky, 2010). Teachers use podcasts, Skype sessions, online chat meetings, and other forms of technological communication to engage learners and establish rapport. Currently, more online educators are using screencasting programs to connect with their students. Gormely and McDermott (2011) explained,

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 often use screencasts for online teaching to introduce students to concepts and skills that they are studying. (p. 15).

*Screencasts* are video recordings of computer screen activities, including audio commentary, mouse movements, and clicks (Garner, 2008; Peterson, 2007; Virginia Commonwealth University, 2009). Peterson explained that the advantage to using a screencast is that it can visually show students what the screen should look like and where to click. Henderson and Phillips (2014)

found that when comparing the use of podcasting (audio) and screencasting (video), video files were downloaded over five times more than podcast files. However, no explanation for this preference was offered other than the suggestion that while video is widely accepted by younger learners, podcasting is considered to be too restrictive.

Equally important, screencasts are easy to prepare and update. Screencasting software programs can assist in recording actions on the computer screen and producing professional multimedia videos (Oud, 2009). Many of these programs are “either relatively cheap or free, fairly easy to learn even for beginners, and require little technical knowledge, putting online multimedia creation within the reach of most instruction librarians” (Oud, 2009; p. 165). Using these innovative screencasting tools, online educators can create various instructional materials for use in their courses. Some of the free screencasting programs include Screencast-O-Matic and Jing. Peterson (2007) rationalized that although Camtasia and Captivate come with a charge, each program offers a substantial educational discount. Naturally the fee-based software options have additional and advanced screencasting features.

## USES FOR SCREENCASTING

There are various uses for screencasting in an online learning environment (Mangieri, 2009). Research (Pang, 2009) has shown that using screencasting in the classroom has many advantages for teachers and students. Mainly, screencasting can be an effective way to connect the distance educator with the learners (Lee, Pradhan, & Dalgarno, 2008). By hearing the instructor’s voice and seeing a visual, the learner feels as if the teacher is actively involved in the teaching process. The actual screencasts can be used as teaching and learning resources, tasks, and support materials.

Teachers can create screencasts that describe a step-by-step process, explain a particular concept, or present a lesson (Ruffini, n.d.). Furthermore, teachers can employ screencasting software to conference with students on their work without having face-to-face meetings. This online conference possibility gives distance educators a way to communicate with and give feedback to students who are not in the same location. In addition, screencasting can be used to explain complicated or technical concepts to anyone with a non-technical background.

Pang (2009) asserted that the inclusion of using screencasting in online instruction could have a positive effect on learning. In fact, the use of this technology can be pedagogically equivalent to face-to-face instruction. The use of the human voice is a critical part of connecting the teacher and learners. The opportunities for using screencasting in online courses are endless;

these include (a) providing course orientations, (b) delivering instructional lectures, (c) offering feedback, and (d) encouraging student collaboration.

### Providing Course Orientations

An online teacher can create a screencast to provide a welcome and visual orientation for course members (Mangieri, 2009; Ruffini, 2012). This introduction can be especially useful for new online learners. The instructor can log into the online classroom and create a short screencast that demonstrates how students can navigate to content areas in the course, use essential course tools, and access important course resources (Kent State University, n.d.). Regardless of how experienced the students are with online learning, a short screencasted course orientation can help alleviate feelings of anxiety as well as develop confidence in the students' ability to successfully navigate the online course. Practically, it can also significantly reduce the number of troubleshooting e-mails from students to the teacher.

### Delivering Instructional Lectures

Screencasting allows the instructor the opportunity to provide direct instruction in the online classroom (Mangieri, 2009). The teacher can create a screencast that demonstrates working on a problem while narrating an explanation of the steps. Screencasting allows students to learn by example. Teachers can present a step-by-step sequence and explain the concept while reviewing the authentic material (Ruffini, n.d.). In addition, the screencast allows the student to pause or review the content to move at his/her own pace, which is not always feasible in the classroom.

### Offering Student Feedback

Research has also shown that screencasting can be a highly effective tool for giving feedback (Mangieri, 2009). It offers an online educator the means to have an asynchronous conference with a student about his/her work. The ability for the online instructor to provide narrative comments while showing corrections on the computer screen appeals to a wide variety of learning styles and preferences. With limited (or no) face-to-face time between instructor and students, Thompson and Lee (2012) struggled with the inability to explain feedback to students. They explained,

When we discovered screencasting, we began to experiment with this digital tool as an alternative form of feedback. We each employed Jing screen-recording software to record five minutes of audiovisual

commentary about a student's work. This screencasting software enabled us to save the commentary as a flash video that could be emailed or uploaded to an electronic dropbox. (para. 21)

## Supporting Student and Teacher Collaboration

Online educators know the importance of having students get involved with the learning. An important online learning opportunity occurs when students are encouraged to share their work, and screencasting can take this sharing to a new level (Mangieri, 2009). Using a screencast, students can articulate what they have learned and explain the work process. Moreover, the students who view these screencasts can learn even more from the explanations of their peers. Plus, the instructor can gain valuable formative assessment information from these screencasts. By having online students screencast, the instructors can see which students are struggling and which have solidified their knowledge and learning. Hence, screencasting can act as an effective tool for assessment and evaluation (Scott, 2010). In addition, the ability for students to download the screencast onto a laptop or a portable device for reviewing it later can provide a powerful medium for asynchronous learning (Yee & Hargis, 2010).

### GUIDELINES FOR CREATING A SCREENCAST

Once an online educator decides he/she can use a screencast in the teaching process, there are some guidelines he/she can follow (Virginia Commonwealth University, 2009). Here are some tips:

1. *Know the learning objective and what is to be presented.* Before you start creating a screencast, make sure you know what the students need to be able to do after the screencast. What is the purpose? What do you want the students to be able to do after watching the screencast? Knowing the purpose of making a screencast is important before you begin.
2. *Make it real and authentic.* Online teachers need to be aware of the validity of the screencast. For example, if it is for a software demonstration, the teacher should work with the actual software while documenting the instructions. If it is feedback, the actual project or paper should be on the screen while the teacher analyzes, assesses, and offers suggestions.
3. *Use animation, narration, and as much interactivity as possible.* Interactivity engages viewers through the demo. Online educators can record narration or insert background music to add appeal to the screencast. Moreover, some screencasting tools enable the teacher to add visual aids to the captured screens, such as callouts, shapes, annotation buttons, and

animated images. When a screencast is interesting, it will engage the viewers in a more effective way.

## DISADVANTAGES OF USING SCREENCASTING

Although there are many advantages to using screencasting, there are also some disadvantages. Time is the main challenge for many educators who choose to employ screencasting in their courses (Thompson & Lee, 2012). Instructors will need to spend a significant amount of time exploring and learning the screencasting software as well as creating the screencasts. The process can be time consuming and demanding for first-time users. Also, it can be difficult to get out of the habit of working with a hard copy or a chalkboard. Keeping to a time limit can also be a drawback for some educators who are not used to condensing their lectures. To hold the attention of the students, screencasts should be no longer than 5 minutes. Nevertheless, the time limit could actually help instructors to focus on the major issues rather than on minor problems.

Another issue is correlated to the recording environment (Thompson & Lee, 2012). Teachers need to secure a quiet place to record the videos, which can be a challenge in a noisy work environment. Thompson and Lee (2012) suggested using noise-canceling headsets, which would allow the instructor to work in any environment while using this method.

## SCREENCASTING TOOLS

Once an online educator is ready to create a screencast, he/she must choose a program that works (Gormely & McDermott, 2011; Walsh, 2010). The most current screencasting tools use Web 2.0 technology to compose and store videos. The online instructor can create and store his/her screencast using one of these online accounts. These online storage accounts are part of the new cloud technology, which eliminates the need for large storage space on a computer or network. To explore some of the most popular screencasting tools, visit the following Web sites:

- Jing: <http://www.jingproject.com/>;
- Screencast-O-Matic: <http://screencast-o-matic.com/>;
- Screenr: <http://www.screenr.com/>;
- Free Screencast: <http://freescreencast.com/>;
- ScreenToaster: <http://www.screentoaster.com/>;
- ScreenCastle: <http://screencastle.com/>;
- Camtasia: [http://download.cnet.com/Camtasia-Studio/3000-13633\\_4-10665109.html](http://download.cnet.com/Camtasia-Studio/3000-13633_4-10665109.html).

## CONCLUSION

In conclusion, there can be days that I miss the chalkboard; yet, they are lessening. Screencasting offers an alternative method to the traditional method that I used to use in my face-to-face classes, one that I plan to continue using. Over the past several semesters, I have created many screencasted mini-lectures and demonstrations that I find myself utilizing over and over again. I even find that I can use some screencasts in multiple sections and courses if created with a general theme (e.g., submitting assignments, checking grades, and discussion board hints). Additionally, feedback to students has also been given using screencasts. In fact, I have gotten many positive reviews from students when they can see and hear the instructor “go over” their work with them in an online environment. All in all, the addition of screencasts is an admirable option to the old-fashioned chalkboard.

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