

Using Search Connectors

1. Introduction

1.1 Start

Using Search Connectors When Searching Databases!

1.2 Welcome

Welcome to *Using Search Connectors When Searching Databases!*

You can listen to or view the contents of this tutorial on the left menu.

To navigate forward click the NEXT button located in the bottom right hand corner of this screen.

1.3 Learning Outcomes

Upon completion of this tutorial you will be able to:

- understand what search connectors are and recognize the importance of using them
- differentiate between the terms used as connectors and when to use them
- use connectors in database searches
- use root words to expand and improve search results
- use “nesting” as a way to structure a keyword search.

2. AND

2.1 Characteristics of AND

AND is the first and most basic connector in database searching.

Here are some reasons for using the AND connector:

- Combines words or phrases describing different ideas or concepts
- Narrows search and limits results
- Finds ALL keywords combined by AND
- Finds results that are relevant to search topic

2.2 How AND Works

Here is how AND works

Our search topic is students' use of online media.

When searching keywords connected by AND both **must** be present in your search results

The green part in the middle represents the results where only information about students and online media appears.

2.3 AND Activity

(Pick One, 10 points, 1 attempt permitted)

Test Your Knowledge!

Based on the characteristics of the AND connector, click on the correct example of its use and select SUBMIT.

Correct Choice	
X	Children and school
	Dogs and puppies
	Running shoes and flip flops

2.4 AND Activity 2

(Pick One, 10 points, 1 attempt permitted)

Let's try another one!

Click on the correct example of the AND connector and select SUBMIT.

Correct Choice	
	Rivers and streams
X	Elvis and rock music
	French fries and tater tots

3. OR

3.1 Characteristics of OR

An OR search is the opposite of an AND search

Here are some reasons for using the OR connector:

- Combines synonyms describing the same idea separated by OR
- Broadens search because it searches for at least one of the words connected by OR
- Increases search results by using multiple synonyms
- Ensures that at least one keyword combined by OR will be in search results

3.2 How OR Works

Our research is about cats.

To expand the information found use the OR connector. Remember OR connects different synonyms describing the same or similar thing.

To expand or broaden what is found connect these keywords: cats, felines. The search will look and retrieve anything discussing either cats OR felines.

The Green represents everything included in the search results.

3.3 OR Activity

(Pick One, 10 points, 1 attempt permitted)

Test What You've Learned!

Select the correct example of the OR connector and click SUBMIT.

Correct Choice
House or street

	Birds or trees
X	High school or secondary school

3.4 OR Activity 2

(Pick One, 10 points, 1 attempt permitted)

Let's try one more!

Select the correct use of the OR connector and click SUBMIT.

Correct Choice	
X	Macintosh or PC
	Stars or rain
	Parking or driving

4. NOT

4.1 Characteristics of NOT

A NOT search is similar to an AND search but NOT is used less frequently. It is still an important connector when needed.

Some of the reasons for using the NOT connector include:

- Narrows the search and limits your results

- Excludes a word or phrase from search results
- Searches the word before NOT and eliminates the one after.

For example, this search: Dogs NOT Cats looks for information about dogs while excluding information about cats.

4.2 How NOT Works

The NOT connector eliminates items from the search results.

For example, this search: Puppies NOT kittens looks for information about puppies while excluding information about kittens.

Let's look at an academic search topic related to 'how we communicate in a non-online environment'. The actual keyword search looks like this: communication NOT online.

The NOT connector focuses on articles about communication while eliminating those about communication using online media.

4.3 NOT Activity

(Drag and Drop, 10 points, 3 attempts permitted)

Test Your Knowledge!

Select the correct statements about the NOT connector and drag them to the post-it. When finished click submit.

Drag Item	Drop Target
Limits search results	Notepad
Cats NOT dogs eliminates everything about dogs	Notepad
Excludes words or phrases	Notepad
Expands amount retrieved	
Combines synonyms describing same idea	
Searches different word endings of word's root	

5. Truncation

5.1 Characteristics of Truncation

Truncation or truncating is a fancy description for searching various endings of a word's root.

Here are some reasons for truncating a word:

- Broadens your search results
- Allows multiple variations of the word to be searched at same time
- Simplifies search by adding a symbol such as * to the root instead of typing the words with different endings separated by OR.

5.2 How Truncation Works

How Truncation Works!

Let's take a look at the topic politics in Washington DC.

Washington DC AND politics only searches those exact words.

Take a closer look at what happens when the root politic is truncated using an asterisk *.

The search now looks like:

Washington AND politic* BUT finds Washington AND politics OR politician OR politicians

5.3 Truncation Activity

Time to test what you learned about truncation and searching the root word to find alternative endings.

Look at the results and select the best root to search. Then, drag the answer to the box at the top.

When you're ready, click "Let's Begin!" below.

5.4 Root Activity

(Word Bank, 10 points, 1 attempt permitted)

What is the root word searched?

Correct Choice	
	nurse*
X	nurs*
	nurses*

5.5 Root Activity 2

(Word Bank, 10 points, 1 attempt permitted)

What is the root word searched?

Correct	Choice
	communicate*
X	communicat*
	communi*

5.6 Root Activity 3

(Word Bank, 10 points, 1 attempt permitted)

What is the root word searched?

Correct	Choice
	polic*
X	politic*
	pol*

6. Nesting

6.1 Characteristics of Nesting

The process of structuring your search and combining search terms in an online environment when using a **variety** of search connectors is also known as “nesting”. The “nest” is comprised of keywords separated by search connectors within parentheses (). Nesting is not a search connector.

- Some reasons for using “nesting” include:
- Search includes multiple connectors in the same search
- Increases efficiency of search and it’s results
- Forces database to group search terms the way you want by specifying the order terms are searched

6.2 More About Structuring a Search (Nesting)

With advanced search screen options available in most research databases, it’s easy to enter the keywords with the AND, OR, NOT already in place. In this example, AND was used and OR was added between teachers or teaching in the 2nd search box.

HINT: We used the advanced search, but think of it as the “easy” search because this option inserts connectors like AND for you. It also separates keywords you connected with OR.

6.3 Closer Look @ Search Format

Let’s look at structuring a search using the “nesting” concept a little closer!

Always place the OR connector combinations in the “nest” of parens.

This way the database will search the OR combination first, then combine those results with the AND combination.

Remember in the advanced search, the system formats or “nests” your search words so the computer system understands without you doing anything!

If you choose the basic search YOU are the one who needs to understand the process of how and where to structure or nest the words using AND, OR and parens ()!

7. Search Examples

7.1 Cyber-bullying

Now that we’ve reviewed what search connectors are and how important they are in searching databases, it’s time to try some searches in a database.

Remember the advanced search is really the “easy” search, so we’ll use that!

The search topic is online bullying of children and teens but we are not interested in physical bullying. The search terms used are cyber-bullying, children, adolescents and physical abuse.

In this first search, cyber-bullying searched alone finds over 1500 articles!

7.2 Cyber-bullying AND Children

To continue the search, now add or connect the keyword 'children' with cyber-bullying. The AND is automatically inserted between the keywords ensuring both are present in the results.

The original search of cyber-bullying found 1500+ articles. By adding children separated by AND there are approximately 440 articles.

7.3 Children OR Adolescents

The search focused on children or teens so now add the keyword adolescents connected to children by OR.

Remember OR combines synonyms describing the same or similar things and it broadens the results.

The last search of cyber-bullying AND children retrieved over 440 articles. Adding adolescents to the search expanded the results to 650.

7.4 Truncating Adolescent

Now let's take a look at what happens when truncation is added to the mix.

Search the root of the word adolescents so that it looks like adolescen*. This will search adolescent OR adolescents or adolescence.

By truncating, the search results increased slightly!

7.5 Not Example

If you remember the search is about online bullying not physical bullying or abuse. To ensure the search results eliminate physical abuse add the NOT

connector. Again, the system provides an easy option for selecting the NOT connector.

The NOT connector acts similar to AND because it narrows the results by limiting what is searched. The numbers are not significantly different but fewer items were found.

Remember! Call this the “Easy” search because the work is done for you unlike the basic search where you do the work!

8. Conclusion

8.1 Learning Outcomes

Now that you have completed this tutorial, you can:

- understand what search connectors are and recognize the importance of using them
- differentiate between the terms used as connectors and when to use them
- use search connectors in database searches
- use root words to expand and improve search results
- use “nesting” as a way to structure a keyword search

8.2 Conclusion

Congratulations!

You have completed the *Using Search Connectors to Search Databases* tutorial!

Click on “Tutorials” to return to the Tutorials page or “Next” to complete a brief quiz.

9. Search Connectors

9.1 *What are Search Connectors*

Let's begin by identifying what a search operator or connector is.

Search operators are 3 common words that are used to connect two or more keywords or keyword phrases.

They are used because computer systems cannot interpret the natural language we speak. Search connectors are: AND, OR and NOT

Each connector serves a unique purpose and functions differently but each "connects" words or phrases in your search.

Search connectors exist even in Google searches. For example, AND is invisible but is automatically inserted between keywords searched.