

Searching – Where do I start?

Do you have:

- distinctive words or phrases? eg: apiculture (unique meaning) or “positive thinking”, a specific, accepted meaning in a phrase.
- no distinctive words or phrases you can think of? You only have common or general terms eg: “order out of chaos” – which is used in too many contexts to be useful; or Smith, J – which is too common to be helpful.
- synonymous or equivalent terms, or variant spellings or even variant word endings that need to be included? eg: Paediatric; Paediatrics; Paediatrician; Pediatric; Pediatrics; Pediatrician; Child; Childhood; Children – some use one term, some use another; sometimes you may want them all or only some; and sometimes the terms are not used in a precisely equivalent way.

Or do you:

- seek an overview of a broad topic? eg: wind power, automobile recycling
- seek a narrow aspect of a broader or common topic? eg: automobile recycling – looking for current government policies and not recycling of components, tyres or oil.

Or does the topic make you feel confused? Is it one you don't really know much about? Or do you feel you need more guidance?

Source: Start point:	In Search Engines	In Subject Directories	In Specialized Databases	Need to Find an Expert?	Luck!
Distinctive word\ phrase	Enclose phrases in “ “ – but expect the unexpected!	Search for the broader concept – what your term is about	To gather facts, statistics and lists of peer-reviewed research, look for a specialized database or webpage or even a custom search engine for the topic	Try a specialist subject directory or your local University. Search for a society or organisation on the topic. Email an author of a good paper on the subject.	Fortune can often favour the brave! So keep your mind open, try the obvious, even Google, and learn as you search! Make use of professional ‘self-help’ resources and support networks like LIS-ILL, SWRLS, FIL.
No distinctive word\ phrase	Use more than one known term or phrase, in “ “, to narrow results, eg: Smith year of pub. and title words. Try advanced search options	Try to find distinctive terms or phrases in directories or thesauruses			
Synonymous or variants terms	Choose search engines that support OR, or truncation, or field limiting	Not recommended!			
Seek overview	Not recommended!	Look for a specialized directory or encyclopaedia or textbook the covers broad subject. Consider asking for help!			
Narrower aspect	Use Boolean searching				
Confused	Not recommended! You'll be even more confused!				

So where do I search?

Apply some basic discernment:

If it is a **journal article** – then public libraries not good at including journals in OPACs; so to find holding libraries:

- go to a University – (best ‘one place’ resource is probably Copac)
 - **www.copac.ac.uk** a combined catalogue of resources from around 30 HE research libraries plus ESW national libraries
 - **www.hero.ac.uk/uk/reference_and_subject_resources/hei_facilities414.cfm** is also very useful as provides links to HEI OPACS
 - or **www.suncat.ac.uk** which list serial holdings of over 70 UK research libraries
- go to BL Integrated catalogue **http://catalogue.bl.uk** & select Integrated Catalogue. You can either search at this point **OR** click the Catalogue Subset search option and select the Serials and Periodicals option to limit your search to only that subset. Do free text using multiple words or enter journal title and click the Exact Phrase = Yes option

Other possible useful sites for journals:

- **www.hcmr.gr/english_site/library/services/abbreviationsA.html** an online journal title abbreviation helper – abbreviations are **the** nightmare in every dept!
- some sites for ‘free’ content:
 - **www.freemedicaljournals.com** (Medical & Health)
 - **http://ukpmc.ac.uk** (UK site of PubMed Central)
 - **http://www.doaj.org/** (All subjects)
 - **www.openj-gate.com/byjournal.asp** (All subjects)
 - **http://www.tictocs.ac.uk** (All subjects) Tables of contents of 11,00 journals with links to content if available (free and access restricted)
- Internet “phrase” search using first 4 or 5 words of article title may be successful – but is the posted content there legally (and do we worry about that)?

If it is a **book**:

- **Fiction** – public libraries are best source.
http://dspace.dial.pipex.com/town/square/ac940/weblibs.html#opacs provides a list of OPACS. Some holdings are also on Worldcat **www.worldcat.org** or **UnityUK**
- **Non-Fiction** – then more likely to be successful checking BL Integrated Catalogue or HEIs (via COPAC and Hero) first and then the public library sector.
NB: If the item is subject specialist consider going to a subject specialist library, eg: **http://www.architecture.com/LibraryDrawingsAndPhotographs/Home.aspx** the RIBA library for Architecture; or **http://www.vam.ac.uk/collections/index.html** the Victoria and Albert Museum for the Arts, and so on
- **Conference** – BL is best source
- Internet “phrase” search using first 4 or 5 words of book title may be successful – but is the posted content there legally (and do we worry about that)?
- Could also try Google Books **http://books.google.co.uk/** - some content in full text, but many are ‘missing’ pages; also generally no print option so of limited use.

If it is a **thesis**:

- UK PhD level use Ethos <http://ethos.bl.uk>
- For Europe try www.dart-europe.eu/basic-search.php
- For RoW – have to try Internet or the OPAC for the issuing University. Some may be held by BL (check Integrated Catalogue) but, for most, only available via Proquest (purchase at approx £40) or by sending a speculative request to the awarding University/Institution
- UK or RoW other levels – could try BL, but most likely only via issuing institution, vast majority do not lend and are for reference use in holding library only.
- Internet “phrase” search using first 4 or 5 words may be successful – but is the posted content there legally (and do we worry about that)?

Where else?

- Could try ShareILL http://www.shareill.org/index.php/Main_Page There are some finding aids and tools on the left side of the window. Along with Worldcat, this is your best bet to find international holdings.
- Or there is the Internet “phrase search”!

Otherwise there is “The internet.”

Here’s a list of just some of web search engines available to you!

About.com; Academic Reference and Research Index; Aesop; Alexa; AllTheWeb; AltaVista; AltaVista text only search; Amfibi; AOLSearch; Ask.com; Beaucoup; BublLink; Clusty; Dewey Browse; Ditto; Dogpile; Entire Web; Exalead; Findelio; FindSounds.com; FindSpot; Giga Blast; Go; Google; Google Custom Search; Google Earth; Google Maps; Grokker; HotBot; Internet Public Library; ixQuick; KartOO; Librarians Internet Index; Live Search; Mamma.com; MetaCrawler; MetaEureka; Mojeek; Ms. Dewey; Partners in Rhyme; QueryServer; Quintura; Search.com; Search Tools for Kids; Simply Google; Soople; Start; TekMom’s; Thomas; Viewzi; Visvo; Visual Thesaurus; Wayback Machine; Webcrawler; Wikipedia’s list of search engines; Wotbox; Yahoo; Zapmeta; Zuula.

(Good list at http://en.wikipedia.org/wiki/List_of_search_engines even tells you which work best for a particular subject or information type!)

How do Internet search engines work?

Firstly – they do not search the web when you click Go!

You are always searching a snapshot of the web at some point in the immediate past – ‘slightly stale’ if you like!

What gets searched is a database of indexed web pages created by robot programs called ‘spiders’. These crawl the web and retrieve pages for inclusion by following links (threads) - they cannot find a page if it isn’t linked to another in some way! These pages are indexed by another program to create the searchable content.

When you click a result, you are taken to the current version of the page which may or may not still contain the ‘hit’ you found in the search!

This is easily demonstrated if you ever click the cached link underneath results.

Many web pages are excluded from being found by spider blockers. Most UK government sites are never included! (Their detailed content is also often blocked to the Internet Archive (the ‘Wayback Machine’) too!).

Secondly – unless you control the process you are at the mercy of the search engine!
 Search tools such as domain limiters, phrase limiters, Boolean logic etc are vital in getting to the right information quickly. Investigate Advanced search options to assist.

Thirdly – just because it says “free” doesn’t mean that either the content is available or the content is ‘free’ from restriction. On the internet “free” is most frequently used to indicate that there is no charge to use the service, eg: Google Images or Google Books. However the content found must always be checked fully for restrictions – for images this usually means going to the source web page (and sometimes tracking back to a home page) for Terms & Conditions of Use.

Here’s a quick comparison of 3 internet search engines

Search Engine Feature	Google	Yahoo	Exalead
Size, type	IMMENSE. Size not disclosed in any way that allows comparison. Probably the biggest.	HUGE. Claims over 20 billion total "web objects."	LARGE. Claims to have over 8 billion searchable pages.
Look and key features	Very simple home page with features as links. Results listed by page ranking system - includes hundreds of factors, but key emphasis on pages most heavily linked to from other pages. Many additional databases including Book Search, Scholar (journal articles), Blog Search, Patents, Images, etc.	Busy home page with lots of info, including advertising video, news feed and shortcut links to give quick access to key features and services.	Simple home page with customisable features. Truncation searching supported. Proximity search lets you find terms NEAR each other or NEXT to each other. Extensive options for refining and limiting your search.
Phrase searching	Enclose phrase in "double quotes".		
Boolean logic	Partial. AND is assumed between words. Capitalize OR. () accepted but not required. In Advanced Search, partial Boolean available in boxes.	Accepts AND, OR, NOT or AND NOT. Must be capitalized. () accepted but not required.	Partial. AND is assumed between words. Capitalize OR. () accepted. See features for more options.
+Requires/ - Excludes	- excludes words: "Periodic -table" (periodic but not periodic with table in same record) (short cut for boolean NOT) + will allow you to search common words: "+in truth" (otherwise 'in' would be ignored and number of hits would increase)		
Sub-Searching	The search box at the top of the results page shows your current search. Modify this by adding more terms at the end.		

<p>Results Ranking</p>	<p>Based on page popularity - high rank if a lot of other pages link to it. 'Fuzzy AND' also invoked. All based on "cached" - may not be the most recent version.</p>	<p>Automatic 'Fuzzy AND'. (Fuzzy AND = 1st are pages with all search terms; then pages with all -1 term; then all -2 etc; down to those with only 1 search term)</p>	<p>Based on page popularity - high rank if a lot of other pages link to it.</p>
<p>Truncation</p>	<p>No truncation. Stems some words. Search variant endings and synonyms separately, separating with OR (capitalized): <i>airline OR airlines</i></p>	<p>Neither. Search with OR as in Google.</p>	<p>Use * example: airline*</p>
<p>Language</p>	<p>Yes. Major Romanized and non-Romanized languages in advanced search.</p>	<p>Yes. Major Romanized and non-Romanized languages in advanced search.</p>	<p>Extensive language and geographic options. In Advanced Search.</p>
<p>Translation</p>	<p>Yes, in "Translate this page" link following some pages. To and sometimes from English and major European languages and Chinese, Japanese, Korean. Uses its own translation software with user feedback.</p>	<p>Available as a separate service (Babblefish)</p>	<p>Yes, in "Translate this page" link following some pages.</p>