Search techniques





Adapted from:

**Bamford Library** 

Harper Adams University College

#### WHAT CAN I GET FROM THIS TUTORIAL?

In this tutorial you will learn how to search for information for your assignments.

#### You will learn:

- √ how to select the most appropriate search terms;
- √ how to use those search terms to find information;
- √ how to combine search terms to find information in electronic sources such as bibliographic databases and the internet;
- √ how to present search terms to allow for alternative spellings, plurals and phrase searching;

#### WHERE DO I START?

Look at your assignment question – make sure you understand exactly what you need to find out.

Use a dictionary to look up any words you don't understand.

The library has a range of dictionaries including subject specific ones such as Bender's dictionary of nutrition and food technology (2006); The Blackwell encyclopaedic dictionary of business ethics (1997) and A world dictionary of livestock breeds, types and varieties (Mason, 1996).

# Search techniques

#### **IDENTIFY LIMITS**

- Are there any limits on the information you need to find?
  - o time limits (e.g. in the last 10 years)
  - o geographical limits (e.g. in England)?
- Has your tutor specified that the information must come from a specific source or type of source?

It is important to acknowledge these as they will help you to find exactly what you need to know.

#### **SELECT KEYWORDS**

To find information, you need to compile a list of keywords or search terms.

Although you won't necessarily use all your keywords in every search – a range of keywords gives you the best chance of finding the widest range of information.

### **REMEMBER:**

## Do not just write out your assignment question!

Keywords should reflect the main topics of your assignment.

Use words that you would expect to find in the index of a book.

Use nouns rather than verbs, adjectives or pronouns.

Don't use words like "of" "the" "and" - these are known as stop words and are ignored by search engines.

### **REMEMBER:**

## Take your time!

This is arguably the most important part of your search – if you get the keywords wrong you will find it difficult to find the information you need.

If you don't select enough keywords - you may not find enough information.

#### **REFINE YOUR TERMS**

Have a look at your list of keywords:

- are there any vague or ambiguous terms? If so remove them.
- think about synonyms words with the same meaning (e.g. cat/feline) add these to your list.
- think also about alternative spellings and plurals (e.g. organisation/organization; cow/cattle).

#### **COMBINING TERMS**

When searching electronic sources such as library databases and the internet you need to be able to combine your keywords.

Search terms can be combined with AND, OR and NOT – these are known as Boolean Operators.

#### **COMBINING TERMS**

AND – looks for sources which include **both** the terms – this will **reduce** the number of hits - eq. wildlife AND Scotland

OR – looks for sources with either one term or the other – this will increase the number of hits eq. UK OR United Kingdom

NOT – looks for **one** term and **not** the other – this is useful for words which can be used in very different contexts e.g. tuberculosis NOT badger\* would find articles about TB but exclude articles about TB and badgers.

#### **PHRASE SEARCHING**

If you want to search for a phrase you need to enter your term within inverted commas e.g. "rural tourism"; "field margin"

#### **REMEMBER:**

When searching, the database or internet will usually assume you are searching for individual words rather than phrases.

This won't necessarily get you the results you want. If you want to search for a phrase, enter it in inverted commas.

#### TRUNCATION AND WILDCARDS

Databases and the internet only search for the word(s) you type – they do not think.

You need to specify any relevant plurals or alternative spellings.

You can substitute symbols for a letter or letter(s) within or at the end of your keywords.

In this way you can allow for alternative spellings or plurals in your search.

Check the specific database or search engine you are going to use – most use the following symbols:

- \* replaces any number of characters (e.g. econom\* searches for economy, economics and economical)
- ? replaces a single character (e.g. wom?n searches for woman and women)

Truncation and wildcards enable you to find alternative spellings or plurals in your search.

## **REMEMBER:**

Be careful not to truncate too soon.

For example economic\* would find economic, economics and economical but miss economy – econom\* would be a better search.

# Search techniques

#### **SEARCH FIELDS**

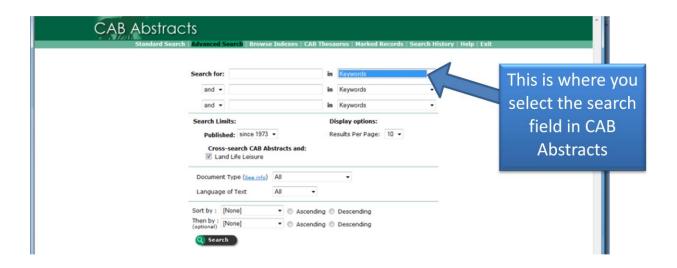
You also need to think about where you want the search terms to appear in your source.

If you are searching for a book or journal article by a specific author – select author in the search field.

If you know the exact title of the source you want - select title.

It is more likely however that you will be searching generally for items on a specific subject – select keyword search.

#### **EXAMPLE OF A SEARCH FIELD**



#### **TOO MANY HITS?**

Databases & the internet might index many hundreds or even thousands of sources.

If your search is too broad you could retrieve too many "hits" or results.

Try the following to get less hits.....

- Check your keywords can you make them any more specific? For example, you might have searched for canine but are actually only interested in domestic dogs
- Are there any limits you can apply to your search results (eg. full text only, peer reviewed only, limit by date etc.)?
- Look at the search fields you have chosen would specifying one or more of your terms as appearing "within the title" help to reduce the hits?
- Look at how you have combined your search terms. Remember that the operator AND reduces your search.
- If you have found an article that is perfect for your assignment, have a look at the subject headings that the database uses (subject headings are index terms assigned by the database creators, chosen from a controlled vocabulary).
- Try using one of subject headings from your relevant article remember to specify subject headings as your search field).

#### TOO FEW HITS?

- Check your spelling typing mistakes are easily done, and they can severely restrict your search.
- Review any limits you have applied to your search are they too restrictive? (For example it s tempting to limit your search on Land, Life, Leisure (LLL) to peer-reviewed journals only - however, this severely limits your results, as the majority of the journals indexed on LLL are not peerreviewed. You could be missing useful information).
- Use wildcards or truncation to allow for plurals and alternative spellings.
- Look at how you have combined your search terms remember that the operator OR increases the number of hits.

#### THAT'S IT!

#### You should now be able to:

- Identify keywords for your research
- Compile a search strategy
- Refine or amend your search to get an appropriate number of results
- Understand what a wildcard is