Performing Searches

This guide briefly demonstrates how to perform a search in library databases and online catalogs.

Getting Started

Standard internet search engines such as Google function by allowing users to type a question or sentence directly into the search box. Results from these search engines are then retrieved based on the popularity (number of clicks) of the results (not their credibility or content). This type of searching will not work in a library database or catalog. Instead, you will need to use Keywords (these are your search terms, see Choosing Keywords handout), Boolean operators (AND, OR, NOT), and phrase searching to properly search.

Boolean operators often appear in all uppercase letters so they are not confused with keywords and some databases require all capitalized Boolean terms. If you are typing in Boolean operators, it is best to put them in all caps even if it is not required by the database.

Phrase Searching

Phrase searching is used to keep words together in a search of a library database or catalog. Use quotation marks around the words you would like to keep together, otherwise, they will be searched as individual terms. Phrase searching can be used in combination with all of the Boolean operators.

Examples:
- diet soda → “diet soda”
- low carb diet → “low carb diet”
- Carl Sagan → “Carl Sagan”

Boolean Operator: AND

The Boolean operator AND is used to connect keywords and decrease (narrow) the number of results retrieved in a search. In other words, performing a search with this operator will ensure that only results that use all of the keywords in your search are retrieved.

Examples:
- “mental health” AND children
- depression AND children
- depression AND children AND “teenagers AND suicide"

Boolean Operator: OR

The Boolean operator OR is used to expand (increase) the number of results retrieved in a search by including synonyms (use a print or online thesaurus to find synonyms) of your keywords. In other words, use OR to tell the database that you are interested in searching with multiple terms. At least one of the keywords from a search will be retrieved by using this operator. This operator is very effective when combined with the AND operator.

Examples:
- depression OR sadness
- depression OR sadness OR hopelessness

Combining operators:
- depression OR sadness AND elderly

Use parenthesis to keep your combined searches in the proper order.

Examples: In the examples below, the results would contain all of the keyword terms outside of the parenthesis and at least one of the words in the parenthesis.
- elderly AND (depression OR sadness)
- elderly AND suicide AND (depression OR SADNESS)
**Boolean Operator: NOT**
The Boolean operator **NOT** is used *before* a keyword to exclude that word from your search results. In other words, this operator is used to exclude terms that are not relevant to your search or have multiple meanings. For example, you want information on tigers but not Siberian tigers, you can search for “tigers NOT Siberian” and eliminate results that have the word “Siberian.”

The **NOT** operator can be used in conjunction with the operators **AND** or **OR** as well as phrase searching. *Make sure **NOT** comes after the keyword you want to keep and before the keyword you want to exclude.*

Examples:
- depression AND elderly AND married NOT widowed
- “mental health” and “senior citizens” NOT depression
- depression and (“senior citizens” OR elderly) NOT retired

**Truncation**
Truncating a root word allows results to be retrieved that use any form of that word and is a way results can be expanded. Truncation is done by adding a * at the end of a root word. For example, if I was searching for results containing “teenagers” I might also want to search for results that contain “teens” “teenage” and “teenaged.”

Truncation can be used in combination with phrase searching and Boolean operators

Examples:
- teen* → teens, teenager, teenage, teenaged, teens
- depress* → depressed, depressing, depression
- music* → musical, musician, musicians

*Truncation can also be used in combination with phrase search and Boolean operators.*

Examples:
- depress* AND “senior citizens”
- teen* AND (obesity OR overweight)