Technologies to Support Qualitative Research

by Alec Couros July 14, 2005

Overview

- Word Processing, Typesetting & Peer Review
- Data Collection & Transcription
- Bibliography & Reference Management
- Conceptualization & Knowledge Management
- Data Analysis



Word Processing, Typesetting & Peer Review

Word Processing & Type-Setting

- Microsoft Office most popular, many powerful editing features.
- Open Office freely available at <u>http://</u> <u>www.openoffice.org</u>, new features emerging.
- LaTeX freely available, best for rigid control of formatting, steepest learning curve.

Review Features in MS Word

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Resource: Collaboration in MS Word

LaTeX

- LaTeX is a high-quality typesetting system.
- LaTeX is not a word processor. Instead, LaTeX encourages authors not to worry too much about the appearance of their documents, but to focus on the content.
- For more information check out <u>http://</u> <u>www.latex-project.org</u>



Data Collection & Transcription

Digital Audio Recorders

- •There are many brands of digital audio recorders available for between \$75 & \$200.
- •Panasonic & Sony are likely the most popular, and most come with memory and a method of moving audio files to your computer.
- Some come with voice recognition software like Dragon Naturally Speaking.
 An iPod can be converted to a voice recorder with a small hardware add-on.



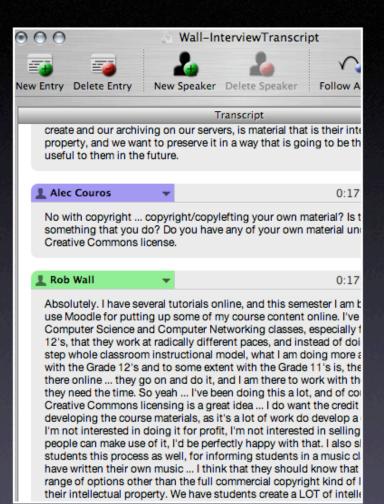
VoIP

- •If for whatever reason you would like to conduct "telephone" interviews, VolP (Voice over Internet Protocol) is available (for free*) by using programs such as Skype. •Skype conversations can take place from computer to computer, or computer to phone.
- •Conference calls, with several participants, are possible.
- •Calls can be recorded into most digital audio formats.

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Transcriva

- •Transcriva is an excellent transcription assistant available for the Mac.
- •Audio files can be imported into Transcriva, and the user will have full conrol of start, stop, play, ffwd, etc. from the keyboard.
- •For those doing their own transcriptions, Transcriva is an excellent and useful tool to consider.
- •Go to Transcriva website.



Transcription Services

- Transcription services are available, but can be costly. Additionally, some argue that using external transcribers may distance researchers from the data.
- •There are local transcription services, and as well, online services like <u>escriptionist.com</u> can be of help for those in a rush.



Web Forms

 As an alternative and/or supplement to spoken interviews, web forms can be an excellent approach to gathering rich data. Example below:

> Examining Open (Source) Communities as Networks of Innovation: Implications for the Adoption of Innovation by Teachers

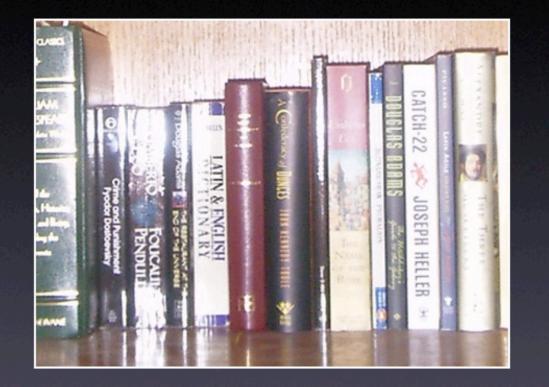
Question Set #1

For this study, I am trying to better understand teacher activity and beliefs around what I describe as the 'open' movement. To me, this movement is characterized by the use and development of open source software (e.g., Linux, Open Office), open content (e.g., learning object repositories, Creative Commons) and open publishing (e.g., blogging, wikis, indy media). The following questions are designed to build understanding around the activities and beliefs of teachers around aspects of the 'open' movement, as described above. Feel free to elaborate on any question you feel necessary.



Do you wish to have your anonymity preserved in the reporting of this study?

Whether you choose to remain anonymous or not, I need your mailing address information in order to send you a form for you to sign indicating your willingness to participate in this study.



Bibliography & Reference Management

Endnote & Refworks

- Endnote is a popular bibliographic management package that integrates well into MS Word.
- Refworks is an online bibliographic management package that is site-licensed by the University (all staff and students have access to this software).

Bibliography

Primary Sources:

Letter to Governor Zulick from F.A. Bee, Chinese Consuel August 25, 18871 Secretary of the Territory, RG6. Arizona State Archives, Arizona State Librar and Public Records, Phoenix, Arizona.

This letter is requesting protection for Chinese because they have been with being driven out of the territory and to have their property destroy illustrates the extreme level of discrimination that the Chinese faced in 1800's.

National Archives and Records Administration Pacific Region (Laguna Nigue California) Record Group 021, Creator: Arizona Territorial Court. Second Ju District. Series: Commissioners' Reports 1892-1912, (1), Box Number 63, Ite 1. Digital File: 021-04-001.

Item Description: Handbill informing Chinese residents to register after passage of the Chinese Exclusionary Act in 1882.

National Archives and Records Administration Pacific Region (Laguna Niguel California) Record Group 21, Records of District Courts of the United States, . Territorial Court, Second Judicial District, Criminal Dockets 1885-1911, Civil 1897-1911, Chinese Exclusion Dockets 1898-1899, Volume 3, Box 22, Book of Register of Arizona.

This lists numerous cases against Chinese for criminal, civil, and immij charges. We pulled files on 38 cases that chronicled the targeting that t faced from the majority population during the above mentioned years.

National Archives and Records Administration Pacific Region (Laguna Niguel California) Record Group 21, Records of the United States District Courts, Ag division: Judicial District, Box Number 2, Criminal Index Cards Case File Nur

This is the complete file of Case 775 Lew Dun (Alias Low Dun) a Chir

Research Buddy

 Research Buddy is a free plug-in for Firefox that allows users to easily keep track of information cited from websites.

Research Buddy!

Hooray for bugfix versions (now at 1.02!)...This version should work with the new versions of firefox (1.03+)

Since the beginning of teaching in this country, everyone from high-school students to doctoral students have been plagued by domineering teachers that require them to write research papers. Research is a dreary, dismal task, characterized by monotonous reading and constantly scribbling down where appropriate sources are found. It would be really helpful to have a secretary that noted all the interesting papers a student read, remembering the important paragraphs from each one, and putting the citations into appropriate format, ready to use in the research paper that will earn the student a Nobel Prize (or Turing Award, if you're lucky).

But wait! There is such a secretary! Starting on December 8th of 2004, there is Research Buddy, a Firefox plugin that does exactly this (and much, much more)! You can arrange your citations in different topics, manage those topics, specify the format of the citation, and anything else your little heart desires. Isn't the internet great?

(Use it often, use it wisely.)

The plugin is designed to be used in the following way:

D The user finds a quote on a webpage and wants to reference the quote in her paper.

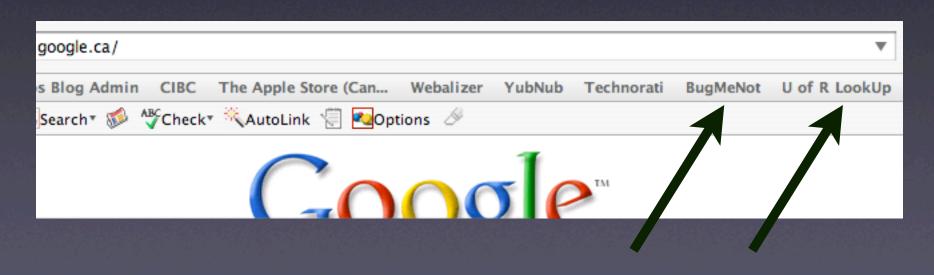
The user selects the text of this quote, and, in the right-click menu, selects "Research Buddy" (this step is optional: the page can be referenced without selected text).

D The plugin opens the main Research Buddy dialog, which allows the user to select which research topic the page should be filed under.

The user clicks on "Add to selected topic", and the reference is saved to the topic. Depending on the preferences, the page (and it's image user's disk.

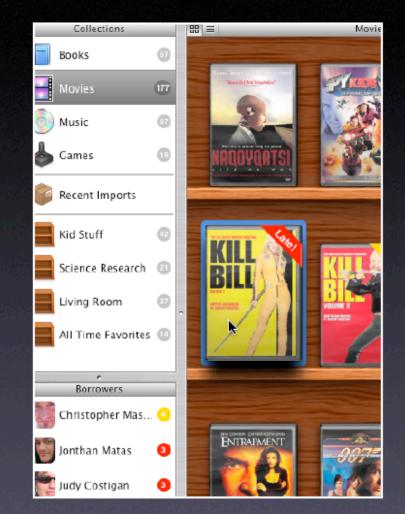
Library Lookup & BugMeNot

- Library Lookup is a simple bookmarklet that you can you use from your browser to check to see if any Amazon books you are considering purchasing, are in your local library.
- BugMeNot is browser bookmarklet that helps you bypass compulsory website registration.



Delicious Library

- •Delicious Library is an excellent personal library management package for the Mac.
- All books can be easily added to your personal library database, information can be imported from Amazon.com and it's simple to keep track of what users are borrowing your items.
 Items can be scanned via iSight camera or barcode scanner.

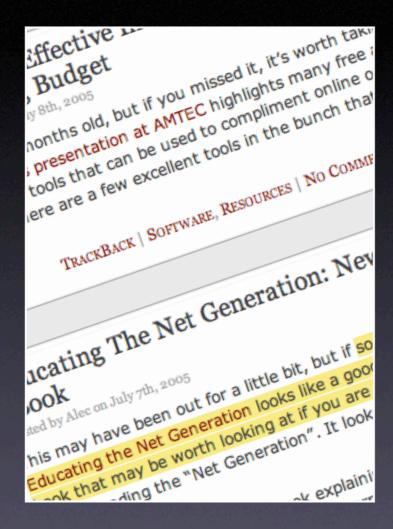




Conceptualization & Knowledge Management

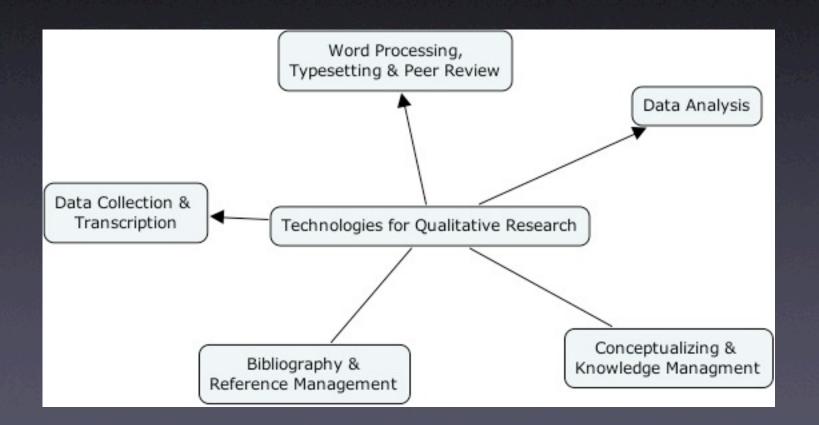
Blogging

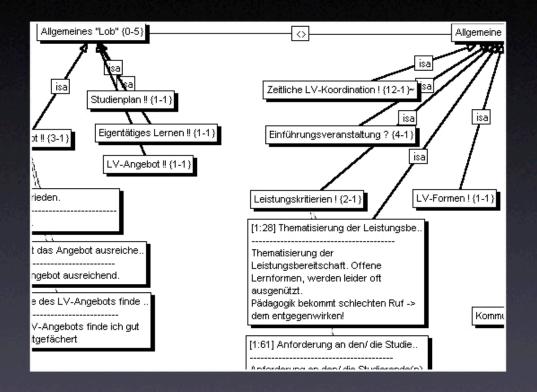
- Content management systems, the technology behind most blogs (or web logs) allow for a very simple method of publishing and organizing thoughts and ideas.
- There have been many graduate students, including myself, who have used blogs as a rich, searchable interface to one's own personal thoughts and links to literature and the ideas of others.



IMHC Cmap Tools

 Cmap Tools is a concept-mapping environment where users can construct, navigate & organize knowledge. The software is free to use, and easy to learn.





Data Analysis

Using Qualitative Data Analysis Software

- Atlas.ti, Nud*ist & Nvivo are popular choices for qualitative data analysis software.Are all proprietary & can be a bit pricy.
- Most packages enable users to code data (text or media files), generate themes and discover relationships in the data.
- TAMS Analyzer is a free package (Mac Only) that is slowly gaining in functionality and usability.

Resources

- Collaboration Tools (MS Word): <u>http://getit.rutgers.edu/tutorials/</u> word_collaboration/media/collaborative.pdf
- LaTeX Resource: <u>http://www.latex-project.org</u>
- Dragon Naturally Speaking: http://www.scansoft.com/naturallyspeaking
- Transcriva Website: <u>http://www.bartastechnologies.com/products/transcriva</u>
- Endnote: <u>http://www.endnote.com</u>
- Refworks (U of R): <u>http://www.uregina.ca/library/research/reference/index.shtml</u>
- Research Buddy: <u>http://researchbuddy.mozdev.org</u>
- BugMeNot: <u>http://www.bugmenot.com</u>
- U of R Lookup: <u>http://www.educationaltechnology.ca/couros/123</u>
- Delicious Library: <u>http://www.delicious-monster.com</u>
- IMHC Cmap: <u>http://cmap.ihmc.us</u>
- Atlas.ti: <u>http://www.atlasti.com</u>

email: alec.couros@uregina.ca

webfolio: <u>http://www.educationaltechnology.ca/couros</u>

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