**Evaluating CamStudio and Wink Screen Capture Programs for Library Instruction**

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**Introduction**

To explain the various features of electronic databases, library websites, and online resources to their patrons, academic librarians are increasingly using screen capture programs to create presentations. These programs range from free software such as *CamStudio, Jing,* and *Wink* to commercial software such as *Adobe Captivate* and *Camtasia.* Though these commercial products are “widely used” (Clark 75) for presentations, their full versions cost hundreds of dollars. With the goal of aiding budget-conscious academic librarians, this study will evaluate the freely available *CamStudio* and *Wink* screen captureprograms. In addition to offering audio soundtracks for the video, these programs provide the option for text captions and therefore meet criteria for Americans with Disabilities Act compliancy. Their video presentations consist of a series of captured frames of video activity, which allow for greater detail, efficiency, and ease of editing. Both programs also employ hotkey combinations to control the recording process and allow for sections of the screen or the entire screen to be captured. Text captions and other illustrative shapes are customizable in both programs and may be edited, resized, or made transparent. *CamStudio* and *Wink* have important differences in their functionality, however, that must also be considered. Because *CamStudio* requires a third party editing program (“RenderSoft CamStudio” 3) and only adds text boxes and shapes after the recording process (“CamStudio” 24-25), the program is in many respects less convenient than *Wink*. *Wink* has the ability, alternately, to edit its own frames (Madsen, Worthington, and Kumar 16-26) and to add text and shapes during the editing process (Madsen, Worthington, and Kumar 18-23). This allows a staff of busy librarians to make video demonstrations more quickly and efficiently. The main advantage of *CamStudio* is its option to add content from a webcam (“CamStudio” 25-27), and this is useful primarily for librarians who work in a media center or who use webcam technology on a regular basis. For most librarians, *Wink* is the more convenient and user-friendly alterative for making video demonstrations.

**Literature Review**

The body of literature on screencast software in libraries reflects this need for accessibility, efficiency, and speed. In “From Cameras to Camtasia: Streaming Media Without the Stress” (2004), Christopher Cox describes his task of updating a series of streaming videos for Worcester Polytechnic Institute’s Gordon Library (Cox 193-194). He finds the easiest way to do this is with Camtasia, which produces screencasts of quality equal to streaming video for less time and money (Cox 194). These screencast videos are easier to implement than live video and also aid in student achievement. Screencasts may be watched multiple times by students in many different locations and may also be indexed (Cox 194). The equipment necessary to record with Camtasia is also cheaper than the equipment needed for streaming video (Cox 197). Cox notes that Camtasia is highly versatile, with many potential uses in libraries such as recording reference interviews, summarizing coursework, and producing interactive video tours (Cox 190). He ultimately decides to use Camtasia because the program is faster to implement and more cost effective than live video (Cox 200).

In “Designing for Experts: How Scholars Approach an Academic Library Website” (2004), Thura Mack, Maribeth Manoff, Tamara J. Miller, and Anthony D. Smith examine the use of the University of Tennessee Libraries website by knowledgeable and practiced users (Mack, Manoff, Miller, and Smith 16). They use Camtasia to collect their test results and state that the program “is relatively easy to install and requires a minimal hardware configuration to operate effectively” (Mack, Manoff, Miller, and Smith 17). In this experiment, Camtasia software and human witnesses record the speed and success rate of test subjects as they complete a series of usability tests (Mack, Manoff, Miller, and Smith 18). According to the authors, screen capture software allows for “an unobtrusive method for creating a permanent record of each session in a level of detail that the human observer could not accomplish” (Mack, Manoff, Miller, and Smith 22). In addition to being an objective source of information, the authors posit, Camtasia software provides an efficient and straightforward means of recording online activity.

“Using screen capture software for website usability and redesign buy-in” addresses key concerns that usability committees face as they propose changes for a website to achieve “organizational buy-in” (Goodwin 610). Susan Goodwin argues that screen capture programs such as Camtasia help to achieve this goal through data collection and the communication of test results (Goodwin 610). Such programs are able to record “usability sessions” (Goodwin 615) and “first-hand testimonials” (Goodwin 615) to achieve support for the website redesign or “buy-in.” During the study at Texas A & M University Libraries, individuals performed various tasks on the TAMU website (Goodwin 615). Camtasia is useful for such studies, as it records and saves audio and visual data to a single file that is conveniently accessed and “available for reviewing by the UC and/or library staff” (Goodwin 616). Providing such a perspective on a usability study, according to Goodwin, leads to a greater sense of understanding by the participants and “help[s] them to better explain web site changes to patrons” (Goodwin 620). Goodwin explains that the features of Camtasia allow for recordings to be “effortlessly transferred (via shared folders on the staff server, intranet, distribution by email, CDs etc.)” (Goodwin 616) in order to accomplish this goal. Open and convenient use of the videos, made possible through Camtasia’s accessible design, allows library staff to more easily learn, share, and teach the new functions of the website. The concern with usability in both the Goodwin and the Mack, Manoff, Miller, and Smith articles demonstrates what an important concept this is for librarians. Though these authors are concerned with the usability of their respective websites, they stress that the software used to record their experiments also be user-friendly.

In their review of Adobe Captivate and Camtasia in the *Journal of the Medical Library Association*, John D. Clark and Qinghua Kou write that these programs are “two of the most widely used screen capture applications” (Clark and Kou 75) for generating online presentations and tutorials. The authors note that both programs are simple for beginners to learn but also have significant differences in their format and features (Clark and Kou 75). Camtasia, they write, is the better option for those familiar with video applications. Captivate is less difficult to edit but, in some cases, generates presentations with a great number of slides and a large file size (Clark and Kou 78). For this reason, the authors encourage users to “consider the lowest speed connection” (Clark and Kou 78) for running the presentation. Clark and Kou effectively compare these two programs against the criteria of cost, format, and usability, a method that informs this study of CamStudio and Wink.

Tim Wales and Penny Robertson further stress accessibility, efficiency, and speed in “Captivating Open University students with online literature search tutorials created using screen capture software” (2008). In this study, the authors describe the creation of an online tutorial for use by information and communication technology (ICT) students (Wales and Robertson 365). After some consideration, they decide to use Adobe Captivate to make a tutorial on search strategies and the use of databases such as Business Source Premier (Wales and Robertson 371). However, they also list several other programs with similar features, including the freeware applications CamStudio and Wink that are the focus of this study (Wales and Robertson 374-375). For other librarians making tutorials, Wales and Robertson recommend that librarians rather than staff members develop the content, that storyboards be created beforehand, and that templates be used to save time (Wales and Robertson 371-372). They encourage the inclusion of quizzes and the division of tutorials into simple, discrete sections to facilitate learning (Wales and Robertson 377). They also encourage librarians to make “very short and simple demonstrations” (Wales and Robertson 377) that are both more user-friendly for patrons and less time-consuming for employees (Wales and Robertson 377-378). Wales and Robertson ultimately endorse making screencasts that are useful for many purposes, time-efficient, and easily viewed and understood by users.

**Analysis**

The *CamStudio* and *Wink* screencast programsboth offer a range of features to their users that are quick, reliable, and clear-cut. They also have many features in common, such as the delivery of video content in the form of frames. In the “Wink 2.0 User Guide,” Bent Moller Madsen, Linda Worthington, and Satish Kumar note several advantages of working in this format. “When editing the file afterwards there are fewer frames to work with and most frames are important,” they write. “The resulting flash file will also be smaller because there are fewer frames in the presentation” (Madsen, Worthington, and Kumar 6). If the user chooses to take a series of individual screenshots in *Wink* using a hotkey, in other words, the file size will be smaller than for a continuous video. However, if the user takes a greater number of automatic screenshots, the file size will be much larger. For this reason, *CamStudio* and *Wink* offer ways to compress the size of these larger files. *CamStudio* allows the user to adjust “the area of the region being captured,” “the (input) rate of which video frames are captured,” and “the compressor and compression quality [. . .] essentially making a tradeoff between picture quality and file size” (“CamStudio” 29) in order to generate smaller and faster files. The flash file generated in *Wink* is adjustable in a similar way, “through the number of colours used and the chosen frame rate of the flash file” (Madsen, Worthington, and Kumar 7). *Wink* also allows the user to change the capture area from the entire screen to “a specific window or part of the screen (rectangle)” (Madsen, Worthington, and Kumar 7) and further reduce file size.

*CamStudio* and *Wink* also allow for audio tracks and text captions to be added to each recording. In each program, the text captions, accompanying text, and various other shapes may be customized in different ways. *CamStudio* allows the user to select various shapes from a menu, add text to shapes, edit and resize shapes, and upload shapes externally (“CamStudio” 19-23). There is also an option to add a “cutout/transparent region” (“CamStudio” 20) to each shape to show information in the background. *Wink* has similar features, offering a range of shapes or “callouts” (Madsen, Worthington, and Kumar 8) that may be selected from a menu and edited for shape, size, text, color, and transparency (Madsen, Worthington, and Kumar 17-22). New callouts may also be created entirely by the user (Madsen, Worthington, and Kumar 8), and other shapes and images may be uploaded externally (Madsen, Worthington, and Kumar 17). *Wink* also allows users to add a customized image to the presentation that may be a “name, logo, copyright messages etc. of the author and/or company” (Madsen, Worthington, and Kumar 7).

Because of these commonalities in the audio, text, and image features of *CamStudio* and *Wink*, the end products of both programs resemble each other in many ways. The crucial differences between the programs, however, lie in how these features are specifically implemented. *CamStudio* offers many options for images and text, but these effects may only be added during recording and in a series of prearranged layouts. Each layout is an “arrangement of one or more shapes on your desktop” (“CamStudio” 24) that is individually created by the user. “You usually prepare all your layouts before recording starts,” the *CamStudio* manual instructs. “When you start recording, you will click a hotkey / shortcut key to cycle through the layouts to display the appropriate captions at the proper time” (“CamStudio” 24). This is a very painstaking process, however, that requires a great deal of time and forethought. If a single error is made while recording the video, the user must start the process all over again. This method is necessary in *CamStudio* because the program is unable to edit presentations after recording in any way. Instead, the user must “edit the output of CamStudio with a third party video editor” (“CamStudio” 3). This is also why audio content in *CamStudio* may only be added “while it is capturing video” (“CamStudio” 10). *Wink*, conversely, provides for the editing of its own frames and the addition of material after the recording process. Users may add audio, images, shapes, textboxes, and interactive buttons during this editing stage (Madsen, Worthington, and Kumar 18-23). This makes the addition of these features and the editing process in general faster, more precise, and less labor-intensive for the user.

**Conclusion**

*CamStudio* does have features that make the program worth considering for a specific group of users. The most valuable of these features is the option for webcam annotations, which allows users to “record [webcam] content along with other screen content when the webcam window is inside your recording region” (“CamStudio” 25). The webcam window, or “Video Annotations window” (“CamStudio” 25), is a feature of the *CamStudio* program. The option to use AVI format and to convert “most AVI files created by third party products” (“CamStudio” 30) to SWF is also useful. For certain individuals who routinely use webcam technology or who work in a media center, these features are very important. However, for the vast majority of librarians, accessibility, efficiency, and speed come before any one group of features. When Tim Wales and Penny Robertson recommend only making brief and basic tutorials, they have the considerable time commitments of librarians and library staff in mind. “Will library staff have the time to get to grips with the software?” (Wales and Robertson 377), they ask. “Will the expertise end up in only a few staff?” (Wales and Robertson 377). These are legitimate concerns that, at the very least, demand software that is user-friendly and that creates its end product quickly. After a period of training with *Wink*, library staff will be rewarded with a program that offers many of the same visual, textual, and editing features as commercial software. This added functionality will ultimately make the task of creating presentations easier and faster for librarians. These added features will also improve service to patrons. Unlike many other freeware programs such as *Jing*, *Wink* achieves ADA compliancy and is able to accommodate a more diverse group of patrons. *Wink* screen capture softwarerepresents the best balance of functionality, ease of use, and accessibility for both librarians and patrons.

Works Cited

Clark, John D. and Qinghua Kou. “Captivate (Product/service evaluation).” *Journal of the*

*Medical Library Association* 96. 1 (2008): 75-78. *Academic OneFile.* Web. 19 July 2009.

Cox, Christopher. “From Cameras to Camtasia: Streaming Media Without the Stress.” *Internet*

*Reference Services Quarterly* 9. 3/4 (2004): 193-200. Print.

Goodwin, Susan. “Using screen capture software for web site usability and redesign buy-in.”

*Library Hi Tech* 23. 4 (2005): 610-621. *Emerald Full Text.* Web. 19 July 2009.

Mack, Thura, Maribeth Manoff, Tamara J. Miller, and Anthony D. Smith. “Designing for

Experts: How Scholars Approach an Academic Library Web Site.” *Information Technology and Libraries* 23. 1 (2004): 16-22. *Library Literature & Information Science Full Text.* Web. 19 July 2009.

Madsen, Bent Moller, Linda Worthington, and Satish Kumar. “Wink 2.0 User Guide.” 2006.

PDF file.

“RenderSoft CamStudio.” *CamStudio – Free Screen Recording Software.* 2 Mar. 2009. Adobe

Systems Incorporated. 6 Feb. 2009. <http://camstudio.org/>.

Wales, Tim and Penny Robertson. “Captivating Open University students with online literature

search tutorials created using screen capture software.” *Program: electronic library and*

*information systems* 42. 4 (2008): 365-381. *Emerald Full Text.* Web. 19 July 2009.