



## Building Search Strings, Part 1: Boolean Operators

### English Transcript

After generating search terms for your research topic, you're ready to start searching for information. When searching in a library database or on the internet, you may not initially get the best results. In this two-part tutorial, you'll learn strategies to help you combine search terms into effective search strings. This will put you in control of your results.

This video focuses on the first strategy: using Boolean operators to narrow or broaden your search results. In Boolean searching, these three words, or operators, act as commands-- AND, OR, and NOT. The three operators tell the computer to do specific things with your search terms.

Here's how AND works. Using AND between two search terms tells the system that every search result must include both words. So how does using AND help you when you're doing a search? If you get too many search results, adding a second term 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 having a dog as a pet, and you need to cover the areas of training, grooming, diet, and exercise. If you just use the search term dogs, you will get too many results. Focus your results by searching for one aspect of your topic at a time.

For example, first search for dogs AND training. As you can see, adding AND training removed all of the findings that do not use both terms, resulting in far fewer search results. Once you find what you need, you can then search for dogs AND grooming, dogs AND diet, and so on.

Using the Boolean operator AND can also help you avoid getting results that have nothing to do with your topic. For example, let's say you need information about the disease AIDS. You complete a library database search for just the term AIDS, and you get these results. As you can see, only one of them has anything to do with the disease known as AIDS.

Now look what happens when you combine the operator AND with a second search term, disease. This narrows your search results by clarifying what you're looking for. As you can see, now our results only include information related to the disease of AIDS.

The next Boolean operator is OR. Here's how it works. Using OR between two search terms tells the system to include results that have one term or the other term 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 are three examples. Maybe your topic has a new name. For example, the country Myanmar was formerly called Burma. Search for both words to get the most results. Maybe



your topic is known by two different names. In some areas, a cougar is called a puma. Maybe your topic has two different spellings. In Great Britain, the word colour is spelled with a U in it.

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

The final Boolean operator is NOT. Here's how it works. NOT tells the system that you want one search term and 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 term may have multiple meanings.

For example, when you search for java, are you expecting results for coffee, an island, or a computer program? If you're getting a lot of results that have nothing to do with your topic, use a second term with NOT to eliminate results that mention the second term. This narrows your results.

Check out this example. Say everyone in your class is researching a different marine animal. When you search for dolphins, you get lots of results about the Miami Dolphins football team. Using dolphins NOT football will focus your results by excluding those about the football team. So, NOT narrows your search by eliminating results you do not want.

Our examples illustrate 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 search terms. So all terms 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 terms. And Google uses the minus sign for NOT.

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

For specific examples and for more information about this topic and the entire research process, explore OSLIS. OSLIS-- Learn to Research. Research to Learn.