

Guide to Searching Research Databases

Searching Research Databases will be more productive if you know how to effectively use these search tools. This requires knowing certain basic search techniques, which are very important for getting good search results. Therefore, you should take the time to understand – and use them. You will be amazed with the improvement in your search.

The search techniques introduced in this guide are: **keyword searching, phrase searching, Boolean operators, truncation and wildcards.**

Whenever you begin to use a new research database, look for a “help” link (“search tips” or “instructions”) to determine which of these search techniques are available and how to apply them to the specific tool you are using.

Keyword Searching

Keyword searching is the most flexible type of search that can be done in a research database. Your search term (keyword) can be found anywhere in the database record which usually includes the title of the article, author’s name, the title of the periodical, the date, the summary of the article (abstract) and the subject heading(s) or descriptors.

The most important thing to remember when using keyword searching is to carefully choose your keywords because the database search feature will only retrieve the words you have typed in the search box.

A helpful way of structuring your search is to state your topic as a question. For example, if you are interested in finding out about internet censoring in schools, you might pose the question “Should the internet be censored in elementary schools?”

Next, identify the keywords in your question. Choose only **the most important words**. Omit unnecessary words.

In this case your keywords would be: Internet, censored and elementary schools.



Just because the computer can find the words, doesn’t mean that it is used the way you want. You may get a “false hit” which means that the record found by the computer has little to do with your topic.

Phrase Searching

Phrase searching allows you to combine words so that you only get results where the words are next to each other in the order specified.

Most databases use quotation marks to designate a phrase. For example: “elementary school” “gun control”.



You will find fewer results when you use phrase searching. Phrase searching narrows your search.

Boolean Operators (Connectors)

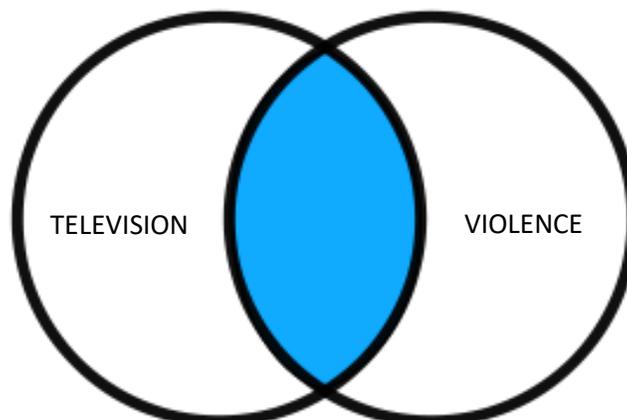
Boolean logic, uses the logical operators (connectors) – **AND**, **OR** and **NOT** to combine the keywords to narrow, broaden or limit a database search. When you use these operators in your database searches, your searches will be more precise.

These operators or connectors tell the database search feature how to combine the keywords you are searching to enable you to retrieve the information to satisfy your research need.

Each operator is explained below.

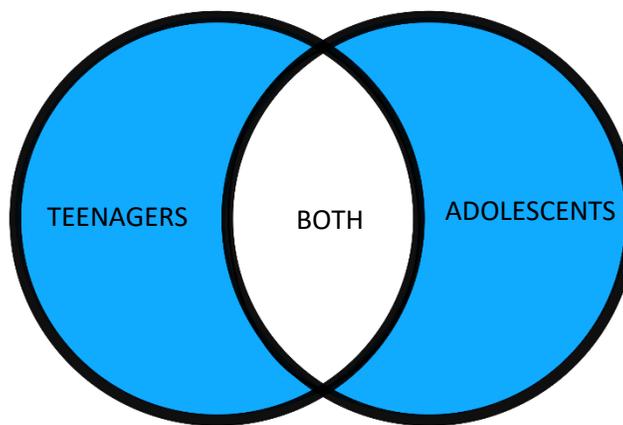
- **AND: narrows or refines a keyword search**

Use the **AND** operator to tell the Research Database to find both (or all of your keywords) in each result that it retrieves. For example, if you search for *television AND violence*, only articles containing both search terms will be retrieved. (The blue area in the illustration below represents search results containing both television AND violence.)



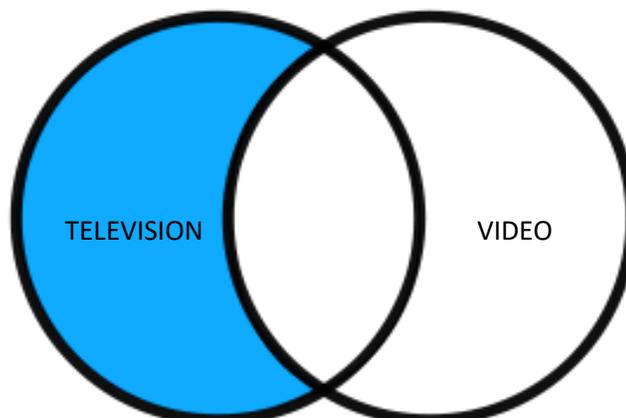
- **OR: broadens a keywords search and allows searching of synonyms**

Use the **OR** operator to tell the Research Databases to find **one, or the other, or both of your search terms** in each result that it retrieves. This operator is used where alternative words can be used to describe the same concept or idea. For example, *teenagers OR adolescents* retrieves articles with either the word teenagers or adolescents, or both. (The illustration below represents search results containing the keyword teenagers OR the keyword adolescents OR both.)



- **NOT: eliminates a keyword from your search results**

Use the **NOT** operator to tell the Research Databases to **remove all database records with search term** that follows the NOT operator. For example, *television NOT video* will retrieve articles containing the term television but not the term video. (The blue area in the illustration represents search results containing the keyword television but NOT the keyword video.)



Note: Boolean logic is not always simple or easy. Individual Research Databases handle Boolean operators differently. For example, some accept NOT, others AND NOT as two words. Some require the operators to be typed in capital letters while others do not. Some Research Databases use drop-down menu options to use Boolean logic in short phrases. For example, “all of the words” or “must contain” equates to AND; “any of the words” or “should contain” equates to OR; and “must not contain” equates to NOT. Therefore, it is very important to read the “Help” page of each database before conducting your search to ensure you retrieve good results.

Truncation and Wildcards

The truncation symbol (usually an asterisk [*]) instructs the database search mechanism to retrieve all words beginning with the root of the search term. For example: **mentor*** will retrieve the words **mentor, mentors, mentoring, mentored or mentorship**.

The wildcard symbol (usually a question mark [?]) searches for a character within a word. For example: **wom?n** will retrieve the word **woman** or **women**.

Note: The symbols used for truncation and wildcards may be different for each Research Database. To determine which symbols are used in the database you are searching, check the online help screens or ask the Library Resource Centre staff.

Search Techniques Summary

Symbol	Explanation	Example
“ _____ ”	Phrase Searching	“elementary school”
AND	Retrieves all search terms	teenagers AND diet
OR	Finds either search term	diet OR nutrition
NOT	Excludes specified search term	diet NOT nutrition
*	Finds root word and various endings	teen*
?	Searches for a character(s) within a word	wom?n

Search Tips

- Become familiar with the Research Database you are using by reading the descriptions available. Make sure you are using the database(s) which are appropriate for the information you require.
- Always check the “Help” screens of the database you are using to see how it works.
- Keep your search simple in the beginning; you can always build on it later.
- Omit unnecessary words.
- Be flexible with your search terms. If your search fails to find enough relevant information, try a related term, a variant spelling, or a different search tool. Also, consider narrowing or widening your search.
- Spelling counts! Check for spelling and typing errors.
- Consider different meanings. Remember that words often have many meanings (e.g. Book can mean a printed work or to reserve in advance.)



We can help you choose an appropriate database, formulate your search statement, help you understand your search results and provide tips for searching more effectively.