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## Library Instruction and Online Tutorials: Developing Best Practices for Streaming Desktop Video Capture

By **Nadaleen Tempelman-Kluit & Ethan Ehrenberg**

*[Ed: Links to web pages and/or e-mail addresses which have become inactive since the publication of this article have been enclosed in curly brackets { }. Replacement links have been provided where possible.]*

Incorporating multimedia in online training modules and tutorials has the potential to significantly affect current methods of library-based instruction. Not only can we deliver interactivity through multimedia-based instruction, but we can also accommodate different learning styles. In *Web-Based Instruction: A Guide for Libraries*, Susan Sharpless Smith says that "information provided in more than one medium" is a characteristic of good library instruction, since "students have different learning styles."<sup>1</sup> Our experience with users at NYU's Bobst Library and at the ITS Faculty Technology Center has shown that providing instruction through multimedia is a good way to engage people, teach concepts, and enhance instruction. We have found that using video desktop screen capture technology, delivered through streaming media, can offer a useful way of providing instruction in the online environment.

At Bobst Library, we provide many forms of instruction. Aside from in-person bibliographic instruction, printed guides, and online guides, we also have several more interactive online tutorials. After evaluating our current instructional materials, we identified the need for another, richer and more guided online alternative. We began to explore the possibility of using video desktop screen capture technologies as a way to generate this alternative, in hopes of targeting our more visual and audio learners. While many on-campus students can come to the library for in-person instruction, distance learners cannot. We were interested in finding a way to reach those users who cannot or will not come into the library, but who still want to learn how to find our resources, and who are not being served by our other online tutorials. Providing a more "human" form of online instruction—a guided tutorial with

voiceover narration—was the option we chose.

Rather than create a separate new tutorial, we decided to supplement our existing text-based HTML tutorial, "How to Find a Book," with a streaming media component to reach a broader range of online users.

After identifying the need and agreeing upon the format, we began investigating production tools. Since the "How to Find a Book" tutorial is a collection of static screen capture images with explanatory text, we wanted to make the multimedia tutorial mirror the actual online navigation involved in finding a book through our website, complete with mouse moves and clicks. We had to consider a variety of usability parameters before proceeding with the project. Through usability testing of our tutorials, we had learned that our users were not interested in committing much time to lengthy tutorials, and wanted information on how to use the library in a quick and succinct fashion. We were considering using a form of online video and rich multimedia, and therefore we had to weigh a variety of delivery factors and the Internet connection patterns of our users.

We knew that in order to reach the broadest user community, we had to consider both slow and fast modem connections and download times. We also needed to minimize the number of plug-ins and other technical barriers to viewing the new tutorial. Also, knowing that online video and multimedia content create large file sizes, and thus the potential for online delivery problems, we needed to find some way to offer this type of rich content to our targeted users. Since both the Real and QuickTime players are planned for inclusion on the next NYU-NET CD, we decided that streaming media would be the best way to accomplish our goals.

We then had to find the software package best able to produce the tutorial content. Only a limited number of software packages have the features we wanted. The Faculty Technology Center recently acquired SmartBoard, an interactive, touch-sensitive lecture board synchronized to a computer. SmartBoard comes with an application package that allows an instructor to record desktop movements for future playback. We were interested in using this desktop recording feature to capture the online navigation of finding a book at Bobst Library.

As we began using SmartBoard to record our "How to Find a Book" tutorial, we considered a variety of production techniques. These included: the length of the tutorial and thus the necessity of using a script; the audio quality and thus the necessity for a specialized microphone; and the coordination of mouse movements with voice, which took practice.

After much trial and error, we began to encounter various quality problems. Resolving some microphone positioning issues and perfecting our timing led to smooth recording sessions. However, due to the graphic nature of the captured desktop images and the specifications of the compression technologies, we found it difficult to generate high-quality compressed images. We contacted librarians at Cornell University who were working on a similar project. They suggested that we use Camtasia, a screen capturing and recording tool, which we did with better results.

One of our goals was to generate a process simple enough to be adopted with minimal training by a broad audience of librarians and other faculty. In our final process, we took the best version of the recorded video through Camtasia Recorder, then used various compression settings within Camtasia Producer, Cleaner EZ, QuickTime Pro and RealProducer, to make the best compressed version. After that, the only step left was to integrate it into the current navigation of the library website. The results are now live at: <http://www.nyu.edu/library/bobst/howto.htm> or <http://www.nyu.edu/library/bobst/info/instruct/book/>.

We are currently in the process of expanding the number of tutorials offered on the site using the above methodology. We are also exploring the possible use of Flash MX and the Sorensen squeeze plug-in, and converting to an MPEG4 compliant version as future alternatives that may enhance interactivity and deliver even higher quality.

### For More Information

- Karmen N.T. Crowther and Alan Wallace, "Delivering Video-Streamed Library Orientation on the Web," *College & Research Libraries News*, March 2001, pp. 280-284.
- Susan Sharpless-Smith, *Web-Based Instruction: A Guide for Libraries*. (Chicago: American Library Association, 2001).
- Camtasia: <http://www.techsmith.com>
- Faculty Technology Center: <http://www.nyu.edu/its/ftc.html>
- Library Tutorials (on beta test website): {<http://dlib.home.nyu.edu/library/research/tutorials/>} Replacement URL: <http://library.nyu.edu/research/tutorials/>
- "Lights, Camera Action: Tips for Effective Streaming Library Instruction Video" by Virginia Cole and Maureen Morris: <http://www.library.cornell.edu/okuref/video.html>
- Smartboard: <http://www.smarttech.com>
- "Streaming Video for the Masses": [http://hotwired.lycos.com/webmonkey/01/03/index4a\\_page3.html](http://hotwired.lycos.com/webmonkey/01/03/index4a_page3.html)

### Footnote

1. Susan Sharpless-Smith, *Web-Based Instruction: A Guide for Libraries*. (Chicago: American Library Association, 2001.)

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