Technologies to Support Qualitative Research

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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 http://www.openoffice.org, new features emerging.

• LaTeX - freely available, best for rigid control of formatting, steepest learning curve.
Review Features in MS Word

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 http://www.latex-project.org
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, VoIP (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.
Transcriva

• Transcriva is an excellent transcription assistant available for the Mac.
• Audio files can be imported into Transcriva, and the user will have full control 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 escriptionist.com 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:

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**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.

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

- [ ] Yes

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.

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* indicates a required field
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).
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:

- 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).
- 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 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 pricey.

- 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): http://getit.rutgers.edu/tutorials/word_collaboration/media/collaborative.pdf
- LaTeX Resource: http://www.latex-project.org
- Dragon Naturally Speaking: http://www.scansoft.com/naturallyspeaking
- Transcriva Website: http://www.bartastechnologies.com/products/transcriva
- Endnote: http://www.endnote.com
- Research Buddy: http://researchbuddy.mozdev.org
- BugMeNot: http://www.bugmenot.com
- U of R Lookup: http://www.educationaltechnology.ca/couros/123
- Delicious Library: http://www.delicious-monster.com
- IMHC Cmap: http://cmap.ihmc.us
- Atlas.ti: http://www.atlasti.com
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