

UMass President's Office 2007 Technology Grant

Grant received by Healey Library at the University of Massachusetts Boston: Video Capture and Delivery of Web-based Library Research Instruction--\$7000.

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I.

The Healey Library at UMass Boston conducts hundreds of library research instruction classes each academic year, generally focusing on specific subjects, programs or assignments. We might offer a class to graduate students in Applied Sociology, and a class on sociology research sources for undergraduates, and a class on how to research a three-page paper covering sentencing disparities.

The classes include three components. First, the librarian lectures at the podium, introducing different library resources. Second, and simultaneously, the librarian projects on the screen a demonstration of how to search particular databases or sources. Last, the students go online and run similar searches.

The technology grant was to test a program called Apreso that captures, in video, the librarian's lecture and also captures the content of the screen projections, in sync. The hybrid movie is streamed from a web server, enabling students to go online 24/7 to review the lecture and demonstration while practicing the searches in a different browser tab.

The intention was to 1) increase the effectiveness of library instruction by allowing students to go home and practice everything covered in the classroom workshop and 2) reach more students because we could share the movie stream link and 3) increase the productivity of the library staff by allowing them to review and update previous sessions when needed.

II.

The grant funds (\$7,000) were supplemented by library funds (over \$20,000) to license the Apreso software, license the RealNetworks Helix software, purchase a remote-control video camera, and purchase a new web server to run the RealNetworks media streaming software.

The Apreso system consists of a podium with a primary workstation with an internet connection and output to the projector. A wall-mounted remote control video camera faces the podium. A stationary microphone is connected to the system. The podium also contains a secondary workstation—the Apreso capture station—that captures the computer video output of the primary station (on a split from the projector feed), the audio from the microphone, and the video input from the wall-mounted camera. The library systems office/data center contains a third Apreso workstation, an internet server running the Apreso control software and capable of video web streaming.

The Apreso system is software-driven. At the scheduled time, a recording session begins. When the system is automatically switched off at the end of the session, the combined content from the video camera, the microphone, and the primary workstation screen output is sent to the library data center where it is processed on a Real Networks Helix server, and then set up for remote streaming.

III.

The Apreso system presented a never-ending series of bugs and resulting system crashes. We generally had to deal with partial functionality. We were able to record and stream components of two public events held in the library instruction classroom. In sum, the Apreso pilot failed the proof-of-concept test. We learned that a University department whose primary purpose is not IT, even one with a small (library) systems staff like ours, is unlikely to have the level of technical expertise necessary for an Apreso classroom capture program with its three workstations, three media inputs, and requisite settings, controls and feeds to capture, synchronize, process and stream rich media. The reasonable up-front cost of the Apreso software is completely belied by the specialized, professional, *additional* staff cost required to install and support it. This was not how the system was sold. It was demonstrated on a small laptop with a clip-on microphone and small mini-camera. Nothing in reality could be further from a laptop, clip-on mic and mini-cam than an *actual* Apreso installation.

IV.

The main issue raised by this pilot concerns the question of how much technology to take on in-house. Since the Apreso pilot did not meet our proof-of-concept test, we have followed a very different path, an approach often called cloud computing, where software, hardware and technical expertise are generally provided by the vendor, and the library subscribes to the cloud platform that is appropriate for each application. This is also called software-as-a-service, or SaaS, and is both a more economical and more effective path for a library to pursue.