Evolution of a Chemical Literature Web Tutorial at Texas A&M

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ABSTRACT

Considerable attention has been paid in library literature to Web tutorials as an efficient means of delivering instruction on the use of online databases and other resources, yet libraries lag behind database producers and other online vendors in the development and use of online tutorials. Librarians, who must master the technology and software needed to produce such tutorials, face many challenges, including time and resource constraints. This poster describes the steps in the development of a tutorial for chemistry students at Texas A&M University in College Station. It is being developed using Camtasia software by the chemistry librarian and an instructional services librarian.

SOFTWARE

Camtasia Studio™ – downloadable from TechSmith Corp.

(http://www.techsmith.com) for $299 ($149 educational rate) – is a video program that allows you to record and edit any actions on your Windows desktop. You'll then be able to add sound to the screen recordings and produce professional looking, narrated slide shows for the Web. 30 DAY FREE TRIAL AVAILABLE.

SYSTEM REQUIREMENTS

- **Windows 2000 or XP**
- **Microsoft DirectX 8.1 or later**
- **500 MHz processor (1 GHz recommended)**
- **64 MB RAM (128 MB recommended)**
- **Windows compatible sound card and speakers**
- **Windows compatible microphone: RadioShack Hands-Free Headset Microphone (Model #33-3012; $49.95) worked well for us.**
- **30 MB of hard drive space for program installation**

RECORDING FACILITIES

- **Quiet room in a quiet zone (no loud machinery nearby!)**
- **Dedicated multimedia development room NOT required! Create Camtasia videos from the comfort of your office.**
- **Quiet computer with little or no operating noise**
- **Pick a microphone with unidirectional pickup to reduce feedback and background noise.**

- **Comfortable, ergonomic seating**

- **Below is a photograph of the recording facility we are using. We have requested that the Library purchase a site license for Camtasia Studio so that we can record instructional sessions in our offices.**

This is the Science/Engineering Department's research computer, which is set up in private office. Lecturer Jane Stephens is shown using Camtasia Studio.

RECORDING A VIDEO

1. **Choose "Start a new project by recording the screen".**
2. **Click the red light to begin recording or use the F9 key.**
3. **Read your script while moving the mouse and navigating Web pages. You can also opt to add your narrative or sound later.**
4. **Click the red light to stop recording or use the F10 key.**
5. **When prompted to save the video, name the file in the field provided and save it to your project folder.**
6. **Your video will appear in the *Clip Bin*, ready for editing.**
7. **Use the Cut option to remove unwanted portions.**
8. **Be sure to save your project periodically. You can continue working on it as much as you want later.**

PRODUCING YOUR VIDEO

- **You can stitch several clips together (if desired) by dragging them into Camtasia Studio's Timeline. Keep in mind that you want to keep your overall file size relatively small.**

- **If stitching clips together, you can use *Transitions* to set up special effects that will smoothly transition one clip to another.**

- **To produce your video as a Flash SWF file, choose File > Produce Video As, which will open the Production Wizard dialog box.**

- **Select Macromedia Flash (SWF) movie file and click Next. Accept all defaults for the production process (i.e., choose Next at the next three screens). Click Finish and then Close.**

TIPS

- **Work from a prepared script.**
- **Break the tutorial into smaller modules to avoid long download times for users on dial-up modems.**
- **Record original capture in high quality; then reduce it to a desired acceptable lower level during encoding process.**
- **Run a few tests first to check screen capture size and sound.**
- **Speak clearly but not too loudly to avoid distortion.**
- **Use two people: one to read the script and another to move the mouse around the screen.**

- **Move the mouse slowly and smoothly; also, keep the mouse within the boundaries of the video capture.**

SUMMARY OF WORKFLOW

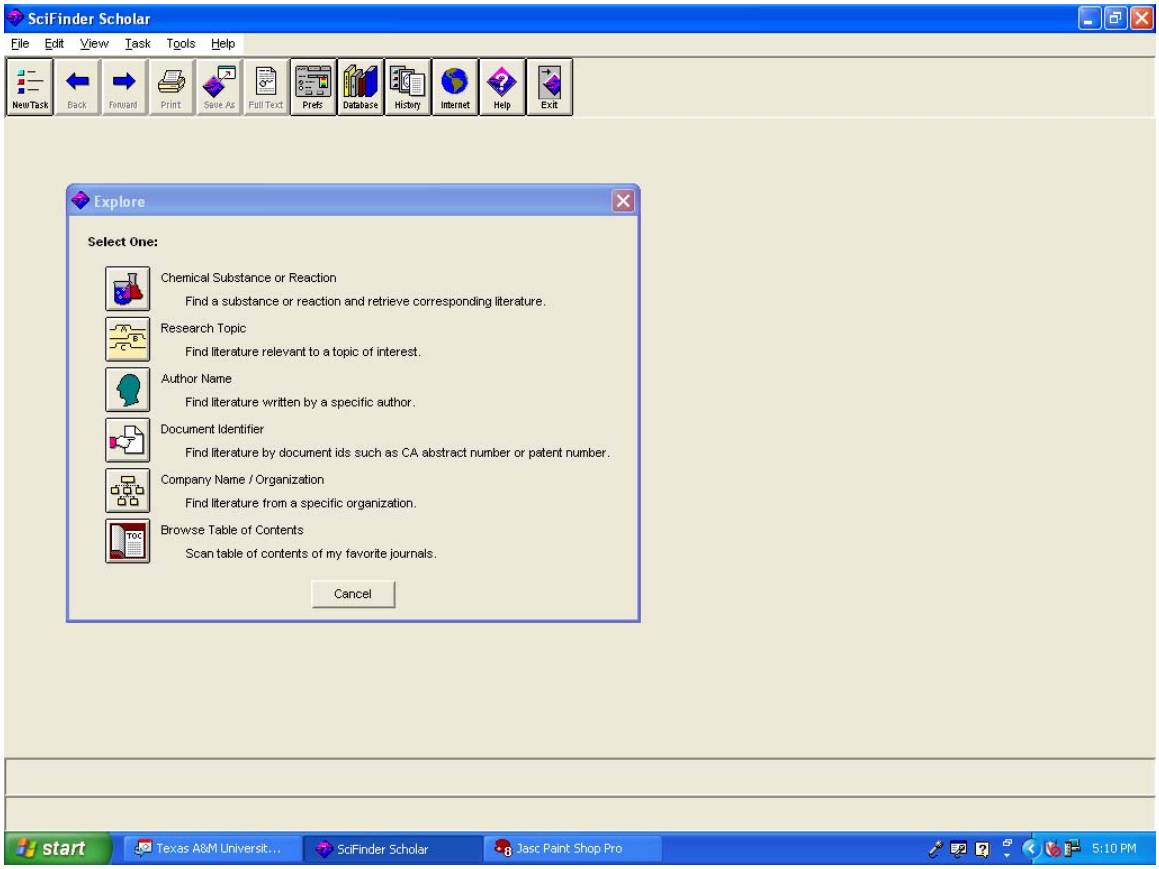
- **Assess your audience.**
- **Determine the modules you want to write.**
- **Write the scripts for your modules. (See sample pages from script below.)**
- **Install Camtasia and set up your PC.**
- **Record the screen captures for your tutorial modules. You can either include narration now or add it later.**
- **Edit your videos.**
- **Fine tune your recorded sounds or add your narration now.**
- **Package your Camtasia videos for the WWW.**
- **Remember to allow time to learn Camtasia Studio and at least 6 hours to produce your first module.**

TWO PAGES FROM SAMPLE SCRIPT

Subject or research topic search in SciFinder Scholar -- Script

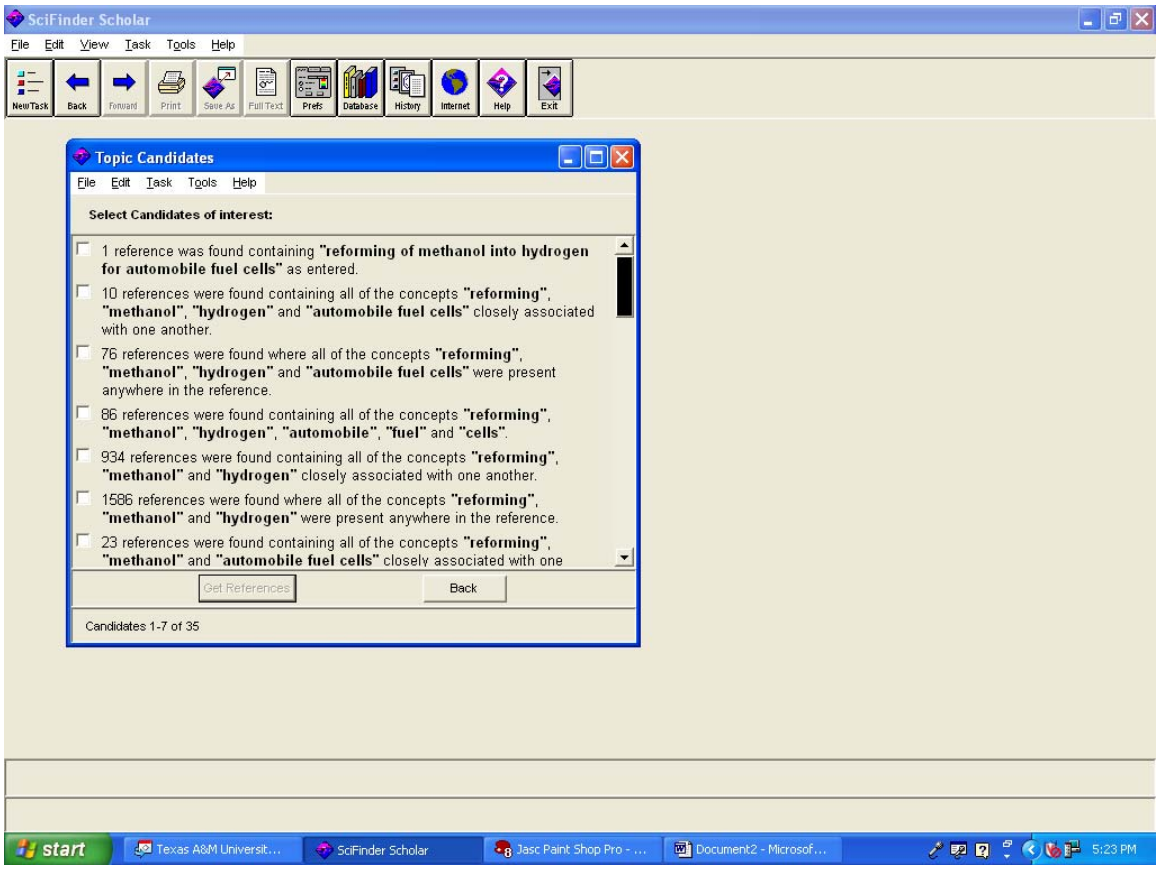
Slide 1

You have been asked to write a research paper on the reforming of methanol into hydrogen for automobile fuel cells. *Begin at the New Task Screen. To explore the literature by research topic, click on the "Research Topic" icon.*



Slide 2

Type words or a phrase that describe your topic. We will type "reforming of methanol into hydrogen for automobile fuel cells." Because an author might also use the word "car" instead of automobile, we will add the word " car" in parenthesis next to the word, "automobile". When a synonym is placed in parenthesis next to the topic word, SciFinder Scholar will search for both terms, for example, "car" and "automobile". You can limit your search by year of publication, document type, language, author name, or company name by clicking Additional Options. If you prefer to see all references and then narrow the search, do not click Additional Options. You will have another opportunity to do this later.



Having a script helps you remember to show every step. Several other librarians at Texas A&M have put their scripts on the Web for use by individuals who learn better by reading.

THINGS WE LEARNED THE HARD WAY

- **You can record as you go or add voice later. Try both methods and see which works best for you.**
- **Become very familiar with your script.**
- **If you make a mistake, pause and count to 10. Put a mark on your script and then continue. This will make editing a lot easier.**
- **When you are done, go into edit mode to delete mistakes in the sound or narrative. This is much faster than trying to obtain a perfect recording.**
- **Use edit mode to remove long screen load segments (dead waiting time when Web or database response times are slow).**
- **Be sure to capture in low resolution. Then, your video will fit in the media player's window. Play back should be in high resolution, which most users will have chosen as a default for their monitors.**

CONCLUSIONS

- ✓ **Using Camtasia Studio is an excellent way to provide bibliographic instruction that's available 24/7 for your users.**
- ✓ **Creating video tutorials in Camtasia Studio is especially good for complicated sources such as SciFinder Scholar.**
- ✓ **You can easily divide instruction into step-by-step training modules left as separate files or later stitched together.**
- ✓ **Tutorials created in Camtasia Studio can be customized for different learning styles and educational levels.**
- ✓ **Camtasia makes efficient use of staff time possible.**

NOTES

The SciFinder tutorial will be available on the Texas A&M University web site after August 23. If you would like to be notified of its availability, please send an email to emaddox@tamu.edu or Kathy-jackson@tamu.edu.

If you have questions, please feel free to contact the authors:

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