TechMatters: From Zotero to Cited in 60 Seconds

Krista Graham, Central Michigan University

Interested in finding an easy way to help students collect citation information for the sources they find online? Need a method to encourage them to organize and document those sources? Looking for a digital substitute for the "note card" system for analyzing information? Searching for a cost effective and easy-to-use alternative to commercial reference management tools like EndNote and RefWorks? If so, then Zotero, a free, open-source Firefox plug-in developed by the Center for History and New Media (http://chnm.gmu.edu/) at George Mason University may be just the tool for you.

Install Zotero

Since Zotero is a Firefox extension, it requires version 2.0 or higher of the browser. If you don't already have a copy, it is available as a free download from the Firefox web site (http://www.mozilla.com/firefox). Once you have the necessary browser, installation of Zotero is easy. Simply go to the Zotero site at http://www.zotero.com and click on the large red "download" button. As with any Firefox extension, a dialog box will appear asking if you want to install the plug-in. Click "Install Now" and then restart the browser. Once installation is complete, you will see the zotero logo in the bottom right-hand corner of your browser window. Click on this icon to launch Zotero.

The Zotero Interface

When Zotero is launched, students will have access to its interface which consists of three sections to list, organize, and annotate their sources (see Figure 1).

On the left, you will find the Collections pane which allows users to manage and organize citations using a familiar method; folders and subfolders. Citations may be placed in multiple collections (i.e., folders) at the same time. The Library Items pane in the center column provides a list of all the items in each collection. Items may include references for books, articles, and web pages, as well as other less common materials such as artwork, films, and podcasts. On the right, you will find the Item Details pane which allows users to enter in depth information about each item in a collection including full citation information, additional notes, attachments such as images and copies of Word documents, links to the full-text versions of sources, personal tags and subject headings.

Adding Items to a Collection

Once you install Zotero, you will want to begin adding citation records. There are several ways to add items to a Zotero collection. First, citations may be added manually using the "New Items" (⊕) icon. Upon clicking this icon, users are prompted to select the type of source to be cited from a drop-down menu of choices, such as book or a journal article. Once a selection is made, a blank template will appear in the Item Details pane in which to supply the citation information.

Alternately, citations may be captured and imported automatically into Zotero from compatible library databases and catalogs. Compatible sources include most library catalogs, online newspapers such as the New York

Figure 1: The three sections of the Zotero interface.
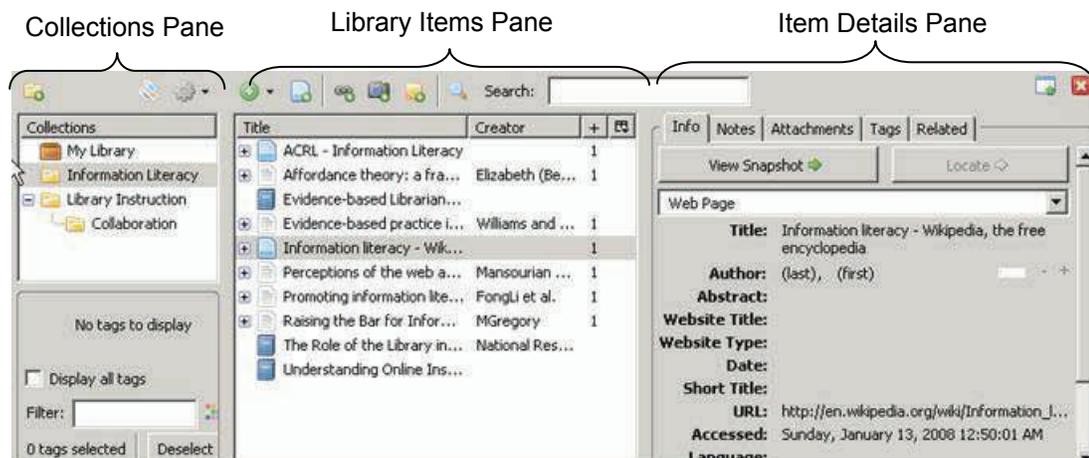
Times, Google Scholar, and many subscription databases including JSTOR, ProQuest, EBSCOhost, and PubMed (for a full list of compatible sites, go to http://www.zotero.org/translators/.) When a list of results is retrieved from a compatible site, a folder icon will appear in the address bar of your browser (see Figure 2).

Figure 2: Folder icon indicating the search results are Zotero compatible

Click on this folder, and a box will appear containing a list of all the records on the page. Users then check those they wish to add to a collection, click "OK", and citation information will be harvested and directly imported into the collection. During this process, along with the necessary citation information (e.g., title, author, publisher) being immediately placed in the "Info" tab, subject headings from catalogs and databases are also automatically captured and added to the "Tags" tab.

Finally, citations for web pages can be automatically generated using the "Create New Item from the Current Page" ( ) icon. Using this feature, information about the web page the user is viewing is harvested from the site and added to the items in your library. When this option is used, a snapshot of the site is automatically saved for future reference. Additionally, students may choose to create a link back to a selected web site using the "Save Link to Current Page" ( ) icon.

Enhancing Research Information
In addition to allowing your students to store and organize a list of information sources, Zotero also allows them to enhance their records by adding notes, attachments, and subject tags. All of these features may be added via the tabbed menu in the items detail pane (see Figure 3).

Figure 3: Items Details Menu


Adding Notes and Attachments
By introducing your students to Zotero's note-taking feature, you can encourage them to get into the habit of reading critically and annotating their sources. To add a note about a specific item, one simply selects the "Notes" tab and clicks the "Add" button. This will open an "Add Note" window where the user can type observations, an-

notations, and ideas related to the source. When items are imported from compatible databases, the abstracts are automatically inserted as notes. An unlimited number of notes may be added to each record, and the notes are all fully searchable. Similarly, additional or related material such as image files or copies of word processing documents can be added to an item record via the "Attachments" tab.

Creating Personal Tags
Another useful feature to help students organize their results is the ability to classify collection items using personal keywords or subject tags. Although subject headings are automatically imported as tags when records are downloaded from compatible databases, the ability to add additional tags allows students to describe their resources in a manner they find personally meaningful, which will be familiar to those who use sites such as Flickr or del.icio.us. Adding tags is as easy as adding notes; users select the "Tags" tab and click the "Add" button to create a new tag. Once tags have been added to items, the "tag selector" window (see Figure 4) can be used to easily filter and identify tagged items within a collection.

Figure 4: Tag Selector Window
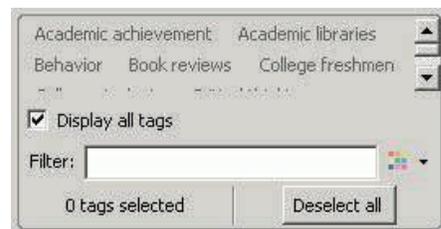
Creating a Bibliography
Of course, one of the primary features of any good reference management tool is the ability to quickly create a bibliography in a variety of citation styles. Generating a bibliography in Zotero is a quick and painless process. Students select the items they wish to include in a bibliography by highlighting the items using *Ctrl+Click*, then *Right Click* and selecting **Create Bibliography from Selected Items** … from the menu of options. This will open the "Create Bibliography" window where they can select from more than 15 popular citation styles including APA, MLA, and Chicago style, as well as selecting the output format (RTF/HTML/Windows Clipboard) that they prefer. Alternately, the bibliography may be sent directly to a printer.

Hopefully, I turned to my right for another voice. Sadly, my library avatar was busy watching pet bloopers on YouTube, drinking a Mr. Pibb.

My two-year-old granddaughter is growing up thinking Borders is a library!

When I ask my students why they come to the library, they tell me the chairs are comfy. In the last two years, I've been through two major library building projects. In both, a major consideration, by librarians and architect alike, was where to put the coffee shop. Don't get me wrong, I'm all for comfy chairs and a latte, but what of the forest?

Part of me is nostalgic for Richard Armour's library ("Here is where people... lower their voices and raise their minds."). And yet, part of me loves the noise and energy of today's libraries. Part of me aches for row after row of long, worn oak tables, in great hushed halls where there is reverence for seriousness, concentration, and learning. Another part of me wants to curl up on the couch, browse Craigslist and eat lemon scones. I miss the dogged-eared catalog cards joining me, tactilely, to a thousand other searches and a thousand other searchers; but I also do love the speed, ease and forgiveness of a crisp connection.

Yesterday on the trip through the desert to our campus' latest venture, Yousef, the driver, was characteristically chatty.

"I'm a technician," he said calmly dodging semis loaded with boulders. "Before this, I was trained technician. Refrigerators, heating, air. Own shop, people."

"What made you change careers?" I asked.

"Today, all parts. Pieces. A compressor breaks. Replace it. Technicians take the old one out, put the new one in. They teach them good, that. They know what to do but they don't know why they do it. *Why* is the big question. If they know *why* the rest is easy. Today, no one cares, *why*."

Full circle.

At yet another information literacy confab, around a white clothed table, I asked my friend and idol, Ilene, if we should simply declare victory and retreat.

"We've been whooped by the likes of Google and Borders and Amazon and Starbucks," I said, feeling burned out and defeated by a lifetime of Sisyphusian efforts.

"But we have to keep trying," she said, ever the champion. "If we don't, who will?"

Writing is not about grammar and spelling and punctuation. It's about expression and discovery and the beauty of language. Libraries are not about Boolean searching, truncation, or APA, but about reading and curiosity and learning. Borders and Google have their place, but it's the libraries that know the *why*.

At breakfast tomorrow, I'll ask Jay if the nice librarian at Borders read her some books about camels.

As you can see, Zotero has many of the features of the more well-known commercial reference management tools. Because Zotero is relatively easy to use and is freely available for download, it is an excellent option for introducing your students to a tool with the potential to significantly impact the way they organize and manage the research process.