

A decorative background featuring a network diagram with nodes and connecting lines. The nodes are represented by circles of varying sizes and colors, including grey, blue, and white. The lines are thin and grey, creating a complex web-like structure. The diagram is positioned in the corners of the page, with the top-left and bottom-right corners showing more of the network, while the center is dominated by the text.

Database Search Tips

Overview

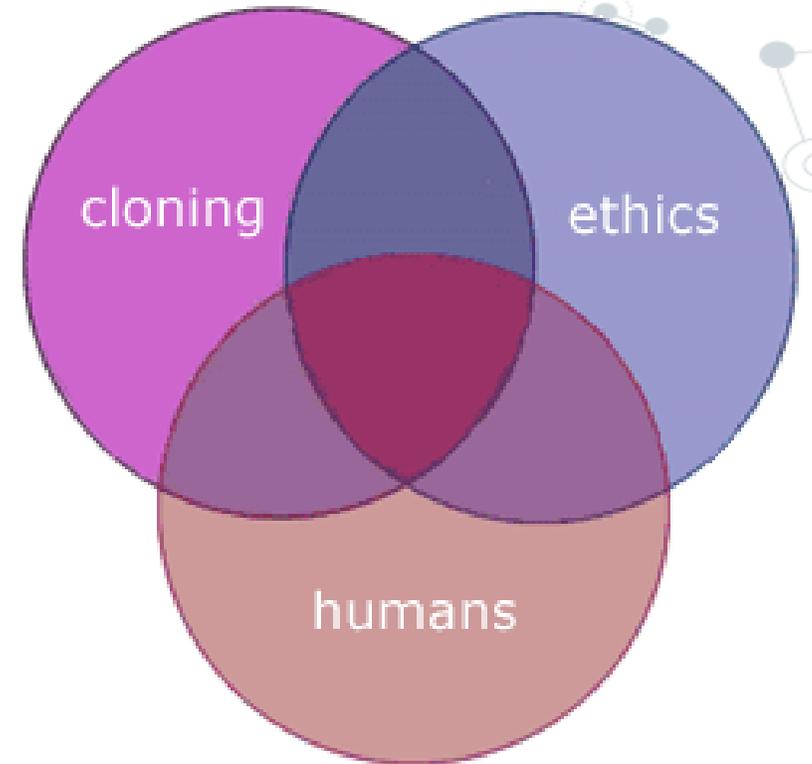
- ◎ The key to being a savvy online researcher is to use common search techniques that you can apply to almost any database, including article databases, online catalogs, and even commercial search engines.
- ◎ This is important because searching library databases is a bit different from searching Google
- ◎ The techniques described here will enable you to quickly retrieve relevant information from the thousands of records in a database.

Boolean Operators: What to Look For

- ◎ Boolean operators form the basis of mathematical sets and database logic
 - They connect your search words together to either narrow or broaden your set of results
 - The three basic operators are AND, OR, and NOT
- ◎ Why use Boolean operators?
 - To focus a search, particularly when your topic contains multiple search terms
 - To connect various pieces of information to find exactly what you're looking for
 - ◎ EXAMPLE: second creation (title) AND wilmut and campbell (author) AND 2000 (year)

Using AND

- ◎ Use AND in a search to
 - Narrow your results
 - Tell the database that ALL search terms must be present in the resulting records
 - Example: cloning AND humans AND ethics
- ◎ The purple triangle in the middle of the Venn diagram below represents the result set for this search. It is a small set using AND, the combination of all three search words

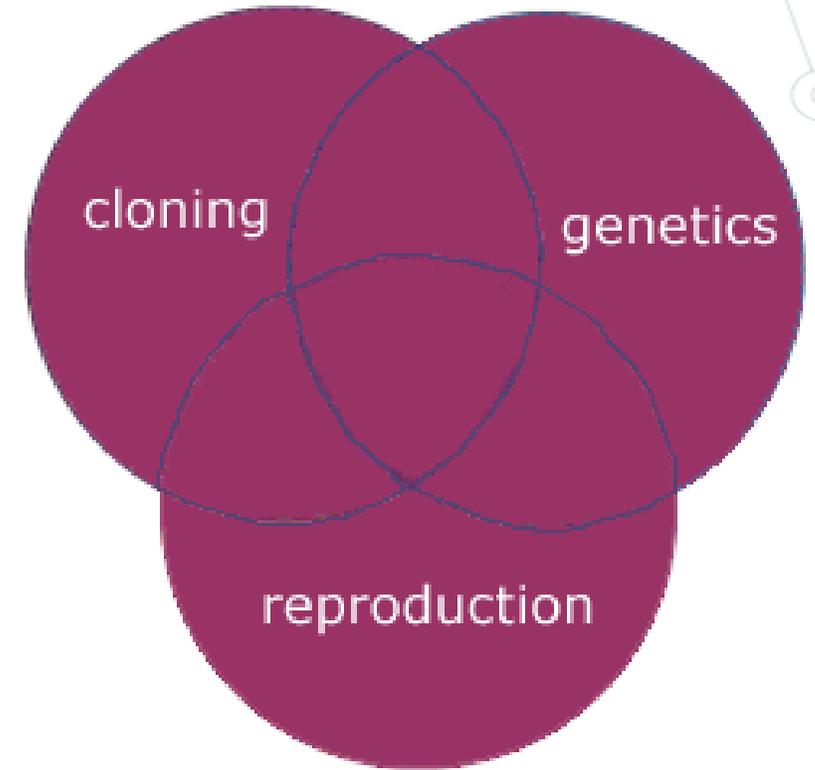


Using AND cont'd

- ◎ Be aware that in many, but not all databases, the AND is implied
 - Google automatically puts AND between your search terms
 - Though all your search terms are included in the results, they may not be connected together in the way you want
 - For example: “college students test anxiety” is translated to “college AND students AND test AND anxiety. The words may appear individually throughout the resulting records
 - You can search using phrases to make your results more specific.
 - For example: “college students” AND “test anxiety”. This way, the phrases show up in the results as you expect them to be.

Using OR

- ◎ Use OR in a search to
 - Connect two or more similar concepts (synonyms)
 - Broaden your results, telling the database that ANY of your search terms can be present in the resulting records
 - Example: cloning OR genetics OR reproduction
- ◎ All 3 circles represent the result set for this search. It is a big set because any of those words are valid using the OR operator.



Using NOT

- ◎ Use NOT in a search to
 - Exclude words from your search
 - Narrow your search, telling the database to ignore concepts that may be implied by your search terms
 - Example: cloning NOT sheep

Search Order

- ◎ Databases follow commands you type in and return results based on those commands. Be aware of the logical order in which words are connected when using Boolean operators:
 - Databases usually recognize AND as the primary operator and will connect concepts with AND together first
 - If you use a combination of AND and OR operators in a search, enclose the words to be “ORed” together in parentheses
- ◎ Examples:
 - ethics AND (cloning OR reproductive techniques)
 - (ethic* OR moral*) AND (bioengineering OR cloning)

Truncation:

What to Look For

- ◎ Root words that have multiple endings
 - Example: sun = suns, sunshine, sunny, sunlight
- ◎ Words that are spelled differently, but mean the same thing
 - Example: color, colour
- ◎ Truncation/wildcard symbols vary by database.
 - EBSCO and ProQuest both use *
 - Google automatically truncates

About Truncation and Wildcards

- ◎ Truncation, also called stemming, is a technique that broadens your search to include various word endings and spellings
 - To use truncation, enter the root of a word and put the truncation symbol at the end
 - The database will return results that include any ending of that root word
 - Examples: child* = child, child's, children, childhood
- ProQuest and EBSCO use *

About Truncation and Wildcards cont'd

- ◎ Wildcards are similar to truncation in that they substitute a symbol for one letter of a word
 - This is useful if a word is spelled in different ways, but still has the same meaning
 - Example: wom!n = woman, women
colo?r = color, colour

ProQuest and EBSCO use ? as the wildcard symbol

Keywords vs Subjects: What to Look For

- ◎ To find subject headings for your topic:
 - Look to see if the database has an online thesaurus to browse for subjects that match your topic (Help screen)
- ◎ Another way to find subject headings:
 - Start with a keyword search using words/phrases that describe your topic
 - Browse the results and choose 2 or 3 that are relevant
 - Look at the subject or descriptor field and note the terms used (write them down)
 - Redo your search using those terms

Your results will be more precise than your initial keyword search

What are Subject Headings & Keywords?

- ◎ **Subject headings** describe the content of each item in a database. Use these headings to find relevant items on the same topic.
 - Typically results in more relevant results
- ◎ **Keyword** searching is how you typically search web search engines. Think of important words or phrases and type them in to get results.
 - Typically yields many irrelevant results

Fields

- ◎ Records in databases are comprised of fields containing specific pieces of bibliographic information. Common fields include
 - Author
 - Title
 - Journal title
 - Abstract
 - Publisher
 - Date/year of publication
 - Subject/descriptor

How Database Fields Improve Your Search

- Limiting your search to specific database fields can yield more precise results.
- For example, if you are looking for books by Adam Smith instead of about him, it is more efficient to limit your search to the author field
- Use Boolean operators to combine fields to further narrow your search

The screenshot displays a search interface with the following elements:

- Search in:** GenSciAbs (General science literature from the U.S. and Europe)
- Search for:** genetic mapping (Subject Phrase)
- Boolean operators:** and
- Search terms:** johnson, norman (Author)
- Limit to:** Record Type Phrase: No Limit
- Limit availability to:** Items in my library (MYG, MASSACHUSETTS)
- Rank by:** No ranking
- Field Selection Dropdown:** A list of fields is shown, with "Author" selected. Other visible fields include Article Type Phrase, Author Phrase, Corporate Author Phrase, Descriptors, Descriptors Phrase, Geographic Coverage Phrase, Named Company Phrase, Named Person Phrase, Place of Publication, Publication Date, Publisher, Reviewed Journal Phrase, Source, Source Phrase, Standard Number, Subject, Subject Phrase, Title, and Title Phrase.

Phrase Searching Tips

Advanced Search of Full Catalog

Keyword Searches

[Browse an Alphabetical List](#)

[Search by Physical Format \(e.g. CD-ROMs, Maps, ...\)](#)

AND <input type="checkbox"/>	Title Words <input type="checkbox"/>	<input type="text"/>
AND <input type="checkbox"/>	Author Words <input type="checkbox"/>	<input type="text"/>
AND <input type="checkbox"/>	Keyword Anywhere <input type="checkbox"/>	<input type="text"/>

Search as: Words Phrases 

- Using parentheses or quotes around search words is a common way to do phrase searching, but not all databases or search engines use them
- It is often very easy to do phrase searching from the ADVANCED or GUIDED search in a database
- You click a button specifying that you want your words searched as a phrase (see example left)