

## Searching Tools

There are a number of helpful tips and hints you can use to improve your search results. For example, you can use Boolean operators to link search terms together; and/or limit the search to a specific title.

### Boolean Operators

Boolean Searching is based on boolean logic, which was developed George Boole, a mathematician. You can fine tune your searches by using **AND**, **OR**, and **NOT** operators to link your search words together. These operators will help you narrow or broaden your search to better express the terms you are looking for and to retrieve the exact information you need quickly.

By stringing key terms together using "**AND**", you can further define your search and reduce the number of results. Note: Unless you define a specific search field, the result list will contain references where all your search terms are located in the citation, full display or full text.

- For example, type **sleep AND walking** to find results that refers to both sleep and walking.

To broaden a search, you can link terms together by using the "OR" operator. By using "**OR**" to link your terms together you can find documents on many topics. Linked by this operator, your words are searched simultaneously and independently of each other.

- As an example, search **sleep AND walking OR waking** to find results that reference the terms "sleep" and "walking", or the term "waking".

To narrow a search, you can link words together by using the "**NOT**" operator. This operator will help you to filter out specific topics you do not wish included as part of your search.

- Type: **sleep OR walking NOT waking** to find results that contain the terms "sleep" or "walking" but not the term "waking".
- You can include many Boolean Operators in your search. The operators are combines with left to right priority.

### Truncation (using part of a term)

Truncation means to cut off a point or shorten. When used with keywords it means to keep the stem of the key words and "cut" everything else away.

Let's look at some examples to illustrate the meaning:

Say you want information about politics, politicians, politician, and political-these words all have the same stem "politi". Instead of searching each word separately, you can search them all at once by using truncation. You have to use a "wildcard" to the stem of the word for the database to recognize that you are using truncation. These "wildcards" are usually one of the following symbols": \*(asterix),?(question mark), #(hash) or + (plus).

Note: Some databases will recognize the \* and other the ?, # or +. Look at the "Help" function of each database to see which symbol(wildcard) you should use for that particular database.

Also note that some wildcards may replace more than one letter, while other can be used to replace a single letter only. An example of the latter is "wom\*n", where the \*(wildcard) allows both singular and plural spellings.

### **Phrase Searching** (using exact strings of words)

Phrase searching is when you use a string of words(instead of a single word to search with. Look at the following example:

You might look for information on Adult Education. Each one of these has a different meaning when standing alone and will retrieve many irrelevant documents. But when you put them together, the meaning changes to the very precise concept of "adult education". For the database to understand you search, you should put the phrase between brackets( ) or inverted commas " ". Type your search as follows: "adult education" or (adult education).

Note: Some databases will use inverted commas and others the brackets. Look at the "Help" function of each database to see what you should use for that particular database.

### **Grouping Terms Together Using Parentheses**

Parentheses also may be used to control a search query. Without parentheses, a search is executed from left to right. Words that you enclose in parentheses are searched first. Why is this important? Parentheses allow you to control and define the way the search will be executed. The left phrase in parentheses is searched first; then based upon those results the second phrase in parentheses is searched.

Generalized Search: dog or cat and show or parade

Focused Search: (dog or cat) and (show or parade)

In the first example, the search will retrieve everything on dog or cat shows AS WELL AS everything on parades whether or not the articles refer to dogs or cats.

In the second example, we have used the parentheses to control our query to only find articles about shows or parades that reference dogs or cats.

The default fields for unqualified searches consist of the following: Article Title, Article Subject Headings, Author and Abstract.

The following are different search tools that can be used to ensure you to retrieve all you want, and only what you want.

### **STOP WORDS**

In database searching, "stop words" are small and frequently occurring words like *and, or, in, of* that are often ignored when keyed as search terms. Sometimes putting them in quotes " " will allow you to search them.