

Techniques for Database and Internet searching

Boolean Logic

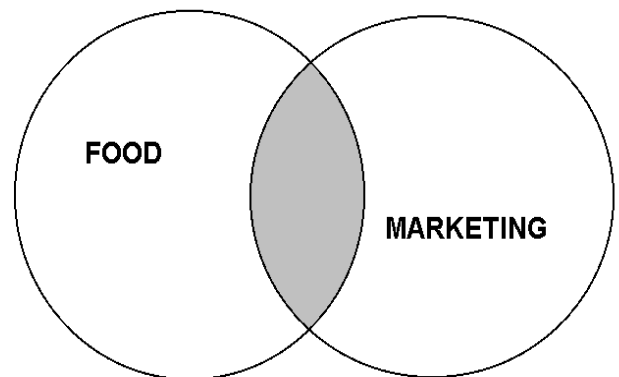
This method uses logical connectors to define the relationship or connection between words. The words **AND**, **OR** and **NOT** are often referred to as Boolean operators. These operators can be used when searching library catalogues, magazine and newspaper databases and when using a search engine.

AND operator

All terms entered must be present in the list of results. In the search

FOOD AND MARKETING

the results will include both words. In the following diagram this is represented by the shaded area:

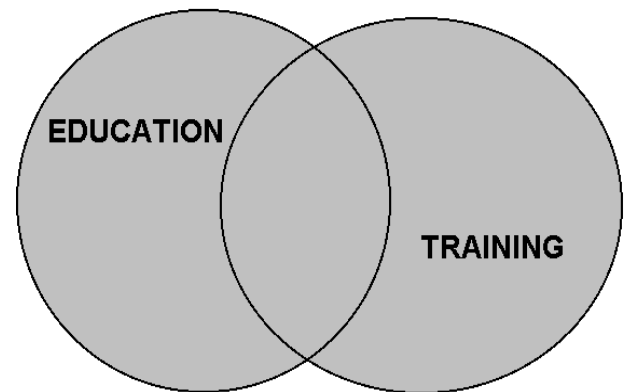


OR operator

This Boolean operator is used to **expand** the results by using alternative keywords that describe the subject. Records will be found where at least one of the keywords must be present. In this example, searching for

EDUCATION OR TRAINING

will retrieve records that contain **either** word or **both** words.

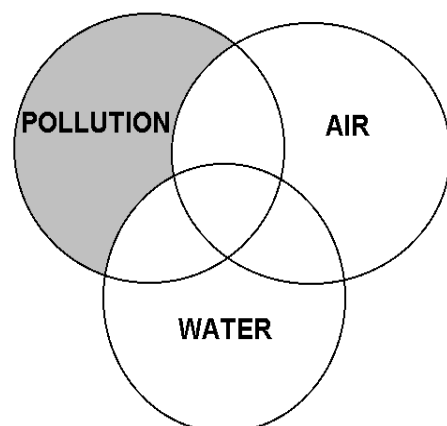


NOT operator

This operator is used to **exclude** records that contain a specific word. In the following example:

Pollution **NOT** water **NOT** air

The results will find records containing the word **pollution** but will exclude those records which include the words air and water.

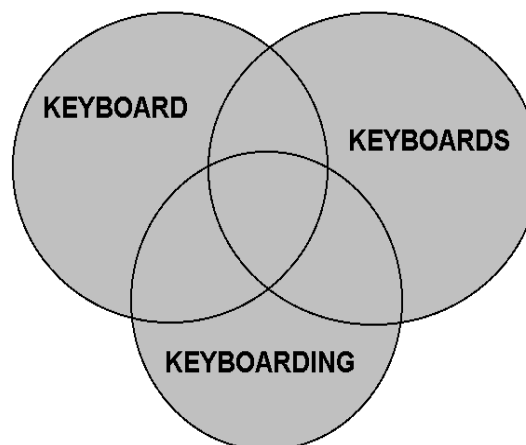


Truncation

Search results can also be expanded by truncating search terms. Truncation is used to search for words with common suffixes such as:

-es, -ers, -ed, -ised, -ing

The base of a word is entered followed by a symbol, usually an * eg. **keyboard*** will find records with words like keyboard or keyboards or keyboarding.



Wildcards

A question mark can be used to replace letters within words. An example is the word **organi?ation** where the words organisation or organization will be found in the results.

Top ten searching tips

1. Use nouns and objects as query *keywords*. Verbs and adjectives are too variable to be useful.
2. Use more rather than less keywords. The more keywords used reduces irrelevant matches.
3. Link concepts with **AND** (some search engines use a + symbol).
4. Use the **NOT** operator before a term to be excluded (some search engines use a minus sign -).
5. Use synonyms via the **OR** operator to cover different ways a concept may be described.
6. Combine keywords into "*phrases*" (enclosed by inverted commas) where possible which restricts to the exact match of the phrase.
7. **Truncate** words to pick up variable and plural versions. eg. comput*.
Use **wildcards** to pick up alternative spellings of words. eg. organi?ation
8. Use **Capitalization** of the first letter of each name to search for a person.
eg. Julia Gillard or place names eg. Port Phillip Bay
9. Combine 2 to 3 concepts in a query. Often referred to as '**nesting**'

eg. "Bill Gates" AND (internet OR "world wide web")
10. Order concepts with main subject first. Order of keywords is important. More emphasis is placed on the first word and subsequent words in order from left to right in a search string.