Getting started with academic research using the Internet

The internet can provide you with free access to many great resources which you can use in your dissertations. However, many students experience a number of common problems when they first begin using the Internet for academic study. This guide will provide you with some tips on how to overcome them!

Common Mistakes.
- Don't assume that you will find all the materials you need by searching Google
- The LSE subscribes to a number of excellent databases which can be accessed via the LSE Library catalogue. Guidance on the best resources for your subject area can be found on the subject guides section of our website http://www2.lse.ac.uk/library/subjectGuides/Home.aspx. Alternatively view the full list on our databases web page http://www2.lse.ac.uk/library/eresources/databases.aspx
- Also don't forget that some journals and books are still only produced in paper remember to check the LSE library Catalogue. http://catalogue.lse.ac.uk/
- Remember to cite the resources you use correctly. Help on citing and referencing is available at http://www2.lse.ac.uk/library/training/citing_referencing.aspx

When to use the Internet

A comparison of LSE Electronic library resources with free Internet sites

To access all the LSE Library resources go to the main lse library catalogue and enter the name of the database. In inverted comas eg "nexis". Expand the record. Open the online links field and log in using your LSE Network username and password.
To find out more about the Internet sites go to the appropriate sections in the LSE Library Moodle Course. We have fact sheets for searching all the main resource types.

Type of resource	Internet	LSE Library subscriptions
Books	Free Access restricted- mainly out of copyright (early 20th Century) titles. Some Charities such as the Joseph Rowntree Trust offer selected titles in full text online.	Many 1,000s of titles including: up to date reading list textbooks Pamphlets Scholarly writings from the 19th Century.
Newspaper	Current	**Nexis** has full text coverage of 1,000s newspapers

articles	editions of daily newspapers are usually free of charge. They may also offer video and sound files. Backfiles often require payment	worldwide from 1980 onwards. Including all major Uk national newspapers. **Times Digital Archive** covers 1785-1985.
Journal articles	A limited range are offered on open access	A wide range of full text databases covering all subject areas. Over 20,000 titles are available. Greater historical coverage and foreign language coverage than the free Internet titles. Also offered are indexing and abstracting databases and current contents databases which can send lists of the latest articles to your email account.
Images	Many available online but be careful to check the copyright	Copyright cleared educational databases including Education Image gallery with over 20,000 from the John Paul Getty Library.
Theses	UK PhD theses – the Ethos project is making increasing numbers available online free of charge Foreign theses (especially Hong Kong; Australia and Canada) are increasingly available	Index to UK and Irish Theses 1715- Digital Dissertations (N.America) No full text. However the databases are more comprehensive as they include all titles produced.
Moving images and film	Increasing number of free sites Government Pressure groups Citizen generated Lectures from Universities However, do	1,00s of hours of newsfilm from Reuters available via the News film online database

	remember to check copyright.	
Law reports and legislation	Most recent Uk Acts of Parliament statutory instruments and consultation papers can be found online. Fewer court reports are available free of charge. Limited to key series only. Some foreign jurisdictions (especially Australia) have better coverage. However, historical coverage limited. Many free series do not have search facilities. See the LSE Law Library guides for further details.	Free access to older legislation and parliamentary papers from 1890 onwards. Also substantial coverage of United States Official publications. A wide range of Uk and foreign legal databases. Also indexes to legal journal articles.
Statistical data	Most national statistical offices have a website where basic and sometimes detailed statistics can be found. Some recent opinion polls Limited free financial data.	The LSE has a large and growing data collection. Includes larger numbers of Census reports Stock Market and financial datasets Company reports Market research studies. For further information see the Data Library http://www2.lse.ac.uk/library/eresources/data/Home.aspx

Constructing effective searches

Our recommended process.

Stage 1: Analyse Your Research Topic.

- Be clear about the type of information that you want. Identify any dates, key persons, geographical locations or concepts which relate to your needs.
- Break down your research query into a series of relevant words or phrases that you can search for.

Stage 2: Select Your Search Terms

- It is necessary to choose your search terms correctly. Remember that search tools are machines they will look for whatever you type in, they cannot currently interpret it. Ideally your number of search terms should not exceed 6 to 8 keywords or phrases.
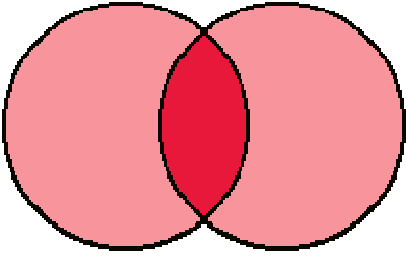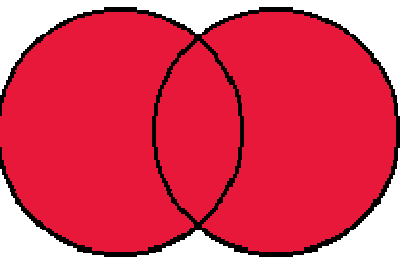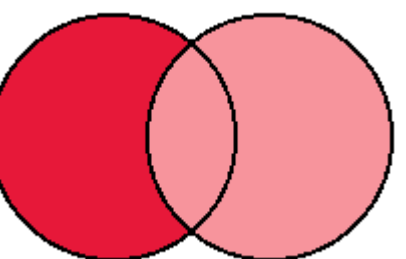
Some good tips are:

- Check your spelling
- Identify any terms which have alternative spellings (e.g. labor and labour)
- Identify any synonyms (e.g. women or female)
- Identify any search terms that may have alternative word endings (e.g. Marx and Marxism)
- Identify key concepts, writers or research institutions associated with your topic
- Consider the level of specificity. This is one of the most difficult things to get right. Make your search terms too broad and you will get too many hits. Make them too specific and you will get too few. Be prepared to refine your search after reviewing your initial results.
- Avoid using prepositions, conjunctions or common verbs as search terms. These include: and, about, if, the, of, a, not, why, before, is, at. Search Engines refer to them as stop words and usually ignore them.

Stage 3: Combine Your Search Terms

Most searches require more than one keyword. Therefore you will need to combine terms. Check the help screens of any search tools you use for advice on this.
Generally it is better to start with a broad search then gradually refine your results.

Combine terms using	Effect	Potential uses
and	Requires all the search terms to appear somewhere in the document. Not necessarily in the same order.	Useful for narrowing a search by making it more specific. The more *and*s you add the fewer hits you should get.
	For instance a search for *Blair and labour party* will retrieve all those documents, which contain both terms. Any that contain just one of	

	them will not be retrieved. This is represented in the diagram on the left by the dark red colour.	
Or	Requires any of the search terms to be found somewhere in the document. For instance the search for *Blair and labour party* will retrieve any documents, which contain either of the terms or both of them. This is represented in the diagram on the left by the dark red colour.	Useful for broadening a search, searching for synonyms and alternative word endings.
and not	This excludes any documents containing the word following *and not* in your search term. For example if you entered *Labour Party and not Australia* you would retrieve all those documents containing Labour Party but those also containing the word Australia would be excluded. This is represented in the diagram on the left by the dark red colour. .	Useful for narrowing a search especially where a word has several different meanings but should be used with caution, as it is easy to exclude relevant results

Other useful strategies

Note that not all databases offer these features. Consult their individual help screens for details and precise instructions on the format you must use.

Truncation or word stemming	Enables a single search to take account of alternative word endings. Abbreviate the word to its root and add a symbol, which allows the search to look for all documents, which contain that word root. For example a search for *advert** will retrieve resources containing adverts, advertising and advertisements.	A useful way of broadening your search to take account of synonyms. However, you must remember not to shorten your search term too far as this could result in a large number of irrelevant terms being retrieved.
Use of parentheses or nesting	A more complicated form of searching. It requires that terms placed inside a bracket Parentheses are searched first. When more than one term is placed inside they are searched in order from left to right. For example in the search *(Blair or Blunkett) and Labour Party*. The search first looks for either of the two search terms in the parenthesis it then looks for these in conjunction with Labour Party.	This method can narrow results but if more than one parenthesis is used it can get confusing. It is often easier to conduct several searches, review the results and gradually make them more specific rather than doing one complicated one and getting no results at all.
Proximity searching *Near*	Some Search Engines/Information Gateways enable you to be more specific about where you want a search term to appear. Sometimes you can restrict to title only or state that you want the words to appear within a certain proximity i.e. within ten words of each other.	Can usefully narrow down results as the search terms must appear in the same sentence rather than anywhere in the document.
Phrase searching	It is often useful to search for a phrase such as *'social exclusion '*by enclosing it in quotation marks. This requires that the words appear next to each other in the documents retrieved.	This method can be used to narrow a search, as documents where the terms do not appear together will be excluded.

Stage Four : Choose Your Search Tool and Run Your Search

At the moment no single search engine indexes the whole of the Internet. Therefore you must allow enough time to conduct several searches using different search tools

A good strategy is to

- Try out your search on an Information Gateway such as Intute http://www.intute.ac.uk/ and then explore the results. Often these include the most important web sites for the subject area. If you check the news items and links pages from these you can usually find other important resources.
- Then expand your research by using a Search Engine such as Google http://www.google.co.uk/ The Google Search Engine is highly recommended as it has wide coverage and ranks results by number of sites that link to a resources (i.e. user popularity) rather than word occurrences.

Stage 5 : evaluate your search results

It is necessary to evaluate your search results as however, carefully you formulate your search terms relevant materials always seem to appear! Here are some useful questions you might ask

Who created the resource?

- Do not use any web site, which does not have a clearly named author. Reputable resources will always credit individual or corporate authors.
- If you are using an organisational web site you should also try to find out more information about the objectives / political stance of the body as this can influence the type of material it publishes. In order to do this look for sections on the site labelled About us, our sponsors or mission and copyright statements.
- Look at the URL for clues about the type of organisation maintaining the web site. Is it a government site, university site or personal homepage?

Was it created for a specific purpose?

- Is the site advertising something?
- Does it have a stated political bias?
- Remember that it is not wrong to use a resource which has a commercial end you should just be aware that it may not be presenting a balanced or objective viewpoint.

When was the site created?

- Try to identify the date when the source was created. This is often given on individual documents or can be found in copyright statements or on 'last updated' messages at the foot or head of individual web pages. It is important, as of course events occurring after the date of publication will not be included.

Where was the resource created?

In certain circumstances the geographical location of the author/publisher may be significant as some nations operate strict censorship laws. Information on location should be displayed somewhere on the site. Try looking for sections labelled contact addresses or 'about us'.

Stage 6: refining your search
If you have too many results try to think of ways to narrow down your search.

Narrowing your search- quick tips

- Is there an advanced search screen where you can limit your search to the title field only?
- Can you limit your results to a particular type of resource or format ? E.g exclude images. Only retrieve PDF files (many of these will be full text reports).
- Can you limit your search to an exact phrase only.
- Can you ensure that your keywords appear in the same sentence?

If you have too few results try to broaden your search to make it more general.

Broadening your search- quick tips

- Try to think of any alternative spellings. E.g. color and colour
- Try truncating terms to see if any items are indexed under alternative word endings. In order to do this you must check the help screen of the database to see what format this requires. e.g. if searching for Marx try Marx* to retrieve associated materials on Marxism.
- Try to think of broader terms e.g. replace blair with Labour Party.

Further help

- For further help . Consult the Library web pages to book a course http://www2.lse.ac.uk/library/training/Home.aspx
- Email the library http://www2.lse.ac.uk/library/enquiriesandfeedback/Home.aspx for help with password and access problems.
- Further information on evaluating the quality of Internet resources can be found in the free Internet training courses available from the Virtual Training Suite. http://www.vts.intute.ac.uk/

HD
Amended 01/10/2009