

Creating a Screencast for Distance Library Services: A Pilot Project

by Anne J. Haynes & Jennifer Laherty

Screencasts are recordings of a video of screen activities, including mouse movements and clicks. An audio commentary can be added to the video to explain the process" (Peterson, 2007, p. 3).

The Project

One of the greatest challenges facing distance students, or students taking courses away from campus, is locating and learning how to use online library resources and services. In an effort to assist Indiana University, Bloomington (IUB) distance students, a pilot project was initiated at the IUB Libraries Reference Department in 2008. This project developed a short screencast and incorporated it into the Distance Education (DE) library services Web page, page 47 (Figure. 1). The goal was to instruct distance students in getting started using the Libraries' resources. The screencast is meant to supplement what is already explained on the Web site, and it is one more way for people who are more visually-oriented learners to access the information. The screencast we created provides basic information for becoming a distance library user.

The Need

The Association of College and Research Libraries' (ACRL) Standards for Distance Learning Library Services state that: "Academic libraries must ... meet the information and research needs of all [their] constituents, wherever they may be" (Association of College & Research Libraries, 2008, Executive Summary, para. 1). The IUB Libraries uphold the responsibility of providing library resources in support of courses and research, even when students are living elsewhere in Indiana, in other states or abroad. Most of our databases are available online on and off campus to IUB students, faculty and staff by password authentication. Some statewide networks also provide databases to their citizens through public or state libraries. Indiana's INSPIRE databases are one such example. For many years, IUB distance students have had document and book delivery services available through our Libraries, and these services have become even more seamless, with scanning and electronic delivery increasingly

available. We also offer reference services at a distance through the "Ask a Librarian" services via e-mail, instant messaging, and a toll-free phone number.

The latest frontier of services to be explored for distance library users to be explored, however, is that of library instruction, or information literacy. It is, for technical reasons, the most challenging of our services to make available completely online. Library instruction has been integrated into online and televised distance courses for some time. Librarians have become "embedded" into their institutional courseware when that is practical, but that is not always done. The question then is: How can we make instruction available to individual students, 24/7, on the Libraries' Web site? Increasingly, this is being done in libraries by posting videos so that a student can simply click on a link and watch a brief tutorial on a specific topic. This is what we intended with our screencast project.

Research tells us that few people are aware that their libraries have online books and journals (De Rosa, 2005, Conclusion section) and that even many college students are not aware of what is available on their libraries' Web sites (DeRosa, 2006, Conclusion section). Even if they use their libraries' Web sites, they may need help in navigating them to discover the many possibilities available to them. Instructors also need to be made aware that their distance students have library resources they can access easily. Instructors of distance courses at IUB who do not use online courseware have told us the reason they have not given assignments that require use of the library is that they did not realize how easy it was for their students to access its resources and services. When shown our screencast, an instructor in the School of Continuing Studies said she was thrilled about its potential for helping her students.

The prevalence of videos on YouTube and other freely available Web sites has shown us how effective short videos can be in demonstrating a technique, product, or navigation of a Web site. Librarians are being creative in offering very short (one- to three-minute) videos or interactive tutorials on Web sites to make libraries much more accessible (Oud, 2009).

How We Did It

We worked with another staff member in the Reference Department and some colleagues in our Libraries' IT department to create an introductory screencast demonstrating how a new student can register as a distance library user and begin to use our library services. Anne attended a workshop on making screencasts, presented by IUB's Teaching and Learning Technologies Center (TLTC). In the workshop, CamStudio OPEN SOURCE software (<http://camstudio.org>) was demonstrated by a business professor who had used it successfully in his classes to have the students create short videos. CamStudio OPEN SOURCE is freeware, and it was expedient to use freeware since our library had not yet purchased Camtasia Studio, the full-blown version of that software. To prove the usefulness of screencasting software we decided to create a pilot video to demonstrate. A TLTC consultant initially helped us learn how to use CamStudio (version 2.0).

A few simple tools were required to complete this project. We installed CamStudio on a computer in a small room with a door to keep external noise out. We used headphones with an attached microphone for recording voice. Speakers were necessary to play back the recording. QuickTime (see Appendix 1) was needed to view the screencast. For those who would like to try this, we've included the hardware and software requirements (Appendix 1) and the settings we used in CamStudio (Appendix 2).

Anne wrote a script for the screencast and asked one of our instruction librarians to review it and advise us as someone who provides instruction mainly to those new to the library. Our tendency was to be thorough and detailed in the script, and the original script was about five minutes long. Our colleague recommended shortening it to three minutes or less, as it is more effective in keeping a person's interest to have several short screencasts than one that is too long. This was a surprise to us until we started looking at other, similar library screencasts and consulted the library literature on this subject. We found that the more effective ones were generally very short, often created in series. We cut ours down to about two minutes.

To record the screencast, Anne navigated our Web site and pointed to each screen while a colleague read the script in a natural speaking voice. After recording, we played it back. We did no editing, because it was not needed. This kind of recording need not be perfect; in fact, if it is too much like a performance it would sound too formal and students might not identify with

it. If a more polished, formal video is desired, Adobe Captivate (<http://www.adobe.com/products/captivate/?promoid=DJDVX>) will allow editing.

The file size we generated was considered too large to be streamed over the Web by our Web content support staff. It was 45MB and they preferred a file size around 10MB, which would be optimal for streaming over the Internet for users on a dial-up system. We also were not aware at the time of Camstudio's ability to record the file in the Adobe Flash format, .swf. Instead, Camstudio produced an .avi file that we were having difficulty playing on a variety of free media players. We needed to investigate a way to compress the file size and then migrate the file type to something more widely accepted by media players. We tried MediaCoder, version 0.7.0.4399 (<http://mediacoder.sourceforge.net/>), a free online tool to accomplish this task, but did so without success. We sought the expertise of university-level media support staff who used a licensed program called Agility, version 2G from Anystream (<http://www.anystream.com/>). They also recommended another licensed software program called Sorensen Squeeze by Sorensen Media (<http://www.sorensenmedia.com/>). The file was compressed to about 6MB and converted to a .mov file, which can be accessed using QuickTime. Since these events, a good article has been written by Adam Pash comparing media converters (Pash, 2008). For a list of free online media players, see Appendix 3.

We placed the file in the Libraries' Web content management system with a link from the DE Library Services Web site. We made the screencast file available on a Web page using embedded HTML code so that the video would launch when the page was viewed if the users had Quicktime installed on their machine. For users who do not have Quicktime installed on their machines, we point them to where they can download the software. We also included a text file of the script on this Web site.

At Indiana University, faculty have two additional options for publishing screencasts, podcasts (digital recordings using audio but not video), and the like: *IU on iTunes U* (<http://itunes.iu.edu/>) and IU's own podcast site, (<http://podcast.iu.edu/>). Subsequent to publishing the DE screencast via the Libraries' Web site, the Libraries' Web Content Team discussed whether it would be better to have these files reside at one of these other locations instead of using storage on its servers. The consensus was to use the IU Podcasts site. Chief among the reasons for the decision was that the Libraries' materials would have additional exposure for being found and used. Librarians developing instructional

media files could then link to the IU Podcast site from their library Web pages.

Use Statistics

The use statistics for the DE main page as well as the DE screencast page for the period March 1, 2008—May 11, 2009, were as follows:

- The DE page had 2,623 pageviews and 1,632 unique pageviews.
- The DE screencast page had 106 pageviews and 81 unique pageviews.

These data were provided by Google Analytics (<http://www.google.com/analytics/>), which we run for the whole Libraries' site. Google Analytics defines pageviews and unique pageviews as such:

A *pageview* is defined as a view of a page on your site that is being tracked by the Analytics tracking code. If a visitor hits reload after reaching the page, this will be counted as an additional pageview. If a user navigates to a different page and then returns to the original page, a second pageview will be recorded as well.

A *unique pageview*, as seen in the Top Content report, aggregates pageviews that are generated by the same user during the same session. A unique pageview represents the number of sessions during which that page was viewed one or more times ("What's the difference," 2009, paras. 9, 10).

Moving Forward

After our experiment with creating and posting the DE screencast, the IUB Libraries' Instruction Committee discussed creating and posting more such screencasts and podcasts for user instruction and orientation on the Libraries' Web site. The discussions resulted in a group of librarians applying for a campus-wide grant, the Indiana University Faculty Podcasting Initiative, which was designed to support faculty efforts in using podcasting in their teaching. The grant proposal was successful, and through it the Libraries were able to purchase hardware and software for a wider group to create screencasts and podcasts to help users interpret library resources and services. Several library staff members are now working on projects. Future screencasts to be created include ones for demonstrating database searching and searching our Libraries' catalog, IUCAT. Library staff members are also learning to use other screencasting software products to see how they

compare with CamStudio.

View the IUB DE screencast at: <http://www.libraries.iub.edu/index.php?pageId=7156>.

Appendix 1: Software and Hardware Requirements

- Recording software: CamStudio OPEN SOURCE (free) (<http://camstudio.org>). Camstudio captures both audio and video content.
- Headphones and microphone. We used a set that plugs into the computer as opposed to a wireless set.
- Speakers to listen to playback.
- Playback software: QuickTime (free) (<http://www.quicktime.com>). This is needed by users to play back the recording.

Appendix 2: Camstudio Software Settings

Once you have launched the CamStudio recording software, you can configure some settings that will aid in the recording and viewing experience. The minimum settings you should configure are:

Screen Size. This is set from your computer's Control Panel, not within Camstudio. Choose the screen display to be 1024x768 pixels, or a lower resolution.

Video Options. In Camstudio go to <Options>, <Video Options>, select <Microsoft Video 1>.

Screen Region to Record. In Camstudio go to <Region>, select either *Region* for capturing a selected region of the screen, *Fixed Region* for capturing a fixed portion of your screen, or Full Screen for capturing all activity on the screen.

Following are some other options to consider. You will find all of these under the Options menu, as depicted on page 47 (Figure 2).

Audio Recording. Turn on audio recording from microphone or from speakers. You will need to test your audio controls via your computer's control panel. There are also some additional audio options in Camstudio.

Cursor Options. You can select to hide the cursor, use a custom cursor, or highlight the cursor with color.

Program Options of interest are:

Minimize program on start recording to remove the Cam-

studio window from your desktop.

Hide flashing rectangle during recording.

Save settings on exit (default setting).

Capture translucent/layered Windows (default setting).
Play AVI file when recording stops. Toggle this off if you do not want it to immediately play back.

Temporary directory for recording. Alter the directory to a meaningful user-specified directory.

Name of AVI file. Specify this unless you want a computer-generated filename.

Additionally, under Options in Camstudio there is a **Record to Flash Option**. Camstudio is capable of recording in Flash (.swf) or the AVI file type. More than likely you will want to produce your video in Flash, a format which more viewers can play. To toggle between AVI and SWF recording, click on the black box outlined in white in the upper right portion of the Camstudio software screen. Then you can use the Record to Flash Option in the Options menu to configure further.

Lastly, there are **Keyboard Shortcuts** under Options in Camstudio. You can set which keystrokes you prefer to use to record/pause and stop recordings.

Appendix 3: List of Free Online Media Players

Adobe Flash Player

<http://www.adobe.com/products/flashplayer/>

QuickTime

<http://www.apple.com/quicktime/download>

RealPlayer

<http://www.real.com/>

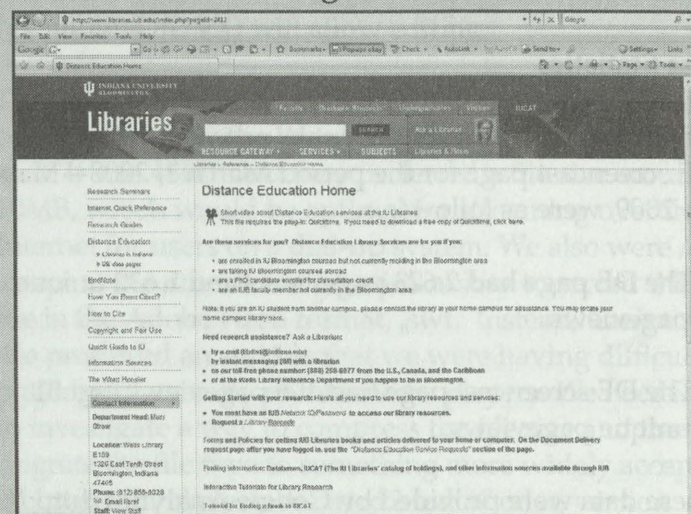
Windows Media Player

<http://www.microsoft.com/windows/windowsmedia/>

VLC

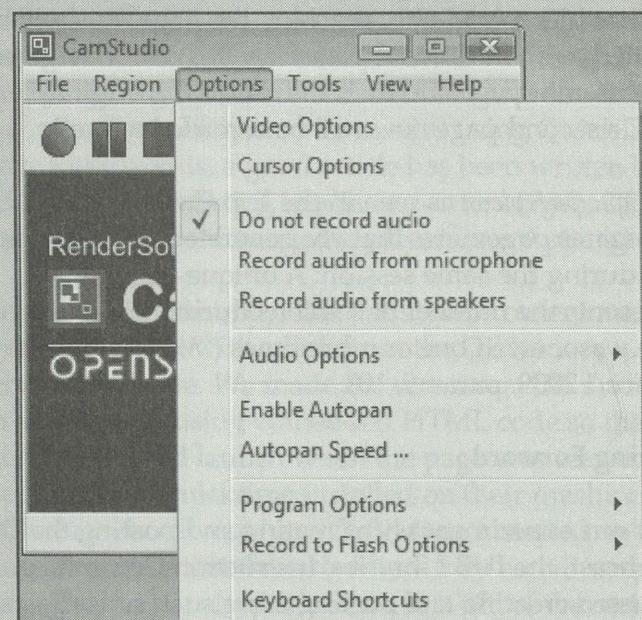
<http://www.videolan.org/>

Figure 1



Screencast from the Distance Education Library Services Web page

Figure 2



CamStudio Options Menu

References

- Association of College & Research Libraries. (2008). *Standards for distance learning library services*. Retrieved April 22, 2009, from <http://www.ala.org/ala/mgrps/divs/acrl/standards/guidelinesdistancelearning.cfm>
- De Rosa, C., Cantrell, J., Cellentani, D., Hawk, J., Jenkins, L., & Wilson, A. (2005). *Perceptions of libraries and information resources: A report to the OCLC membership*. Retrieved from http://www.oclc.org/reports/pdfs/Percept_all.pdf
- DeRosa, C., Cantrell, J., Hawk, J., & Wilson, A. (2006). *College students' perceptions of libraries and information resources: A report to the OCLC membership*. Retrieved from <http://www.oclc.org/reports/perceptionscollege.htm>
- Oud, J. (2009). Guidelines for effective online instruction using multimedia screencasts. *Reference Services Review*, 37, 164-177. doi: 10.1108/00907320910957206
- Pash, A. (2008, October 5). *Five best media converters*. Retrieved from <http://lifelhacker.com/5058888/five-best-media-converters>
- Peterson, E. (2007). Incorporating screencasts in online teaching. *International Review of Research in Open and Distance Learning*, 8(3). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/495/943>
- What's the difference between clicks, visits, visitors, pageviews, and unique pageviews? (2009). *Google Analytics*. Retrieved from <http://www.google.com/support/analytics/bin/answer.py?hl=en&answer=57164>

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