

# Screencasting: Informing Students, Shaping Instruction

by Guy Stieglitz

HCT Fujairah Women's College

## Abstract

*Screencasting technology has significantly impacted the field of education as an effective, easy-to-use technology for delivering direct instruction in a mobile learning environment. However, this technology can have a deeper impact on the learning process. After discussing the basics of screencasting and its role as a tool for flipped instruction, the author will discuss how screencasting can be used as a formative assessment tool for both reading and writing.*

**Keywords:** Screencasting, educational technology, formative assessment, reading, writing feedback.

## Introduction

As Education makes the shift from 2.0 to 3.0, using technology to connect with students outside of class parameters will shift from the category of good pedagogy to expected pedagogy. In Education 3.0, learning is fully mobilized, ambient and available, placing the student at the centre of learning by offering a more flexible learning environment (Heick, 2013). Although screencasting has proven to be an effective technology in this regard, it can also be used as an effective tool to shape instruction and offer opportunities for feedback during the learning process.

## Overview of Screencasting

Screencasters are simple tools that turn the computer (or iPad) into a recording device, giving the teacher the ability to record every aspect of the computer screen to deliver instruction (Yuen, 2007) and create a visual and aural experience for the student. There are several free and easy-to-use screencasting tools available on the web. For example, *Screen Cast-O-matic* ([www.screencast-O-matic.com](http://www.screencast-O-matic.com)) is popular for good reason; it is simple to use and effective (See Figures 1-3, Appendix A). *Jing* is another free and easy-to-use device for capturing the screen and sharing tutorials. When using *Jing*, a teacher can choose a default social media to share the URL, which makes the creation and sharing of a video almost effortless (See Figure 5, Appendix A). The only possible drawback with *Jing* is that videos can be no longer than five minutes. Finally, *screenr* is another effective screencasting tool that makes it easy to share videos of up to five minutes.

One of the key features of a good screencasting tool is the ease of sharing; once a video is created, the link should be available immediately to share with students. If using the iPad as a screencasting tool, *Explain Everything* is also popular as it is simple to create and share videos. There are a variety of screen capture technologies available for teachers and discussing the details of each would be outside the scope of this article. However, when choosing a screencasting technology that is appealing to you, it is very helpful to search it on *YouTube*, where you can see a video that demonstrates the different functions. As always, when using a new technology, it is very important to take a hands-on, trial-and-error approach.

## Flipping the classroom

This ability to create specifically tailored learning videos has had a major impact on the teaching field. Websites like *YouTube* and *eHow* host a plethora of instructional videos that have changed the way we access instruction. In fact, screencasting has led to a major shift in the way teachers structure learning in many educational institutions (Bergmann & Sams, 2012). By flipping instruction, also known as reversing instruction, students learn by watching teacher-created videos of about 8-10 minutes in length outside of class time. The students watch the video, take notes and pause as necessary to learn the material, which could vary from basic English grammar to advanced calculus. Then, during class time, this learning is followed up with activities that build on the instructional videos (2012). This model has other important benefits, for example, individualizing

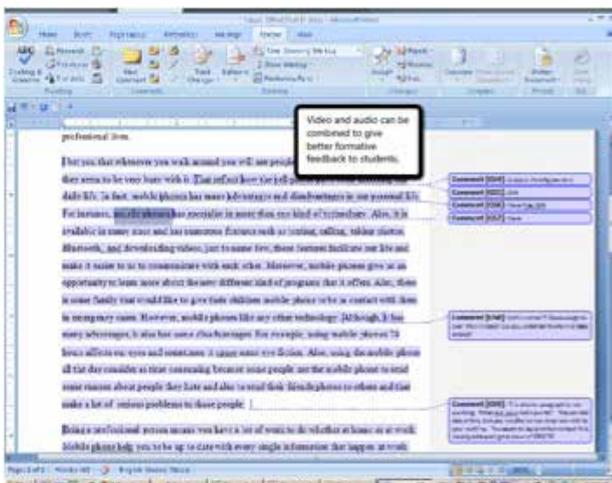
instruction, helping students when they are absent and keeping parents more aware of what their children are learning (Alvarez, 2012).

### Writingcasts

Giving helpful feedback can be very motivating for writers (Nation, 2009). The combined video and audio function of screencasting gives the teacher a chance to create highly individualized feedback, discussing the discrete points of grammar to the overall format of the essay. This video feedback can be very important when holding individual writing conferences is not feasible. For online courses, this type of video feedback could be essential as face-to-face meetings with the teacher are typically not possible. Another important advantage of using the video for feedback is that the teacher can encourage the students by using a positive tone of voice as the feedback is given. Sometimes, a teacher's written comments on paper can seem harsh when taken out of context, which can demoralize the student. When recording the video, the teacher can easily personalize the feedback by referring to the student by name and being as encouraging as possible. The feedback, as with any screencast, can be easily shared, accessed and repeated as necessary. This use of screencasting to give feedback to writers works best with *Microsoft Word* and the "Review" feature. To keep the videos an acceptable length, the teacher should first read the essay, make the written comments and then record the screen to explain the comments and give instruction as necessary.

Figure 1 shows a screenshot of feedback for a student essay.

One of the most challenging aspects of teaching writing is the role of grammatical instruction. Students



often understand grammatical concepts when used in isolation but make mistakes when applying them in their writing. For instance, the use of transition phrases and conjunctions often cause difficulty for students. To create an opportunity for students to reflect on how they

were using these connectors, I asked them to create a screencast explaining how the connectors functioned in their persuasive essays. This required the students to explain in their own words how the connectors were used. After watching the student-created videos, I was able to follow up with specific instruction to further guide them.

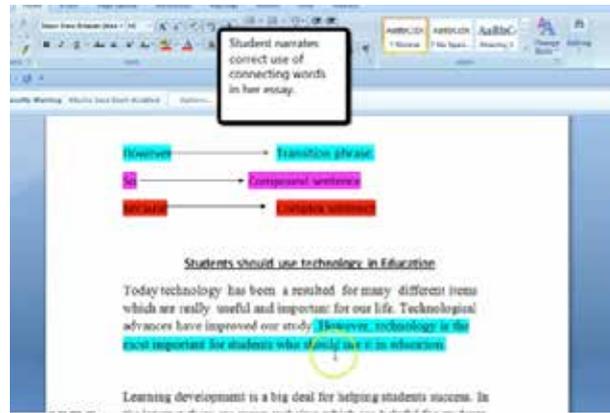


Figure 2 shows a screenshot of a student explaining how connectors were used in her essay.

### Readingcasts

Visualizing is an important reading comprehension strategy; good readers create pictures in their head as they read (Manning, 2002) and readingcasts can be used for this purpose. To create this type of screencast, or readingcast, students read a text for global comprehension and create a *Microsoft Word* document with images from the internet that represent key concepts in the text. After this, they record their explanation using a screencaster, requiring them to make connections between the images on the page and the text. An activity like this not only gives the students a chance to articulate their understanding of a text in a more holistic way, but it also offers a needed break from more traditional comprehension checks like multiple-choice and true-false questions.



Figure 3 shows a readingcast about e-waste in China.

Another important aspect of good reading is using key words to create meaning. Good readers recognize key

words and use them to comprehend the text (Vasquez, Hansen & Smith, 2010). With this important skill in mind, students can also use screencasting technology to demonstrate comprehension of a text. For this type of readingcast, the students first copy and paste the article into a *Microsoft Word* document then highlight and explain the key words needed to make meaning of the text. Watching a student video can be very informative as the student explains the relationships between key words, images and the meaning of a text.



Figure 4 shows a readingcast based on the use of key words.

Dealing with challenging academic texts with many unknown words presents a significant challenge for EFL students, and they need reading strategies to help guide them through the process of creating meaning. Alsheikh & Mokhtari (2011) concluded in a study that raising the awareness of reading strategies through explicit instruction is helpful for EFL students. First, readingcasts can be used by the teacher to model proper use of reading strategies, such as activating schema, making predictions, monitoring comprehension, paraphrasing and summarizing a text. This means the teacher creates a readingcast that demonstrates the use of reading strategies to construct meaning. After the students watch the teacher-created model, they should work together to notice and discuss the strategies used in the video.

Did the reader use the title and images to recall background information?
Did the reader make a prediction?
Did the reader continuously check comprehension?
Did the reader paraphrase information to facilitate comprehension?
Did the reader reread as necessary?
How did the reader figure out the unknown words?
Were the vocabulary guesses correct?
What information did the reader skip over?
Do you agree that the information was not critical for comprehension?
Did the reader breakdown complex sentences effectively?
Did the reader check his predictions against the content of the text?

Figure 5 shows the basic reading strategies for students to notice when watching the teacher-created video.

After ample time discussing the strategies used and

drawing attention to the role of reading strategies, students are ready to make their own readingcast. When choosing this type of readingcast, it is important to make sure the students receive the text just before they read it and hand in the video within specific time frames. This is a critical part of this type of readingcast; the reading and narration of the text should be in real time as to get a better view of how they construct meaning. In addition, it is very important that the students understand that this type of readingcast is not an assessment; it is a tool for insight and reflection. The chosen text for an activity like this should be around 300 words to get a large enough sample of how they construct meaning while keeping the video a manageable length of 8-10 minutes.

A readingcast like this creates a rich opportunity for formative feedback. For example, after watching some of the readingcasts, it was clear that some of the students were not attempting to define words in context. They simply marked the words as unknown and continued. This creates the opportunity for further instruction based on an identifiable need. In addition, it was clear that several students did not make predictions about the content of the text before reading. The readingcasts also offered opportunities to reinforce good reading habits. Several of the students demonstrated the ability to activate background knowledge, make and confirm predictions, paraphrase for comprehension, ignore non-essential information, and define words in context. For example, one student came across the words 'asbestos' and 'polyurethane' and successfully concluded that they were generally bad for the environment. This type of reading behaviour is highly desirable because we want students to maintain the flow of reading as much as possible, not stop and look up words in the dictionary. In this example, the reader does not need to know the specific details of asbestos and polyurethane; she simply needs to see that these materials are not good for the environment.

Although reading a text in real time was implemented to gain insight into the students' use of reading strategies, it provided insight into other areas of students' reading as well. For example, it provided understanding of their overall fluency of reading and word recognition skills, which both correlate with reading comprehension (Spencer, 2008). After listening and watching the students read, it was clear that some students had difficulties pronouncing basic words, and a small number of students read word-by-word, not in chunks and phrases. A readingcast like this can give the teacher a deeper insight into the way students read, which can not only shape future instruction, but also offer opportunities for more individualized reading instruction.

## Conclusions

Simple and versatile, screencasting technology has a clear place in education as both a tool for direct instruction and as a tool for guiding and shaping the learning process. Of course, the use of screencasting should be used in conjunction with face-to-face techniques such as writing conferences, peer editing and one-on-one reading interviews whenever feasible.

## References

Alsheikh, N. O., & Mokhtari, K. (2011). An examination of the metacognitive reading strategies used by native speakers of Arabic when reading in English and Arabic. *English Language Teaching*, 4(2), 151-160. Retrieved from <http://search.proquest.com/docview/876041679?accountid=1215>

Alvarez, B. (2012). Flipping the Classroom: Homework in Class, Lessons at Home. *Education Digest: Essential Readings Condensed For Quick Review*, 77(8), 18-21.

Bergmann, J. and Sams, A. (2012). Flip your classroom. Eugene, OR: International Society for Technology in Education.

Heick, J. (03/23/2013). 8 Characteristics Of Education 3.0. *TeachThought*, [web log] Retrieved from: <http://www.TeachThought.com/learning/8-characteristics-of-education30/> [Accessed: 28 May 2013].

Manning, M. (2002). Visualizing when reading. *Teaching Pre K - 8*, 32(8), 89-90. Retrieved from <http://search.proquest.com/docview/231932391?accountid=1215>

Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. New York: Routledge.

Spencer, S. A. (2008). *The effects of a fluency intervention program on the reading outcomes of middle school students with severe reading disabilities*. University of Southern California. *ProQuest Dissertations and Theses*, , 170-n/a. Retrieved from <http://search.proquest.com/docview/250820721?accountid=1215>. (250820721).

Yuen, S. (2004). Screen-Capture Based Video: A Powerful Teaching Tool. In R. Ferdig et al. (Eds.), *Proceedings of Society for Information Technology & Teacher Education International Conference 2004* (pp. 2779-2780). Chesapeake, VA: AACE.

Vasquez, A., Hansen, A. & Smith, P. (2010). *Teaching Language Arts to English Language Learners*. New York : Routledge.

## Appendix A

### Getting Started

Step 1: Go to <http://www.screencast-O-matic.com>

Step 2: Sign up for a free membership.



Figure 1 shows the homepage.

Step 3: Design a document or *Microsoft PowerPoint* presentation that you want your students to see during the video and press record. After pressing record, it will be important to select the dimensions of the screen that you want the students to see. Once these dimensions are set, press record again and narrate the tutorial.

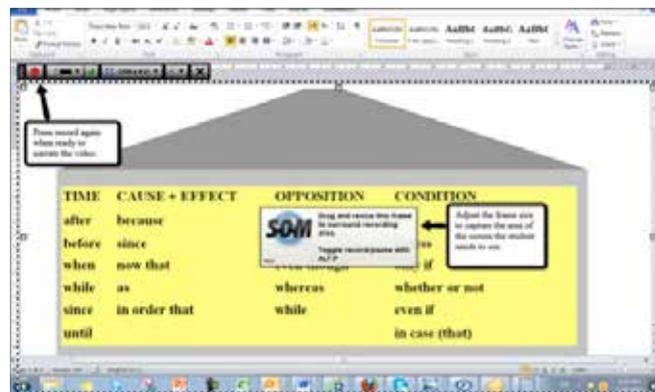


Figure 2 shows a teacher-created document ready for recording.

Step 4:

When finished with the video, there are three basic options. The first option is to publish to the *Screencast-O-matic* website. In this case, the video and URL will be stored on the website. The video can be downloaded as an MP3 file or shared with the link via email, *YouTube*, *Twitter*, *Facebook*, *Wikis* or course management systems like *Edmodo*.

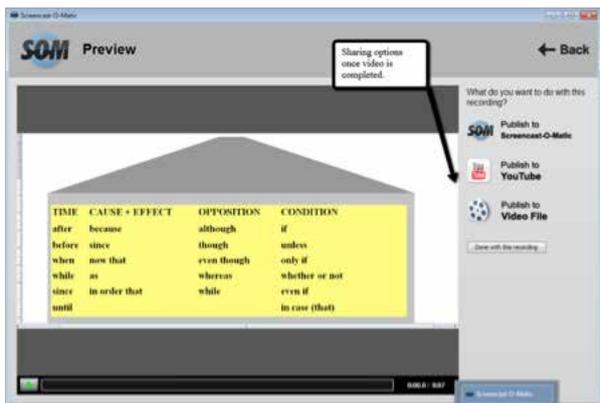


Figure 3 shows the sharing options.

Figure 5 shows Jing's social media choices.

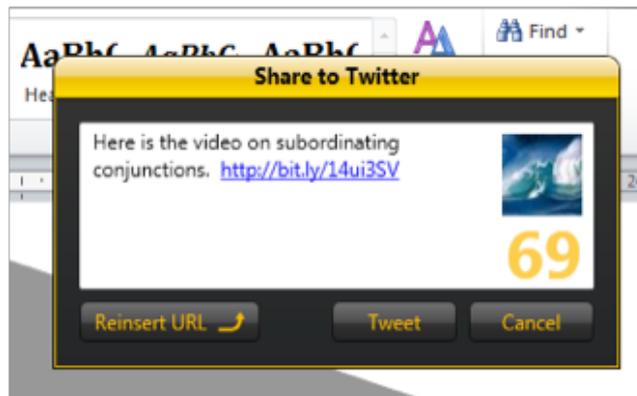


Figure 6 shows Twitter as the default social media for easy sharing.

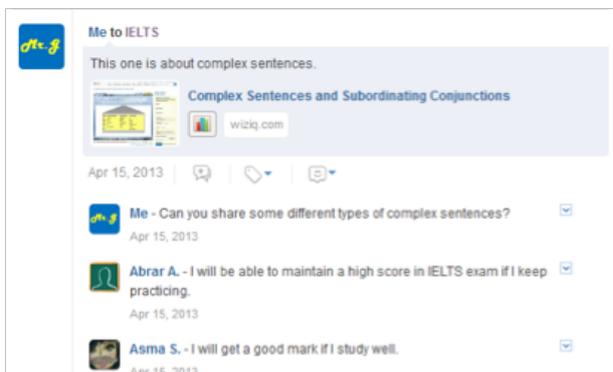


Figure 4 shows video shared via Edmodo.

