Collaborative Research

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Research is one of those things that can be done well either in a group or solo. For me, I always work better in a group, sharing resources, picking colleagues' brains, coming up with new ways to look at something I've reviewed a hundred times before. In some fields collaborative research is a must. Science is one of those fields; information studies on the other hand can be researched in many different ways. I bring up this difference in research styles because I just finished writing my second book, this time a solo work, and find it interesting how differently I tackled it from my first written work, which was a collaborative effort.

When I reached the age in school when teachers were assigning research projects, there was one tried and true way to work on your research paper. First you started with an outline, and then you went to the library and skimmed the card catalog (or browsed the shelves) for books on your topic. You wrote down the necessary information from the titles on 3x5 index cards and then sorted your cards alongside your outline. Just writing that process down has for me a comforting feel to it. The library was (and still is) a place of comfort; just sitting in between the shelves surrounded by tomes of research on any topic I could think of would help me sort out my thoughts before starting a new research project.

In this memory I'm sitting in the local academic library. My mother pulled strings to get us cards so that we'd be allowed to research there even though we were just kids. I remember skimming through the indexes and bibliographies of books on topics like Cameroon, Africa and the Whooping Crane (two projects I worked on as a kid). This practice didn't change once I became an undergraduate, not even with the availability of research databases in my campus library. I would use the OPAC, search for a few titles and then hunker down in the stacks surrounded by possible resources and their bibliographies.

All of this was done solo. I wrote my papers alone, I did my research alone and I didn't share any of my work with anyone other than my professors. It wasn't that I was selfish, it was that I didn't know there were others who might want to see what I was working on or even benefit from it. It was not very collaborative and not on point for this particular column, so why am I sharing this with you all? Simply to set up a bit of history on how I used to do research before the advent of many web-based collaborative research tools, maybe show you that we used to do things the same way.

Link Sharing

My entry into the world of shared research started with Delicious (http://delicious.com). Delicious is a site that allows you to store your bookmarks online and share them with others. When working on various research projects for myself, in and out of library school, I save every new resource I find to Delicious. This allows others to see what I was reading (http://delicious.com/nengard) and hopefully find a resource they didn't know existed.

While Delicious is basically designed as a way to save individual resources, it actually works very well as a collaborative tool simply by letting you build up a network of fellow researchers who you can follow and send resources to. In addition to my personal collection of links (which I can choose to make public or private) I can keep up with sites bookmarked by those I consider trusted sources. As with most online networking sites, these people do not have to be people I have met or know in person,

they can simply be people who happen to find resources that match my areas of study. This method of keeping up with the things my fellow researchers are finding online is a huge leap above sitting in the stacks and browsing research bibliographies. This way I find out about new resources sooner than I ever would have before and I can even add value to those resources by giving them summaries and keywords and sharing them with an even wider network of researchers.

Using Delicious we can also help provide up-to-date resources to our patrons via subject guides[1] or library websites. Many libraries have set up an account that all of the librarians have access too. Using that account, the librarians bookmark resources of interest to their patrons or to a specific research area and then make their lists of bookmarks public for others to learn from. One tool that Delicious provides to make this sharing easy is a *link roll* (http://delicious.com/help/linkrolls). *Link rolls* are simply a list of bookmarks meeting a specific criteria (be it user or keyword).

Reference Sharing

My new favorite research tool would have to be Zotero (http://zotero.org). Zotero itself isn't new, but the newest version comes with so many amazing tools for collaborative research that is has topped my list of favorite collaborative research gear. One of the rotating tag lines that can be found on the Zotero site actually says "Goodbye 3x5 cards, hello Zotero," giving a nod to the way we all used to create our bibliographies.

Zotero[2] is an open source bibliographic utility that installs itself right into your Firefox (http://firefox.com) browser for easy reference keeping. To use Zotero you must first have Firefox installed; at this time Zotero is only available as an add-on for Firefox. Once you have the add-on installed you will have a menu at the bottom of your browser where you can see all of the resources you have saved; consider each entry a new 3x5 index card.

Zotero integrates itself into many popular OPACs and research databases so that you can easily add a citation to your library simply by clicking an icon in the browser address bar. If the site you're on does not already have Zotero integration, there is nothing stopping you from adding a citation manually using one of a few different methods in Zotero. However, this process, while handy and very easy, doesn't really touch on the collaborative nature of Zotero.

With the newest release of the software users can now sign up for a free account on Zotero and share their bibliographies with others. Not only can they share their own individual bibliographies, but also they can create public libraries where several people with similar interests can join together to create a bibliography that will benefit everyone. While working on my book I decided to share my bibliography (http://www.zotero.org/nengard/items/collection/2080807) and my entire library (http://www.zotero.org/nengard/items) with others. Every resource I referenced while researching the book is shared and available for others to learn from. I was also lucky enough to find and participate in a few groups[3] that helped me find resources that might have fallen through the cracks.

Zotero has taken collaborative research to another level just by letting us store our information on their servers and access it through our browsers; this is one of those collaborative research tools that I see changing the way we work on group research projects from now on.

Marking up the Web

My final web-based collaborative research tool is one that to date I have yet to use for more than just fun, but it's a tool I think we should be aware of and one that might be just what you're looking for for your next collaborative research project. The tool is Diigo (http://www.diigo.com). Diigo calls itself a "powerful research tool and knowledge-sharing community," which makes it

sound like a pretty promising addition to the toolbox I'm building here.

Like Zotero, Diigo is a browser add-on that you install to assist in your research. Like Delicious, Diigo lets you save your bookmarks and share them with your online network (http://www.diigo.com/user/nengard). Unlike both of these tools, however, Diigo[4] actually lets you annotate the web. What does that mean?

With the Diigo toolbar installed you can add notes to any webpage and other Diigo users can see and add to your notes and comments. This means you could find an article online that is of interest to your research and find that the author is actually agreeing with another article you found the day before. With the Diigo toolbar installed you simply choose to annotate the article you have open and add a link (or just some text) referencing the related article so that you can find it later. Not just you though; anyone else researching the same topic can benefit from the content you have added.

The New Way of Research

I've limited myself to only mentioning three collaborative research tools here, but there are so many options popping up each day. Some of the tools people are using to work together on research projects weren't even envisioned as research tools in the first place. I actually find Twitter (http://twitter.com) to be a pretty powerful information delivery system, and Facebook (http://facebook.com) works great when I'm looking for a specific article or citation. We are lucky enough to be researching at a time when collaborative tools are the norm and I, for one, am having so much fun trying them all out.

For your next research project, whether it be for personal or professional reasons, give at least one of these tools a try and see how it changes not just the way you perform your research, but also the final product. And if you want, feel free to subscribe to any of my public reference resources to see what new things I'm finding every day.

References

[1] Brian Herzog has a short guide to using Delicious to create subject guides at your library, http://www.swissarmylibrarian.net/2007/07/28/library-subject-guides-using-delicious

[2] Learn more about Zotero with Jason Puckett's amazing Zotero research guide, http://research.library.gsu.edu/zotero

[3] One of these groups was the Free/Libre and Open Source Software and Libraries Bibliography, http://www.zotero.org/groups/freelibre_and_open_source_software_and_libraries_bibliography

[4] José Picardo has a short video tutorial for students using Diigo that can teach you a bit more, http://www.boxoftricks.net/?p=1352