Planning and reviewing your search

In this post we will look at the three main steps in carrying out your search for academic literature as well as where to search and how you can improve the quality of your results.

# Introduction

There are three steps involved in planning your search:

1. **Identify** concepts and search terms.
2. **Search** relevant databases for your topic/subject.
3. **Review** relevant databases for your subject.

In this post we will look at each of these steps in more detail.

# Identifying concepts and search terms

You may already have been given your assignment title or question, but you still need to ensure that you fully understand it, this includes:

* Understanding all the terms in your question
* Knowing what depth of information you need
* Considering the limits of your search. For example, it might cover a particular time-period or geographical region

The next stage is to identify the key concepts and search terms in your question.

# Identify alternative search terms

The key concepts you have identified from your question are the topics you’ll be searching for. In order to perform a thorough search, you need to consider other words and phrases that might be used to describe these concepts, remember to also consider:

* Words or phrases which have the same or a similar meaning as your original search term, these are known as synonyms.
* Some terms might have different spellings, especially in American English.
* You may also want to search for plurals or different tenses of terms.

You can make use of advanced search functions like truncation and wildcards to help ensure you pick up variations and in spelling as well as plurals. However, make sure you check the help guide to find out how to do this the database you are searching as the process is often different in different databases.

To find out more about how wildcards, truncation and other operators can help you refine your search results work through our resource [Using operators within your search](Using%20operators%20within%20your%20search).

# Recording your search

Keep a record of your searches including any alternative search terms or synonyms you come up to. This will be really helpful if you need to carry out a similar search in future, as well as helping you identify gaps and refinements you could make to your existing search.

This is particularly useful if you’re doing a dissertation or other long piece of work. Especially where you might be searching a number of times on the same concept.

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## Search relevant databases for your topic

There are a number of places you can search tools to find information for your academic work:

* [**Library search**](https://www.librarysearch.manchester.ac.uk/discovery/search?vid=44MAN_INST%3AMU_NUI&lang=en&sortby=rank&mode=advanced)**:**Searches the Library’s electronic and physical resources.
* [**Subject databases**](https://www.library.manchester.ac.uk/search-resources/databases/)**:**Searches high-quality scholarly material in specific subject areas.
* [**Google Scholar**](https://scholar.google.com/)**:** Searches for academic texts across a large number of sources.
* **Search engines:**Search engines such as Google or Bing search billions of webpages openly available on the web.

In the next section, we will examine the benefits and drawbacks of Library search, Subject databases and Google Scholar.

## Exploring Library Search

Library Search is University of Manchester Library’s integrated search facility. It enables you to search all material subscribed to by the Library including journals, databases, and special collections, using a single search box.

If you use the single search box first with no limits, you’ll often get a very large number of results. You can use the filters options to limit the results to a manageable number or use the advanced search option to improve the relevance of your results further. The quality of the results in Library Search also make it the best place to start searching for resources.

A great feature of Library search is that it allows you to personalise your search results by logging in to Library Search and specifying your subject area.

Your search terms will then be interpreted in the context of your subject, and your results will be more relevant.

## Exploring subject databases

Subject databases provide access to scholarly material from academic publishers and specialist information providers. Much of this material will be peer-reviewed, which means it’s been checked by other scholars working in the same field; your tutors will be expecting you to use in your work. However, peer review doesn’t always indicate work is of a higher quality so it’s still important to apply critical analysis when using these sources.

As well as databases specialising in your subject you can search other specialist databases such as those that provide access to related material including company information, reports and statistics; regional, national and international newspapers; and legal case histories and legislation.

If you learn how to use databases effectively by planning an appropriate search, you will return a good number of relevant results.

However, you should be wary of which and how many you search. There are a lot of databases available, and not all of them will be useful to you. Before you start, make sure you look at your subject guide to see which ones are most relevant to your own work. You may also find it useful to explore other subject guides when carrying out interdisciplinary research.

## Exploring Google Scholar

Google Scholar provides a simple way to broadly search for scholarly literature. From one place, you can search across many disciplines and sources including articles, theses, books, abstracts and so on. Through academic publishers, professional societies, online repositories, universities and other websites.  
  
It is very similar to Google, which makes it very easy to use. However, it doesn’t provide access to everything you might need, so it makes a good starting point for:

* + Researching how much information is available on a particular area of interest.
  + Quickly locating a specific article title.
  + Downloading references as well as full text articles.

Using Google Scholar in combination with the University of Manchester Library’s ‘Find It’ service can in some cases provide a one-stop shop for relevant material including grey literature. Instructions are available to show you how to set up the ‘Find It’ service.

**However, it’s not a good idea to use Google Scholar exclusively, try to remember:**

* Google’s definition of scholarly material may differ from your tutor’s. Google doesn’t release the parameters for what qualifies as scholarly material. You’ll need to analyse the source for yourself to decide if it is scholarly or simply popular.
* It can take a while for articles to appear on Google Scholar, and a lot of academic journals don’t allow their material to be searched by it, so you may miss out on a lot of relevant articles if you don’t use other search tools as well.
* It mainly covers journal articles, so it doesn’t retrieve other types of information such as news items or statistics.

Try to use the refine options or the advanced search to reduce the number of results and improve the relevance of your searches. After you’ve done a search, there are a number of quick refine options available down the left side of the results page or at the top of your results when you’re using a mobile device.

## Review relevant results from your search

Once you’ve finished formulating your search, it’s time to start searching. If you’re satisfied with the list of results returned from your first search, you may stop at this point in the process.

If you get too many or too few results, you’ll need to adjust your strategy.

It’s important to remember that searching is an iterative process; you will not always get the results you want immediately, you will often need to adjust your strategy after performing an initial search. We’ll look at this next.

## Adjust your strategy

There are a number of ways you can adjust your strategy to improve your results.

If you found **too few results** don’t worry, there are a lot of strategies you can try to find further sources whilst also ensuring they are relevant to your search:

* Think of some additional terms for your key concepts.
* If you have multiple concepts, remove the least important one.
* If you have used limits, remove some of them.

If you have some results that are useful you can also try:

* Reviewing the literature cited by the author.
* Searching for other papers written by the same author(s).
* Looking at the keywords the paper has been tagged with, then add some of these to your list of search terms.

If you returned **too many results**, the first step you should take is to consider how you can add limits to your search.

Limits are sometimes present in your topic or question, where for example you might be asked to look at a specific event which will be limited by location and date. If you are looking at a large body of research, you may wish to introduce your own limits.

Limits may restrict your searches to focus on a specific event, group of people, date range or place. On a more practical note, you may also want to limit your search to publications. You can also try limiting your search by:

* Using narrower, more precise search terms.
* Removing some of your alternative search terms.
* Filter your results to search only in a particular language or location.

You may also want to work through the resource [Using operators in your search](https://www.education.library.manchester.ac.uk/mle/search-operators/story_html5.html) which will show you how to use operators to put search terms together in your search. This will enable you to retrieve more accurate and relevant results.

# Summary

Remember that searching is an iterative process. This means you may need to alter, change and repeat your search several times to retrieve results you want.

As well as considering the terms you are searching for and limits you may apply to your search you should also consider where you are searching.

Using Library search & Subject databases will ensure you retrieve the most relevant results; however, there may be occasions when it will be useful to explore other tools. You can find further resources to help in your search in the further support section below.