Database and Internet Search Tips

The following[1] tips can be applied when you search in most library catalogs, scholarly databases, and web search engines. Each database may have its own unique search rules, however, so look for their parameters in "Help" sections and FAQs.

The Basics

While the following may seem obvious, what you type into the database search box directly affects the outcome of the search and is therefore crucial.

- Spell all words correctly (Google might try to help you out, but most database searches will not)
- Don't capitalize proper nouns
- Don't use punctuation
- Don't use natural language phrases; in other words, as you would speak.

Keyword Searching

In databases, "significant" words used within the title, summary, or text of an article are indexed into a searchable table. With web search engines, all the text of a website is searchable. These indexed words and phrases are called "**Keywords**" and using such words and terms to search is called Keyword Searching.

Things to consider with Keyword Searching:

- Keywords are words that can appear anywhere in an article including the title or somewhere in the article text.
- The search tools will only draw results that include these keywords
- Try to think of the keywords that best describe and relate to your topic.
- If you aren't sure about what keywords to use, consider reading an encyclopedia article on your topic to get ideas for other keywords.
- Keyword Searching sometimes requires multiple searches under a variety of key words and word variations. For example, you may need to search for *child*, *children*, *kids*, *boys*, or *girls* in order to find full information on children.
- Keyword Searching may also yield incorrect results, called "False Drops," where key words might be similar for totally different subject. For example, if you are searching for *the psychological aspects of depression in children*, you may retrieve records that have nothing to do with your topic such as this title "American Lives: Looking Back at the *Children* of the Great *Depression*."

[1] Information adapted from a handout by the Meriam Library at California State University, Chico and the Northeast Community College Library

Boolean Operators and Logic

Boolean operators are words (connectors) placed between search terms to narrow or expand a search. Use Boolean operators when you search using more than one word or phrase at a time.

- **AND**—Concatenation, narrows a search by combining Keywords
  - The **AND** operator tells the computer that both terms must be present in the record.
  - The terms may or may not be in a phrase. The more terms that are linked with an **AND** operator, the smaller the results will be. EX.: **children AND depression AND medication**
- **OR**—Alternative, broadens a search by offering alternative keywords
  - The **OR** operator is used for like or synonymous terms. Using it tells the computer that either (any) term must be present in the record. The more terms connected with the **OR** operator, the larger the results will be. EX.: **children OR adolescents OR teens OR juveniles**
- **NOT**—Limitation, narrows a search by eliminating a word from the search
  - The **NOT** operator eliminates an unwanted search term or group of search terms from the search results. EX.: **children NOT teens**
- **()**—Order of Operation, limits results by searching for keywords in parentheses first before searching for other terms
  - EX.: (**children OR adolescents) AND depression**
- **“”**—Phrase Searching, retrieves more precise results
  - Tells the computer to search for <u>exact</u> phrases, so be careful of spelling and try alternative phrasing
  - Searches for two or more words in the exact order in which they are entered
  - Use quotations marks to enclose the phrase. EX.: **“weapons of mass destruction” AND WMDs**
- ***, ?, $, #** — Truncation, broadens search by searching for the "root" form of a word with all its different endings by adding a symbol to the end of a word.
  - Using truncation saves time, as you don’t have to repeat searches with multiple variations of the same word
  - The most common truncation symbol is the asterisk ***** but databases vary. Check the database Help section to find the correct truncation symbol.
  - EX.: typing in ***bank**** will retrieve results with these words: **bank**, **banks**, **banking**, **bankers**, **bankruptcy**

When you enter two search terms without using a connector (AND, OR, NOT), be aware that the database may **automatically** be set up to do one of three things.

- **Implied AND:** Searches for records containing all of the terms.
  - EX.: typing in ***ozone layer depletion*** may really mean ***ozone AND layer AND depletion***

- **Implied OR:** Searches for items containing any of the terms. (Often employed by Web search engines resulting in thousands of records.)
    - EX.: typing in ***ozone layer depletion*** may really mean ***ozone OR layer OR depletion***
- **Implied Phrase Searching:** Searches for a phrase, i.e., 2 or more words that are adjacent and in the exact order.
    - EX.: typing in ***ozone layer depletion*** may actually mean ***ozone layer depletion***

Additional Google Tips

Google has some tricks of its own to help you limit search results in addition to the usual Boolean operators above.

- Eliminate a word: Like the **NOT** function, in Google you can use a dash (-) in front of a word to eliminate it from the results. EX.: **moon landing –conspiracy**
- Search within a Site: Limit searches to just a single website using **site:**. EX.: **reviews site:rollingstone.com**
- Search in the text:
    - Find pages where all the keywords appear in the text of the site itself using **allintext:**. EX.: **allintext: Neil Armstrong moon landing**
    - Find sites with some words anywhere on the page and some words in the text using **intext:**. EX.: **Neil Armstrong intext:pilot**
- Search in the title:
    - Find pages where all the keywords appear in the text of the site's title using **allintitlet:**. EX.: **allintext: Neil Armstrong moon landing**
    - Find sites with some words anywhere on the page and some words in the title using **intitle:**. EX.: **Neil Armstrong intitle:moon**
- Search for similar sites: Find sites with similar content using **related:**. EX.: **related:nytimes.com**
- Search for file types: Limit searches to a file type using **filetype:suffix**. EX.: **Neil Armstrong filetype:jpg**
- Search using partial phrases: You can use the asterisk (*) as a wildcard to leave a blank for words you can't remember. EX.: **twinkle twinkle little * how I wonder what you ***