Module 3.2 How do you put your search together?

Searching a database may seem daunting at first or extremely easy depending on your perspective and approach. Some people want to treat database searches like a Google search, entering a word or maybe a phrase, but this approach isn't very effective.

We've all searched for information before, and we've all used a range of tools to do so. Sometimes we find what we want, sometimes we don't. It happens. Different information needs require different tools, and each tool has subtle differences. There are some consistencies you can expect from databases and there are plenty of strategies to make your searches more effective.

As mentioned in tutorial 3.1, databases are organized warehouses of information. Each warehouse has it's own unique supply of information, though there may be overlap. In order to effectively and efficiently search a database, you need to start with keywords, then consider applying limits.

If you need a refresher on keywords, feel free to go to tutorial 1.3. Mapping out your topic helps you define what you would like to focus on, and that focus helps you find more relevant information.

For example if you are searching for information on multiple sclerosis (MS) ask yourself what, exactly, you want to find out about MS. Are you looking for the causes of MS, therapies for MS, prevalence of MS among certain populations? Narrowing down your topic at this stage will help immensely to focus your search. Not only will you have key words to work with but you can then expand your options by identifying synonyms for your key words.

For example, if you were looking for the causes of MS you could also use the term etiology which means "cause of a disease".

A thesaurus in the database or, in this case, an external medical thesaurus could lead you to this term.

Databases use *controlled vocabulary* which is a formal way of describing things. For example, you may type in the phrase "heart attack" but the database uses the more formal term "myocardial infarction" instead. Some databases will suggest the controlled vocabulary term it uses while others will not. Start with a search for your phrase or keyword and see what you find. If a formal term/phrase shows up in a title or in the subject headings, include it in your search and see how that changes your results.

Once you have a few keywords, and you've figured out what focus you want to start with, you can combine keywords.

When you have related terms or synonyms, you can use OR to link those terms. For example, a search for MS might only retrieve items using the acronym. If you search for

MS OR "multiple sclerosis," you'll get results for both the full name and the acronym. Also, Multiple sclerosis needs to be searched as a phrase, so put it in quotation marks.

If you want to focus your search and add another keyword - or more than one- you can use an AND. MS AND cause will find results where both terms appear, so a smaller set of more specific results. Since we would want to make sure we didn't exclude relevant results, we should include "multiple sclerosis", like this: (MS OR "multiple sclerosis") AND cause

The brackets around MS OR "multiple sclerosis" treats those concepts as one unti to be combined with the focused keyword 'cause.' So now we get MS AND cause, "multiple sclerosis" AND cause, both and cause. If you wanted to make sure you had cause singular and plural, you can truncate cause by removing the suffix and replacing it with an asterisk. Caus* will find: cause, causes, causality, causation, and so on...