

Tools to Improve Your Online Searches

Different databases provide different tools to help you create efficient search statements. Below is a list of the various tools and techniques available to you. Please note that what works well in one database may not work in another. Always check the database's help screens or ask a librarian if you are not getting the results you want.

Boolean Operators

Allow you to expand or narrow your search

- **AND:** combining search terms with AND focuses and narrows your search by retrieving only records that contain every one of the keywords you enter. The more terms you "AND" together, the more specific and relevant your search results will be.
Example: executive AND compensation AND profitability
- **OR:** combining search terms with OR expands and broadens your search by returning records in which either or both keywords appear. Since the OR operator is usually used for keywords that are similar or synonymous, the more keywords you enter, the more documents you will retrieve.
Example: compensation OR salary OR wages
- **NOT:** (sometimes AND NOT) narrows your search by retrieving only records that do **not** contain the search term following it. In the example below, the results returned would only include those records that contained the word "compensation"; any records with the word "stock" would be eliminated.
Example: compensation NOT stock

Phrase Searching

Allows you to create very specific, precise searches, which should retrieve more relevant results. Use phrase searching whenever you want to link specific terms together like "child abuse" or "health care." Different databases offer different methods of designating phrases. Some of the methods are:

- **Quotation marks:** Place quotation marks around the phrase.
Example: "stock options"
- **Proximity Operators**
 - **WITH/W:** Type **W** or **WITH** between two or more terms to search for records containing both terms, in the order typed, with no words between them. Type **W** and a number (1-25) between two terms to search for records containing both terms, in the order typed, with no more than that number of other words between them.
Examples: stock W options ; stock WITH options ; stock W2 options ; stock w/2 options
 - **NEAR:** Type **N** or **NEAR** between two or more terms to search for records containing both terms, in any order, with words between them. Type **N** and a number (1-25) between two terms to search for records containing both terms, in any order, with no more than that number of other words between them.
Examples: stock N options ; stock NEAR options; stock N2 options ; stock n/2 options
 - **ADJ:** (adjacent to) ADJ works as a phrase except that the two terms, which must appear adjacent to each other in the record, can appear in any order. The two examples below would return the exact same results
Examples: stock ADJ options ; options ADJ stock
- **Assumed phrases:** some databases assume if you type in two or more words together that you want them to be searched as a phrase. Therefore, you don't need any special method or tool to designate your search terms as phrases.

Truncation

Allows you to search for a term and its variations by entering the first few letters of the term followed by the appropriate symbol, such as an asterisk (*). Truncation symbols do vary from database to database. The "*" is the most popular, but "?" or "!" may also be used. Check the database's help screens if you're not sure which symbol to use.

Example: profit retrieves records that contain profit, profits, profitability, etc.*

Wildcard characters

Wildcards are used to represent from zero to nine additional characters in a search term. They are useful when you are unsure of spelling, when there are alternate spellings, or when you only know part of a term. As with truncation symbols, wildcard characters vary from database to database. Always check the database's help screens. Some common examples are:

- **Pound sign #** represents a single character. That is, the # symbol will replace exactly one character.
Example: wom#n will search for records containing woman and women only
- **Question mark ?** represents from any number of additional characters.
Example: colo?r will search for records containing color, colour, colonizer, and colorimeter

Nesting

Combine synonyms for your keywords into one search statement. Each parentheses in the example below represents one keyword and its synonyms and is a "nest." You can combine "nests" together with the Boolean AND operator. Most library databases support nested searches.

Example: (business OR company OR industry) AND (compensation OR salary OR wages) AND (president OR CEO OR executive)

Example using a database like ProQuest (the search boxes act like parentheses):

The screenshot shows the ProQuest search interface. At the top, there is a navigation bar with icons for Basic Search, Advanced Search, Topic Guide, and Publication Search, along with a 'Marked List : 0 articles' indicator. Below this, a dropdown menu shows 'Databases selected: Multiple databases...'. The main section is titled 'Advanced Search' and includes 'Tools: Search Tips Browse Topics'. The search form consists of three rows, each with a text input box and a dropdown menu. The first row has the text 'executive or CEO or president' and a dropdown set to 'Citation and abstract'. The second row has 'AND' in a dropdown, 'compensation or wages or salary' in the text box, and another 'Citation and abstract' dropdown. The third row has 'AND' in a dropdown, 'profitability or earnings' in the text box, and a third 'Citation and abstract' dropdown.

Combining Techniques and Tools

It is possible and even advisable to combine the above tools and techniques into one search to create an efficient, effective search statement. Here is an example using some of the tools:

This screenshot shows a search form similar to the one above, but with a combined search statement. The first row has the text 'executive* or CEO or president*' in the input box and a 'Citation and abstract' dropdown. The second row has 'AND' in a dropdown, 'compensation or "stock options"' in the text box, and another 'Citation and abstract' dropdown. The third row has 'AND' in a dropdown, 'profit* or earnings' in the text box, and a third 'Citation and abstract' dropdown.