Boolean Basics

Despite the intimidating name, Boolean search techniques are quite simple to learn and can make your search much more effective. The system was developed by English mathematician George Boole in the mid-19th century, and was instrumental in the development of computers and search engines. Much of the information on the Web is highly unstructured. Boolean techniques provide a way for you to bring structure to this unstructured environment. They give you the ability to narrow your search to a reasonable number of potentially useful possibilities thereby increasing the likelihood of success.

A Boolean search uses AND, OR and NOT, the primary operators of Boolean logic, to limit and refine a search. A Venn diagram can help illustrate how this works. See http://kathyschrock.net/rbs3k/boolean/ Boolean can be particularly useful when searching databases. Some databases assume that words be adjacent. If your search returns few or no results, try inserting *AND* between the words.

- *AND*
  AND means "I want only documents that contain both search terms"
  Results retrieved when using *AND* will include results containing both (or all) of the search terms used. The results **will not** include those documents containing only one of the search terms. *AND* narrows your search.
  The *AND* operator can be used to chain a number of search terms or phrases together, and all will be contained in any results. Example: *Chicago AND "Sears Tower" AND "Navy Pier"* would only return documents that contained all three terms or phrases.
  Search Tip: AND should be your most frequently used Boolean operator.

- *OR*
  OR means "I want documents that contain either search term; I don't care which one." It broadens a search and makes it less focused. Results retrieved when using *OR* will contain either the first search term *or* the second *or* both together. False results can be common using the *OR* operator. Example: Europe *OR* France
  Search Tip: Use *OR* to string together synonyms.

- *NOT*
  NOT means "I want documents that contain the first word/term, but not the second." Results retrieved using *NOT* will contain only items containing the first search term. Items containing the second term will be excluded, as will any items including both terms. Take care when using *NOT* in order to avoid overly limiting your search. Example: Vikings *NOT* Football

- *Wild Card*
  Use *?* as a wild card within a word. (Find WOMAN and WOMEN using WOM?N.)

- Add an asterisk ***** to the stem of a word to search for variations of the word. (FARM* to retrieve FARMING and FARMERS.)