Dissecting a Database: Teaching Yourself How to Search

How can you figure out the best way to search a new or unfamiliar journal database? Although many databases look different at first, most have similar features. Understanding these basic features will improve the efficiency and effectiveness of your searching. It will save you time and also will improve the accuracy and comprehensiveness of your searches.

What is in the database?
Scope: What subject areas are being covered? What years are covered? What type of materials (journals, books, book chapters, dissertations, etc.) are included? Can you find a list of journals or other materials that are included in the database? Check for any links to “About this database” for the answers to these questions.

What does it search?
Can you search by keyword, subject, author, title of article or journal? What is the default search and how do you switch to other types? Clicking on “Help” should give you information about the various searches available.

How does it search?

Phrase versus Word searching
Determine whether the database considers multiple words as a single phrase or a combination of words connected by OR (any of the words), or AND (all of the words). Use OR searches to broaden your search. Use AND searches to narrow your search. Check to see what the default search is and also if other options are available.

Truncation
Most databases allow you to search on a truncated (abbreviated) form of a word plus a wildcard. The wildcard must be directly next to the truncated word for this to work. Check to see what the truncation sign is in the database. Common truncation signs are #, *, ?, !, and $. For example, psych# will retrieve items on psychology, psychotherapy, psychotic, etc.

Controlled vocabulary/thesaurus searching
Some databases offer the option of searching by controlled vocabulary terms. These are authorized terms used to describe topics in the database and are frequently collected in a thesaurus. Using the controlled vocabulary or thesaurus terms in your search ensures that items being retrieved are specifically on the topic of interest. Check to see if your database has an online or print thesaurus to determine the best controlled-vocabulary terms to use for your search.

What do I do if I get too many results?

Are there any limit options?
Most databases allow you to narrow your search by selecting specific dates, language, and publication types. Some databases also allow you to restrict your search to particular population groups and ages.

Are any special modifiers available?
Some databases also allow you to focus your search by adding special modifiers. Modifiers vary depending upon the content of a database. Check to see if there are any special modifiers available in your database. For example, you can limit your search to specific subsets such as Complementary Medicine or the History of Medicine in PubMed.

Note: This can sometimes accidently eliminate results you would like to see.

Can you combine searches or add more concepts to your original search?
One quick way to reduce your results and focus your search is to add one or more additional concepts to your search. Check to see if you can type more terms into your search box, or if you need to modify your search in another way. Also, check to see if a “Search History” feature is available. If it is, you may be able to combine some of your previous searches into a new one that should reduce your results and focus your search. Also try focusing your search by using controlled vocabulary terms as described in the “How does it search?” section above.

Adapted from a worksheet provided by UCLA 03/11 PF
What do I do if I get too few results?

Eliminate concepts
The more concepts you combine in a search, the fewer results you are likely to retrieve. If you get little or no results from your search, try eliminating some of your concepts, limits, or modifiers.

Related articles
Some databases offer a “Related Articles” feature that enables you to expand your search. If you find only one or two articles on your topic, see if this feature is available. Clicking on a Related Articles link will allow you to retrieve more articles similar to the one with which you started.

Cited reference search
Another way to expand your results is to do a “Cited Reference Search” on any relevant article you might have. This feature is available in databases offered through the Web of Science. When you perform this type of search, you will retrieve articles that have cited the original article. You can use a cited reference search to find more up-to-date material on your topic, since retrieved material from this type of search will be more current than the original article.

How do I locate material from my search?
Many databases allow you to check if your library subscribes to the material you retrieve in your search. For many databases to which the UTK Library subscribes, electronic or print availability can be determined via the icon. Click on this link to access electronic versions of any material provided by UTK in that format or to find the location (call number) for the print version in the library.

How do I print, e-mail or download my results?
Most databases offer the option of printing your results. Others also allow for e-mailing and/or downloading your results. Select items of interest by clicking in the box (✓) next to the citation. Once you have selected all your items, click on the print, e-mail, or download option and follow the on-screen directions. You usually can customize the results to include abstracts and/or subject terms. Software such as Zotero or Endnote can make managing these citations easier.

Some Final Tips

Read the screen
- A careful examination of the screen often will yield a lot of information about the database.
- See if there is an example of how to type in your search (including the truncation sign used in the database) near the search box.
- Look for pull-down menus that might offer you ways to limit, modify, or otherwise alter your search.

Look for help
- See if there is a Help icon or button to obtain additional information about the database.
- Don’t forget “mouse-overs.” You frequently can obtain more information just by rolling your mouse over the icons and/or buttons on the screen.
- Ask a librarian. We are available to help you further dissect the databases you are trying to use and to offer advice on how to further refine your searches. You can contact us at agvetlib@utk.edu

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