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### Managing Citations With Cost-Free Tools

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## **INTERNET CONNECTION**

### **Managing Citations With Cost-Free Tools**

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As faculty members receive more access to more electronic collections, they are forced to deal with the issue of bibliographic management. Historically, dealing with print material has been relatively simple: The only way to manage something being cited from a print resource was to hold the physical object (or a copy of the original) and create a citation from the bibliographic information provided by the work. However, with all of the electronic research collections now available, more and more faculty members are finding more and more research in electronic form, giving faculty members the opportunity to harvest the metadata and turn that metadata into an automatically generated citation. (At this point, it should be mentioned that many of the citation management tools also manage print material, provided the user manually enters in the metadata about the work, or if the user imports the metadata from a site like Amazon.com.)

All of these tools and options beg a simple question: Is all of this really necessary to organize research? While it seems obvious that librarians might be attracted to comprehensive citation management options, is this something a non-librarian researcher should be using? Of course, it will depend upon the researcher, but in general, citation management tools offer some advantages for many types of researchers.

For the purposes of this article, bibliographic management refers to software that allows users to track articles and books being used for research purposes, providing access to the material either in the form of a link or in the hosting of the actual document. This software also allows the user to export a bibliography based upon the metadata within the bibliographic management tool. (This article only examines free tools and does not look at fee-based products like EndNote or subscription-based tools like RefWorks.)

One such cost-free bibliographic management tool is Zotero, which acts in conjunction with the Firefox web browser, letting users capture material

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they find while using the browser. For instance, a user might be in an EBSCO database and see an article she'd like to use in her research. Zotero will display an icon in the browser address bar, letting the user know it recognizes the article as an article. Clicking the icon will then import the citation into Zotero. In addition to basic bibliographic information, Zotero will also import subject headings and convert them to tags. The user can add her own tags and notes and can also file the article within a folder hierarchy.

Zotero also has some additional functionality. Users can create Zotero accounts that can be synced across browsers, so someone working from two different Firefox installations, perhaps work and home, has access to the same Zotero content. Zotero also has a web interface, to allow users access to their saved citation information from non-Zotero-enabled browsers. Zotero users can also choose not to sync their citations with the web.

For users who do wish to use Zotero socially, not only can citations be made public, but public and private groups can be created, allowing users to see and contribute citations on a given topic, as well as create group discussions. Like most social sites, users can also choose to follow each other.

While Zotero was seemingly first designed to capture web-based content, users can download certain tools that allow Zotero to index locally held PDFs, thus letting Zotero serve as a local drive index, also.

Given that Zotero only works with Firefox, not everyone will find it convenient to use. There is no version for alternative browsers, like Internet Explorer, Chrome, or Safari. However, to remedy that, Zotero is developing a cross-platform stand-alone client that will not be dependent upon a single browser ("Zotero standalone alpha" 2011).

Zotero is free and open source and is produced by the Center for History and New Media at George Mason University (Trinoskey 2009, 224). Zotero also allows users to create plugins to provide the tool with additional functionality.

Mendeley is another bibliographic management tool. Where Zotero is browser based (for now), Mendeley is a cross-platform stand-alone client, meaning it does not require the use of a specific browser.

Like Zotero, Mendeley allows users to organize their research, using tags and folders and whatever other process makes sense. Unlike the browser-based Zotero, Mendeley seems more designed to work with locally held files, indexing them and extracting metadata.

Mendeley also serves as a self-contained PDF viewer, letting users view PDFs and also annotate them. Like Zotero, Mendeley can be synced via a cloud. And like Zotero, Mendeley gives users a certain amount of space for free, with extra space available for a fee. Both tools also allow users to sync files as well as citation information. Both tools also have word-processing integration, allowing users to easily insert citations and bibliographies into programs like Microsoft Office or OpenOffice.org.

Unlike Zotero, Mendeley is not natively set up for grabbing web-based content like HTML pages. It's more of a PDF manager. Mendeley does have a browser toolbar shortcut that can be used to add web pages to the Mendeley database.

Mendeley also has group capabilities similar to Zotero. Mendeley can even import data from your Zotero installation, so anything you capture via Zotero is also moved over to your Mendeley database.

The Mendeley concept is interesting. Mendeley is based upon Last.fm, a music recommendation site (Maxmen 2010, 387). Papers imported into Mendeley can be viewed in terms of how many users have read them and what their discipline is. Mendeley will also recommend related papers that might also be helpful. So in addition to an organizational tool, Mendeley is also a discovery tool.

In fact, it might sound similar to citeulike, another bibliographic management tool. Unlike Mendeley, which is a separate client, and unlike Zotero, which works within the Firefox browser, citeulike is a simple web interface, not unlike the delicious bookmarking service. Like Mendeley, to capture web content, users must bookmark a special button. With certain types of electronic articles, citeulike then imports metadata from a web-based article into the citeulike database. Not all library subscription services are supported, and citeulike only imports from peer-reviewed journals. Mendeley content can be imported into citeulike via a special citeulike browser button, and citeulike content can be imported into Mendeley via the Mendeley client.

Like Mendeley, citeulike looks at articles other people have captured and makes recommendations. In theory, this helps users discover articles they might have missed. Citeulike conveniently links to subscription resources, allowing relatively quick access to bookmarked electronic resources. Unfortunately, where Mendeley and Zotero can automatically insert library proxy information before subscription links, citeulike does not have that functionality.

While citeulike is not much of a file management tool, it does offer users the options of uploading files along with the web-based citation being captured. There is no option to annotate the actual file, as there is in Mendeley. However, as in Zotero, users can add notes to the record page for their article.

All three tools are very good about letting the user export their data and all three seem to work well with the BibTeX format.

BibTeX can be a bit of a mystery to people, especially those outside of math and science, where the LaTeX markup language is often used to create articles for publication ("An introduction to LaTeX" 2010). BibTeX integrates with LaTeX to create automatic bibliographies. However, it can also be used without LaTeX (Fenn 2007, 1). Basically, a BibTeX file can be converted to a bibliography of any format, using a third-party converter of some kind. Many subscription databases offer users the option to export their citations in BibTeX, so users interested in BibTeX to manage their citations can simply

maintain a BibTeX file of their citations, perhaps even importing the BibTeX into something like one of the tools already mentioned, and then exporting the citations in a documentation style.

In general, Zotero, Mendeley, citeulike, and even, to a lesser extent, BibTeX all offer some advantages over manually created, locally saved citations.

One advantage is cloud access. These web-based and web-syncable solutions allow users access to their research from anywhere. This can be convenient when a user needs her research from a new computer, but it can be indispensable in the case of a hard-drive crash. BibTeX is not inherently cloud-based, but BibTeX files can be saved in a cloud environment.

Another advantage is the ability to create citations in different formats. This is especially helpful in the social sciences, where there is not one dominant citation format as seen in other disciplines like English and psychology. The flexibility to export bibliographies in different formats means one less thing to do if one is reworking an article for a different publication with a different citation format. For instance, by keeping citations in a citation management tool, a user can export a bibliography in American Sociological Association (ASA) format, but, if needed, also export the same citations in Chicago Manual of Style format. Because the citations are computer generated, they'll need to be checked and massaged, but in general, most users should find it easier than manually converting the ASA citations into Chicago. Interestingly, the issue of the accuracy of automatically generated citations seems to occupy a niche place in the medical librarianship literature (Gall & Brahma 2006, 49; Gomis, Gall, & Brahma 2008, 260; Smith & Baker 2007, 156).

Finally, when hearing about these kinds of tools and options, many non-library faculty will find a trusted a librarian and ask which citation management tool should be used. It's a tough question to answer because it depends upon the user's workflow and goals. If the user wants a social tool, citeulike or Mendeley might be best, although Zotero does have some social components.

If the user wants a web-based client, all three tools offer that functionality, although Mendeley is most efficient as a separate client.

The best advice might be to encourage users to pick one and use it for a few weeks. If they find it's not doing what they want it to, users can simply export their data in BibTeX and import the file into the new tool. While notes and tags might not come over seamlessly between tools, the user will at least have his citations and a working knowledge of a new electronic citation tool.

## REFERENCES

An introduction to LaTeX. 2008. <http://www.latex-project.org/intro.html> (accessed January 27, 2011).

- Fenn, J. 2006. Managing citations and your bibliography with BibTeX. *The PracTeX Journal* 4. <http://www.tug.org/pracjourn/2006-4/fenn/fenn.pdf> (accessed January 27, 2011).
- Gall, C., and F. A. Brahmi. 2006. EndNote and reference manager citation formats compared to “Instructions to Authors” in top medical journals. *Medical Reference Services Quarterly* 25(2): 49–57.
- Gomis, M., C. Gall, and F. A. Brahmi. 2008. Web-based citation management compared to End Note: Options for medical sciences. *Medical Reference Services Quarterly* 27(3): 260–271.
- Maxmen, A. 2010. Science networking gets serious. *Cell* 141(3): 387–389.
- Smith, C. M., and B. Baker. 2007. Technology in nursing scholarship: Use of citation reference managers. *International Journal of Mental Health Nursing* 16(3): 156–160.
- Trinoskey, J., F. A. Brahmi, and C. Gall. 2009. Zotero: A product review. *Journal of Electronic Resources in Medical Libraries* 6(3):224–229.
- Zotero standalone alpha. 2011. <http://www.zotero.org/support/standalone> (accessed January 27, 2011).