Martha Meacham on Constructing a Literature Search – The Vocabulary Roadmap

Hi, my name is Martha Meacham, a librarian at the Lamar Soutter Library, University of Massachusetts Medical School. Searching for information is a treasure hunt. The words you use to construct your search can be the map. Librarians make excellent escorts for your explorations, but if you are venturing on your own, it pays to be prepared with a good vocabulary roadmap.

Hot Tips

Once you have selected where to search (see the recent blog on Top 10 databases), realize that every place uses a different set of rules. The words used to index, categorize, and organize content are deliberately chosen to reflect the subjects covered in the database. This is often called a controlled vocabulary or thesaurus. As a medical librarian, I am particularly familiar with MeSH (Medical Subject Headings) the National Library of Medicine's controlled vocabulary, but there are many others. The database ERIC (Education Resources Information Center) has its own thesaurus. Google uses complex, proprietary web crawling, indexing, and algorithms to take the words you enter and bring back relevant results. Ovid, LexisNexis, etc. all have different search languages and structures.

Lessons Learned

An important distinction is the difference between keyword searching or using the controlled vocabulary. You can use any word as a keyword. Generally, for most databases, searching by keyword means that it will look for that word(s) anywhere, in any context, in any order. However, you will probably get irrelevant results.

A controlled vocabulary provides the exact words the database staff assign to content. These terms are applied to results because they reflect the subject or content of that result. Searching using this vocabulary may retrieve more relevant results but may miss relevant articles that were not categorized with that term.

Another trick to searching is realizing there is usually more than one route to the destination. You want to use many different words to describe your concept. I recommend keeping a list of synonyms. Using the controlled vocabulary of a database can be useful in finding alternative words. For example, "heart attack" is not a MeSH term, but Myocardial Infarction is. Additionally, the MeSH result for this example also points to narrower terms like "Shock, Cardiogenic" or broader terms such as "Myocardial Ischemia." Searching these alternatives could enrich your search.

Rad Resources

Knowing a little more about the vocabulary of a database, or the way a search engine like Google interprets your words, will help you structure a search in that system which will retrieve the most useful and relevant results. By using many different skills, tricks, tactics – many found in this week's blog posts – you will be well-equipped for a successful information treasure hunt.