Searching Databases
Library Guide
Searching is easy isn’t it?

Type a couple of keywords into your database and it will produce some useful references.

Searching **effectively** is a little more involved – but with a few simple tools and a bit of preparation you’ll find that getting the information you really need isn’t too difficult at all.

Six steps to finding an article

1. **Analyse your query:**
   Make sure you’re asking the right questions.

2. **Choose a database:**
   Select the most relevant database (or databases) for your search.

3. **Search the database:**
   Search your database with your keywords. Use whatever tools the database makes available to you to ensure the search is as thorough as possible.

4. **Evaluate the results:**
   Look at the results you get from the search. Are the references you’ve got really what you’re after? Do you have too many – or too few – references?

5. **Revise your search:**
   If you’re not happy with your results, go back and alter your search until you get exactly what you’re after.

6. **Get hold of the article:**
   a. check the ejournals to see if we have access
   b. if not, search the library catalogue for journal title
   c. if we have it, locate it on the library shelves
   d. if not, submit a document delivery request to library staff
What exactly is a bibliographic database?

Millions of articles are published each year around the world. Bibliographic databases store details on what has been published where, and by whom. We use them to FIND ARTICLES written about your subject.

Author(s), title, journal, and keywords – are entered into the databases. More often than not the articles“ abstracts are also included in the database, and in many cases extra descriptive keywords are added as well.

They are powerful search tools, with lots of in-built functions to help you focus your search on your subject.

Of course I’m asking the right question!

We’re a long way from being able to ask computers a question in the same way we might a person.

Certainly with bibliographic databases you need to think about your search question carefully. Asking the right question means combining the right keywords, in the right way, to get the results that you’re after.

The “concepts” of your search

The first thing you need to do is identify which keywords are important to your search.

For instance, if your search query is:

“Investigate injuries to athletes caused by inadequate warming-up routines”

the significant keywords are:

- injuries
- athletes
- warming-up

Alternative keywords

Identifying the major concepts is an excellent start, but there’s no guarantee that articles will feature the words that you’ve identified.

Therefore, for each concept, you need to identify as many different words and phrases that might be used to describe it as you can.

Apart from just coming up with alternatives, also bear in mind that some articles may use American English – so look out for possible differences in spelling and terminology, e.g. “colour” vs. “color” and “behaviour” vs. “behavior”.
Database in-built tools
Databases usually come with a range of “tools” that makes preparing thorough searches an easier task.

These tools are quite common, and you’ll see them implemented in many other resources, like Web search engines. We call them ‘limiters’ – they refine your search by limiting certain criteria. For example, you may limit by timeframe, by gender, by language, by type of article, etc. So in addition to your keywords, you have other functions to help you.

Other helpful tools often built in to databases include ‘related items’, keyword suggestions (based on the terms you’ve entered), citing articles etc. If you find a great article, clicking on ‘related items’ can take you down a path you wouldn’t otherwise have thought of.

You may also find that the implementation varies slightly between one database and another – but generally many techniques used in one database can be transferred across to others.

Search strategies

Truncation
Interested in articles about “amputation”? You may decide that you need to look out for keywords such as “amputate”, “amputee”, “amputated”, “amputation”, “amputations”. But rather than search for all these words individually, it would be easier to search for any word that begins with “amput”.

That’s where truncation comes in – enter the stem of a word followed by the truncation symbol (commonly *) and the database will find any word that begins with that stem, e.g.:

amput* finds:  “amputation”, “amputee”, “amputate”, etc.

Boolean Logic (AND, OR & NOT) – combining search terms
Building your search strategy requires you to combine your various terms in a logical way. We use ‘boolean operators’ to do this.

AND... combines keywords expressing two different concepts (narrows your search)
OR... combines two keywords expressing the same concept (broadens your search)
NOT... differentiates two unrelated uses of the same keyword (narrows your search)

If you are searching for information about injuries to athletes then you only want articles that include both of the keywords “athletes” and “injuries” – use the search expression: athletes AND injuries

If you are searching for information about children you may also wish to include articles that use the word “juveniles” instead – use the search expression: children OR juveniles

If you are searching for information about the common cold you may find that you retrieve a lot of irrelevant articles that discuss cold in terms of temperature – use the search expression: tablet NOT computer
Adding it all together

With these tools at your disposal you can now formulate quite complicated searches, especially if you use brackets to group concepts together.

Going back to our original example, to find information about athletes’ injuries, we could run a search such as:

injur* AND (athlete* OR sportspeople OR sportswomen OR sportsmen) AND (warming-up OR warm-up)

Evaluating your results

Once you’ve run your search the story isn’t quite finished – you need to evaluate the results you get. The two main questions you need to ask are:

- Are the articles you’ve retrieved relevant to what you need?
- Do you have a good number of articles to deal with (not too many, not too few)?

If you’re not happy with your results you’ll need to go back and change your search.

If you don’t get the results you want the first time, be persistent – change your keywords, change databases, change your strategy. It’s rare to have success on the first search, so don’t despair

Getting hold of the articles

Remember that just because an article is on the database it doesn’t mean that it’s in the Library.

Firstly, select the most useful articles in the results and identify the journals in which they were published. You need to note the journal title, the year, volume and issue numbers.