Bibliographic Management Software is an Author’s Best Productivity Tool

Karen H. Frith

I remember using the printed Cumulative Index to Nursing and Allied Health Literature (CINAHL) in the library during my undergraduate education. Yes, I actually went to the library, opened several large reference books, and found indexed entries for research articles on my topic of interest. Now, I cannot imagine the time it would take to do literature searches in such a way, and I never want to give up the ease and efficiency of online literature searches from any place with an Internet connection. I also remember having stacks of articles on a table at home; each stack represented a topic. I had duplicates because I could not remember if I had the article, and sometimes I had duplicates on purpose because the article was relevant to two different topics. Now, I rarely print an article, and I can organize my articles in many different topics with little effort using bibliographic management software (BMS). I can find articles easily and cite them in manuscripts with a few mouse clicks! I can spend time thinking about the message of my manuscript rather than using my time to type references in the correct format or to look for that article that I know I had somewhere...

I am surprised that few of my colleagues and students in our doctoral program know how to use BMS. Here are some of the reasons that I have heard: (a) I don't need BMS because I can get what I want from online databases such as CINAHL; (b) I saw a demonstration when I first started my graduate program, but I was too busy with the course material to focus on the software; (c) it takes too long to learn how to use BMS; and (d) author guidelines for some journals state that BMS should not be used to format references. I would like to address each of these reasons in turn.

Why Scholars Need More than CINAHL and Other Databases

As an educator and a scholar, I cannot live without CINAHL, PubMed, and other online databases of professional literature. Truly, access to these and their full-text documents make evidence-based nursing possible. However, access alone is not sufficient. Scholarship requires synthesis of ideas, which is more easily accomplished with software designed for organizing references, web pages, and other types of source materials.

Most BMS can do three main functions: import full bibliographic contents associated with references from online databases, store and search thousands of references and source materials in a single BMS “library,” and output references to a word processing document in different styles including American Psychological Association (APA), American Medical Association (AMA), Harvard, Turabian, and hundreds more. I admit shamefully that before using a BMS, I only submitted manuscripts to journals that required APA formatting. Now I submit to the appropriate journal, regardless of style because the BMS does the formatting for me!

Learning by Doing

The best time to learn new software is when it is needed because adults typically will not expend time for something that is not useful. When in graduate school, a good approach is to set aside a little time to learn BMS when writing the first few papers. These initial papers do not usually require an
extensive list of references, and the basic functions of BMS can be learned rather quickly. As graduate students become more sophisticated in their thinking and synthesis, they will have more references and can try additional functions in the BMS. By the end of their education, graduate students who have used a BMS will have created a robust collection of references and source materials to support their practice and scholarship. They also will have a great tool to continue their thinking, writing, and dissemination.

The Learning Curve for BMS

If someone has never used a BMS, it takes time to learn, but the investment of time is well worth the efficiency gained when writing manuscripts for publication. I teach faculty in our Scholars’ Forum how to use BMS. It typically takes 3 hours of concentrated, hands-on-the-computer time for new users to learn how to export references from online library databases to BMS, find full-text documents (if they are not automatically imported with the reference), manage the references into groups, use cite-while-you-write function, and convert a manuscript to plain text for submission to a journal.

Even though 3 hours is a precious amount of time for any busy academic, the “ah-ha moment” occurs the first time that a reference list is automatically generated. However, getting an automatic, fully formatted reference list might not be worth the 3-hour investment. Other efficiencies are gained by using BMS. For example, it is much faster to search for a needed article in a BMS than searching through stacks of printed articles. It takes only seconds to organize references into topical groups by using drag and drop functions in software. References can be sorted by the author, year, title of article, and journal by clicking on the heading in the BMS. References can be shared among colleagues when writing joint manuscripts using web-based BMS or by using cloud storage for BMS libraries. These functions and many more increase the productivity of scholars by freeing time from tedious technical work for use in thinking and writing.

Conforming to Author Guidelines after Using BMS

Journal editors want manuscripts that are free from the tags or codes placed in word processing documents by a BMS. Manuscripts with BMS codes “look” for the source software when they are opened. This linking process creates technical problems for the journal, and many author guidelines prohibit the use of BMS to create reference lists because of the linking problem. There is, however, an easy way to use a BMS to cite references and create the reference list while still adhering to author guidelines. Depending on the BMS, the coding can be removed from manuscript by using tools placed in the word processor by the BMS. For example, EndNote®, a commercial BMS, places a tab in Microsoft Word. By clicking on the EndNote tab and selecting ‘convert citations and bibliography to plain text,’ the document can be stripped of the EndNote codes. Likewise, Zotero, a free BMS, places an add-in tab to Microsoft Word. By clicking on ‘Add-ins’ and then on an icon indicating a broken link, the Zotero codes can be removed from the manuscript. A quick check of references for adherence to the referencing format of the journal ensures the reference list is acceptable.

Selecting a BMS

There are many BMS packages available for purchase or for free (see Table 1 for web pages that contain comparison charts). There are two well-developed and freely available software: Mendeley and Zotero. Other software, such as EndNote®, ProCite®, Reference Manager®, RefWorks, and EasyBib, and are commercially developed and cost about $100-$200 USD. One way to decide between the available software is to choose the one supported by the university’s library or information technology office. Another way is to select the BMS that colleagues are using to simplify co-authoring a manuscript.
Table 1 Sources of BMS Comparisons

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<tr>
<th>Source</th>
<th>Website Address</th>
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<tr>
<td>New York University Libraries</td>
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<tr>
<td>University of Wisconsin-Madison Library</td>
<td><a href="http://www.library.wisc.edu/citation-managers/comparison.html">http://www.library.wisc.edu/citation-managers/comparison.html</a></td>
</tr>
<tr>
<td>MIT Library</td>
<td><a href="http://libguides.mit.edu/references">http://libguides.mit.edu/references</a></td>
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If you do not use a card catalog to look for references, a typewriter to develop a manuscript, or a hand-held calculator to run statistical analyses, it’s time to give up the manual processes for organizing references and source documents. Now is the time to accelerate your scholarly productivity by using a BMS!

Author
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