



Searching Effectively: Boolean Operators – English Transcript

In previous videos, you learned about choosing a topic, developing a research question, and using keywords. Now you're ready to start searching for information. When searching in a library database or on the Internet, you may not get the best results at first. In this tutorial, you'll learn how to combine keywords into effective search strings by using Boolean operators to narrow or broaden your search results. This will put you in control of your searching.

In Boolean searching, these three words, or operators, act as commands -- AND, OR, NOT. The three operators tell the computer to do specific things with your keywords.

Here's how AND works. Using AND between two keywords tells the computer that every search result must include both words. So how does using AND help you when you are doing a search? If you get too many search results, adding a second keyword with AND can help you narrow your search results by focusing on just one aspect of your topic.

Let's say you have to write a report about bees and you need to cover the areas of hive life, pollination, and their endangered status. If you just use the keyword bees, you will get too many results. However, you can focus your results by adding one aspect of your topic. For example, first search for bees AND hive. As you can see, adding AND hive removed all of the findings that do not use both keywords, resulting in far fewer search results. Once you find what you need, you can then search for bees AND pollination. After that, try bees AND endangered and so on.

So using the Boolean operator AND helps you get results specific to your topic. Let's look at another example. Say you need information about how an elephant uses its trunk. You complete a library database search for just the keyword trunk, and you get these results.

As you can see, only one of them has anything to do with an elephant's trunk. Now look what happens when you use the Boolean operator AND with the keywords trunk AND elephant. As you can see, now the results only include information related to an elephant's trunk. Using a second keyword makes your search more specific. The Boolean operator AND narrows your search results.

The next Boolean operator is OR. Here's how it works. Using OR between two keywords tells the computer to include results that have one keyword, or the other keyword, or both. So how does using OR help you when you're doing a search? It broadens your search to get more results. OR gives you more!

Here's some examples. Maybe your topic has changed names over time. For example, names of sports stadiums may change with sponsorship. Or, did you know that the country Myanmar used to be called Burma? Search for both words to get the most results.



Maybe your topic is known by two different terms. Everyone knows that the season fall is also called autumn. In some areas, a cougar is called a puma.

So the operators AND and OR are basically opposites. AND narrows the search while OR broadens it.

The final Boolean operator is NOT. Here's how it works. NOT tells the computer that you want one keyword, but not the other, in your search results. So how does using NOT help you when you're doing a search? Well, you may not even think about the fact that your keyword may have multiple meanings.

For example, when you search for bug, are you expecting results for an insect, the flu, a computer virus, or a spy device? If you're getting a lot of results that have nothing to do with your topic, use a second keyword with NOT to eliminate results that mention the second keyword. This narrows your results.

Check out this example. Say everyone in your class is researching a different North American animal. When you search for bears, you're getting lots of results about the Chicago Bears football team. Using bears NOT football will focus your results by eliminating those about the football team. So NOT narrows your search by eliminating results you do not want.

So far, our examples have shown you how to enter Boolean operators when searching in library databases. For an Internet search engine, check the search tips or help menus to see how it uses Boolean.

For example, Google automatically uses the Boolean operator AND between keywords. So all keywords that you enter in the search box will be included in your results. To use the OR command, you must enter the word OR between two keywords. For the NOT command, Google uses a minus sign in place of the operator.

AND narrows your search. OR broadens your search. NOT narrows your search. AND, OR, NOT. These three tiny words make a huge difference in your search results.

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