

E LIBRARY® CANADA

BOOLEAN SEARCHING 101



This worksheet was created to introduce and explain basic Boolean searching with eLibrary® Canada. While eLibrary Canada defaults to a Natural Language search, you may use Boolean operators in your search.

Boolean searching allows you to specify the exact words that you want to find whether you want all or some of your search terms to appear in the results.



All results with Boolean Searching will be ranked 100% relevant, as the search will not yield any results that do not have the exact terms that you have specified.

The following is a guide to using Boolean operators. Use it as a quick reference tool while performing Boolean searches:

Boolean Operator	GIVES YOU THE FOLLOWING RESULTS:	Example
AND	All terms appear in document	A AND B
OR	At least one term appears in the document:	A OR B
AND NOT	Term must not be in the document:	A AND NOT B
WITHIN	Terms must appear within # of one another:	A B WITHIN 30
ADJ	Terms appear in the document in the same order that you have typed them within # words of each other:	A B ADJ 30

BOOLEAN OPERATORS:

The words: **AND**, **OR**, **AND NOT**, **ADJ** and **WITHIN** are Boolean operators. They are used in a Boolean search command to refine your search even further.

THE AND OPERATOR

The AND command allows you to combine terms. Try the following search:

1. Canada AND "Free Trade Agreement".

All terms appear in all documents. Terms in quotes will appear at least once together in the article, for example "Free Trade Agreement".

THE OR OPERATOR

The search engine will look for any or all of your terms, and retrieve documents with any combination of them. This type of search is useful for finding information on related terms. Try the following searches with operators 'AND' and 'OR' to compare the different results.

1. farming AND grazing AND tilling
2. farming OR grazing OR tilling

NOTE: A Natural Language search would look for any combination of the words, but would also give a higher ranking to documents with all three terms in the order specified.

THE AND NOT OPERATOR

With the "AND NOT" operator, you are instructing the database to eliminate terms to narrow your search. Try the following example:

1. children AND allergies AND food
2. children AND allergies AND NOT food

The 'AND NOT' operator excludes specific terms that you do not want in your document.

USING BRACKETS

Brackets are used to instruct the database to look for words in a specific combination. Try the following search without brackets.

1. technology AND fraud OR viruses
With no brackets, the search engine will look for documents with "**technology**" AND "**fraud**" together or documents with just the word "**viruses**" in them. In this case, the Boolean operators are evaluated from left to right.
2. technology AND (fraud or viruses)
By adding the brackets, all documents retrieved will have **technology AND fraud OR technology AND viruses**. "**technology**" can appear with both terms in the brackets, but at the very least must appear with one of the terms.

THE WITHIN OPERATOR

The WITHIN operator will narrow a search by telling the search engine to find all search terms within a certain number of words of each other. Depending on the numerical value that is specified, the terms will appear within that distance of one another. Compare your search results before and after using the WITHIN operator.

1. drug athletes banned substances WITHIN 50 (**HINT:** Use the "go to best part" button)

NOTE: This is a very powerful and useful way to get extremely relevant documents. "**WITHIN**" can only be performed in Boolean and needs to be at the end of your search terms. The 'WITHIN' operator, in this example yields only those documents in which the terms being searched are 50 words maximum distance from one another, in at least one occurrence within that document.

THE ADJACENT OPERATOR

With the ADJ (adjacent) operator, you are instructing the database to look for the search terms specified in the order in which they are entered in the search box and within the number of words specified.

All terms found using 'ADJ' are in the desired order and within a certain number of terms from one another. Be sure to use the 'ADJ' operator with a numerical value.

The screenshot shows the eLibrary Canada search interface. At the top, there is a navigation bar with tabs for CANADA, SEARCH, TOPIC, REFERENCE, MY LIST, BOOKCART, QUIZZES, HELP, and EXIT. Below this is a search bar with a 'SEARCH' button. A row of icons represents different content types: NEWS, MAGAZINES, BOOKS, MAPS, PICTURES, AUDIO/VIDEO, and TRANSCRIPTS. Below the icons is an 'ADVANCED SEARCH OPTIONS' section with various filters and search parameters. Two callout boxes are present: one pointing to the search bar with the text 'Enter your Boolean query here', and another pointing to the 'Boolean Operator' radio button in the 'SEARCH TYPE' section with the text 'Click on Boolean Operator to launch a Boolean search'.

Shown above is the main search screen for eLibrary Canada. Please note that when you are running a Boolean search, you need to select the Boolean Operator option at the bottom of the screen. Doing so will ensure that the database recognizes the operator that you have entered in your query and will retrieve only relevant results.