

Organizing and Managing Your Research

Effective Literature Searching

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Effective Literature Searching

A literature search is likely to be one of the first tasks you undertake in your research. Writing a literature review can be daunting, frustrating, confusing and time-consuming. You are expected to be familiar and up-to-date with all that has been written in your field and to write critically about that literature, in order to establish your credibility as a researcher and to argue for the relevance of your research. Our survey of research students¹ indicates that many feel moderately confident in their literature searching skills. In our experience, however, few are strategic, planned or methodical, leading to a scattered, random approach to literature searching. While they may find relevant papers, many students are left with a lingering feeling of doubt about how thorough their searches have been.

There are many good resources already available to help you to write up your literature review² and it is beyond the scope of this book to discuss the critical reviewing process itself. Rather, in this chapter we consider:



[p. 129 ↓] This chapter should be read in conjunction with Chapter 9, which provides guidance on managing and organizing the results of your literature searches.

The changing nature of information literacy

Researchers who completed their higher degrees before the online information explosion (perhaps your supervisor is one), will have possibly used quite different strategies from those explored in this chapter. Their searches would have included card-based library catalogues, walking down rows of book shelves and traveling to libraries to search out important and relevant works. They would have perhaps had elaborate card systems for storing their references, with pages of hand-written notes to work through. They would have spent many hours compiling their references into a bibliography, a painstaking task involving hours of checking and proofreading.

Electronic catalogues and databases, together with the Web (considered in more detail in the following chapter), have greatly increased accessibility to literature locally and internationally. Increasingly, many databases are providing access to scholarly literature in full text. While this certainly provides many benefits to researchers, the exponential increase in available information has also brought with it the need for increasingly efficient strategies to search, sort and manage literature and the need to make judicious decisions about the quality of material on offer.

While there have been significant changes for researchers in the types of processes they engage in when conducting a literature search, there are also some fundamental behaviors and principles which continue to be relevant regardless of the changes brought by technology. We consider these in the following section.

Fundamental searching strategies and skills

What does it take to be an effective literature searcher? Think about how you search for information. Do you go straight to a library catalogue and search for a subject or specific title? Do you start with a bibliography from a useful source and follow-up the references listed by the author? Do you rely on references supplied to you by colleagues? All these strategies are useful and appropriate at different stages of the research process.

Expanding your repertoire to include the range of strategies listed in Table 7.1³ will undoubtedly enhance the effectiveness of your information searches.

In this and the following two chapters we consider a range of skills, techniques and tools that support these literature-searching strategies. Before you read on, however, it is important to understand the nature of databases and the terminology associated with them. We address these fundamentals in Chapter 2. If you have not yet read this section, now would be a timely point to do so.

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Information-seeking strategy	Nature and purpose of the strategy	Comments
Planning	A process of brainstorming key terms, synonyms and how these might combine, including use of search syntax. It is also important to plan which search tools are appropriate and relevant to consult	See later sections in this chapter
Reconnaissance	An initial exploratory search to identify key ideas or studies, provide an overview of the topic or identify some good terms to use in a more methodical search. For example, scanning the proceedings of a conference in your topic area	Useful to determine whether an issue is topical or a focus for a particular audience or discipline
Browsing	A process of searching by fairly broad subject or topic. One example	Useful to identify general references which might

	of this is looking along the library shelves in a particular subject area. Electronic databases also allow browsing by subject or keyword	inform planning or methodical searching
Methodical searching	Once you have identified the most appropriate key terms (through planning, reconnaissance and/or browsing) a methodical search can be conducted both within and across relevant databases and catalogues	Keep a methodical record of your searches (see later in this chapter)
Citation chaining	A technique where you follow chains of citations which lead to other relevant material. Citation indexes are an important tool in this process, but Web searching can also prove useful	Highly valuable when you have located an ideal or seminal reference in your field
Limiting searches	A process of differentiating and narrowing search results in order to filter references and identify those most relevant and appropriate to your needs. Differentiating might occur on the basis of approach or perspective, by level, quality, currency or type of source	Useful to exclude references that are not peer reviewed or that have been published only after a certain year

Monitoring	Maintaining awareness of developments in a field or from a particular source. For example, you might set up a “table of contents” alert for new issues of a journal	See later sections in this chapter
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Planning your search

When you conduct a literature search, do you go straight to a familiar or well-used search tool and enter the first terms or words that come to mind? While this is a common practice and can yield relevant resources, you will get better results from a more planned and organized approach. In particular it is important to: identify key terms; plan how key terms will be combined and [p. 131 ↓] entered; and keep records of your searches.

While planning will be iterative and initial strategies will continue to be refined and expanded, you should make this a conscious and considered process. Be aware of the differences between looking for specific rather than general information and between an exhaustive and a representative search. In planning your searches, always keep in mind your overall purpose.



Identifying key terms

In any large research project there will be a significant number of concepts or terms that will relate to your topic. The first step is to jot down the key terms, but don't stop there. Brainstorming to identify synonyms or related terms (including both more general

and more specific terms) is also vital as different words or phrases may be used in the literature to describe very similar concepts. You may also want to consider how terms are used in different countries or how different spelling forms are used, including the use of plural and singular forms. We recommend setting up a table exploring all these possibilities, such as the one in Table 7.2.

Table 7.2 Identifying key terms relevant to your literature search.

This example relates to research on “the influence of women’s self-perceptions on career advancement”.

Search strategies	Examples of search terms/key words
Synonyms for “women”	females
Synonyms for self-perception	self-esteem; self-confidence; self-understanding
Synonyms for “career”	profession; vocation; work; employment
Synonyms for “advancement”	progress; promotion; success
Related concepts	women and management; women and business; women in organizations; gender stereotypes; glass ceiling
Terminology variations	corporations/businesses/companies
Spelling differences	organisation/organization
Singular/plural forms	Woman/women; company/companies; profession/professions

As you locate relevant references, you may find that alternative terms are used by different writers or by the database producers. Keep jotting these down and re-running your searches based on these terms (see also the section below on keeping a record of your searches).

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Planning how terms will be combined and entered

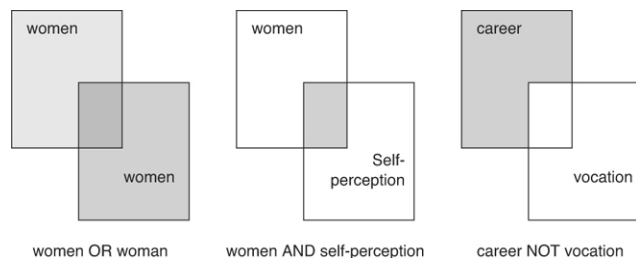
Identifying key terms to search for is only the first step towards developing efficient searching strategies. The real skill comes in knowing how to refine your search in a way that gives you the best chance of finding the literature most pertinent to your project. We consider the following key strategies in turn: using Boolean logic; using phrase searching and proximity operators; using truncators and wildcards; determining which fields are relevant to search; and limiting searches.

Boolean logic

Boolean logic is useful when your search involves more than one search term and you need to be more specific about how the terms relate to each other. The three Boolean operators, AND, OR and NOT, are explained in Table 7.3⁴ and Figure 7.1.

Operator	Process	Result
OR	Requires either or both terms to be present in the document, e.g. women OR woman	Increases the number of documents retrieved
AND	Requires both terms to be present, e.g. women AND self-perception	Reduces the number of documents
NOT	Requires the term to be absent, e.g. career NOT vocation	Reduces the number of documents, but runs the risk of eliminating a relevant document

Figure 7.1 The Boolean operational concepts of OR, AND & NOT



Boolean logic is used to enlarge or restrict your search results.

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Phrase searching and proximity operators

Phrase searching and proximity operators enable you to establish a connection between your search terms, allowing you to be more specific about how and where the terms might most productively combine. This is particularly important when you are searching full-text articles. Phrase searching involves searching for words that are in a set order and adjacent to one another, placing the phrase in inverted commas, as indicated in Table 7.4.

Search statement	Potential result
"glass ceiling" [as a phrase]	Many women pursuing careers in management find themselves encountering a glass ceiling
Glass ceiling[as a normal search without phrase or proximity syntax]	A sign of prestige for managers was to be located in an executive office with a high ceiling and large expanses of glass windows with a view

Some literature search tools also provide proximity searching capabilities. For instance, they might use terms such as NEAR or ADJ (short for "adjacent") or SAME or WITH (to say that the words must appear in the same sentence). Table 7.5 demonstrates how proximity operators can impact on search results.

Table 7.5 Impact on search results of using proximity operators.

Search statement	Potential result
self (ADJ) esteem	The importance of self esteem for women seeking to advance their careers
self (NEAR) esteem	The process by which a woman comes to terms with self and career can influence the esteem in which she is held by others

Using truncators or “Wildcards”

Truncators allow you to use a special symbol (frequently *) in the place of a particular letter or letters to broaden or restrict your search results. For example, fish* would retrieve fish, fisher, fishermen, fisherwomen, fishers and fishing. When used as a wildcard, the * replaces a single letter, and is useful for words with different spelling variations e.g. organi*ation would produce results for both organization and organisation.

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Determining which fields to search

When you use a literature database, you can specify in which field you wish to search for a particular term. For example, you might choose to specifically search by author, title, subject (general conceptual area covered), keywords (identified by the writer or indexer as key concepts covered in the paper), or full text (the whole document). Your search results can be significantly affected by the field you nominate to search. Let's take an example from the discipline of civil engineering. You might be researching the optimal design for single-lane roundabouts. If you searched for the term “roundabout” in the title field you would get very different results than if you searched for the same term in the subject or full-text field. For instance, you might get all the articles that had “roundabout” as a word in the text, but had nothing to do with engineering. For instance, “#in a roundabout way” ...

Limiting searches

Many databases also allow you to limit your searches, for example, by: date (to retrieve references written after or before a particular year); material type (to retrieve only conference papers, refereed versus non-refereed journal articles, or newspaper articles); language; or country of publication.

Tips for learning more about search syntax



Symbols and syntax to specify Boolean logic, proximity operators, search specific fields, apply truncators or wildcards or limit your search are not standardized. It therefore pays to become familiar with the syntax used in your commonly accessed search tools. Each will have a “help,” “tips” or “advanced search” section where these are outlined. We recommend printing these out and referring to them while planning and conducting your searches.

Keeping a record of your searches

Methodically maintaining a record of your searches enables you to:

[p. 135 ↓] A record of your searches might include such details as key words, date searched, time spent, search tools consulted, and the number of “hits” or relevant references, as exemplified in Table 7.6.

Table 7.6 Hypothetical sample record of literature search history.

Key Words	Current contents		Emerald		Expanded Academic ASAP		Google Scholar	
	DATE	HITS	DATE	HITS	DATE	HITS	DATE	HITS
{women OR woman} AND organi*ation*	7 May 06	576	1 June 06	230				
{women OR woman} AND career	7 May 06	234	1 June 06	129				
{Self-perception OR self-confidence} AND {women OR woman}	7 May 06	56	1 June 06	26!!				
"glass ceiling" [phrase]	12 Jan 07	38	12 Jan 07	80				
women AND "glass ceiling"	12 Oct 06	10!!	12 Jan 07	60				
women AND "glass ceiling" AND {Self-perception OR self-confidence}			12 Jan 07	13 !!				

Note that a symbol has been used (!!) to indicate results which are of particular value and relevance.



See the **Organizing and Managing Your Research Website**

for templates for recording search results.

<http://www.sagepub.co.uk/phelps>

Tools for locating literature

Knowing what type of source to search, and how to get the most from each, is an important research skill. In this section we consider in turn: electronic literature databases, including citation indexes; library catalogues; locating books in and out of print; e-book sources; periodical directories; search tools for specific types of resources; and harnessing the skills of librarians. We discuss searching the Web in Chapter 8.

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Electronic literature databases

Literature databases generally provide access to journal articles, conference papers, reports or other occasional papers, although some include electronic versions of books. Of the huge number of literature databases available, some have a general focus while others are much more specialized. Your university library will subscribe to a wide range of databases and we suggest you familiarize yourself with the ones commonly used in your discipline area, examples of which are provided in Table 7.7.

Discipline	Databases
Natural sciences	ScienceResearch, Wiley InterScience
Engineering	Engineering and Applied Science Online
Health sciences	Medline; PubMed; SPORTDiscus
Education	Expanded Academic; ERIC
Business & Management	Emerald Intelligence; LexisNexis International
Social sciences & Humanities	Expanded Academic
Law	LexisNexis International; Lawbook Online
Arts	Art Abstracts; Music Index
General coverage	Current Contents, Proquest

Each database will have an “about” or “information” section that explains its coverage. Don't overlook the many general coverage databases and think a little laterally about whether your topic might be covered in journals outside your specific discipline area.

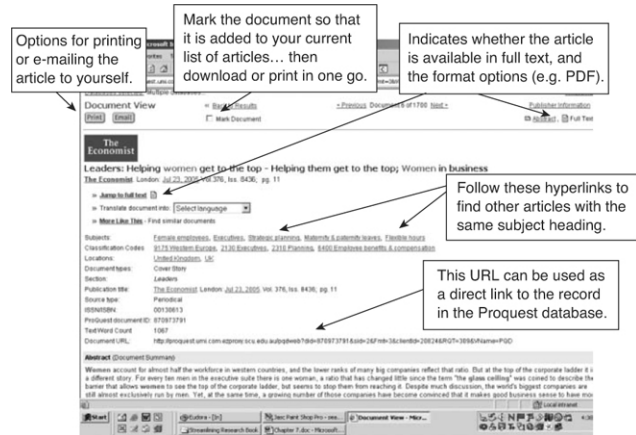
Databases also vary in terms of the nationality of their coverage (e.g. some only include material from the USA) and whether they are full text or only provide bibliographic details and abstracts. Some will index only scholarly papers while others will include newspaper and magazine articles. Some will contain diverse resources such as conference papers, reports and theses while others will not. We suggest you

develop your own list of relevant and available databases and annotate the specific characteristics that are relevant to your own research, as the example in Table 7.8 illustrates.

Each database will have its own look and feel, and the interface and screen designs will differ between companies and even between databases. While this may initially be a little confusing, all will have common key features. Being aware of the fundamental searching skills and strategies outlined in the previous section will enable you to move between them fairly seamlessly.

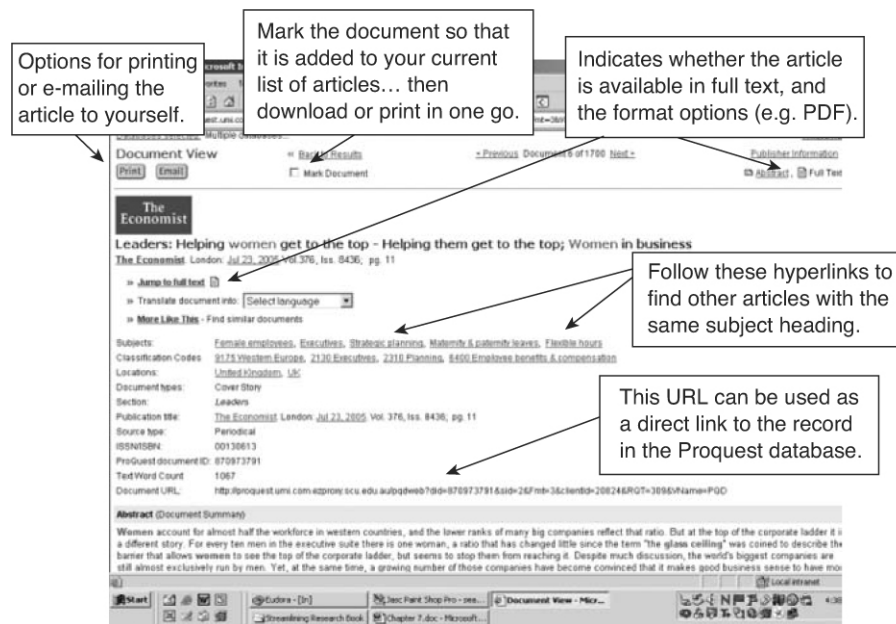
Understanding and saving your search results

In Chapter 2 we discussed the general nature of databases and defined records and fields. To understand the format of your search results these concepts **[p. 137 ↓]** become important. Each database will vary in its display of records and will provide different options for saving and/or exporting the results of your search to another program. Many provide other features such as allowing you to link to related citations (see also the section on citation indexes below) or to subscribe to updates or tables of contents. The image in Figure 7.2 is drawn from one example database. This figure also indicates how, by locating one relevant paper, you can follow links from the allocated subject headings to locate other articles which have been allocated the same subject heading. This is useful when you are performing a reconnaissance search or browsing.



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Figure 7.2 Display format of results from a search in a literature database



Note the ability to mark records for batch processing and to link from this record to articles with the same subject. Example is from ProQuest.

Tips on literature database searching: a summary



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Citation indexes

Citation indexes are particularly useful when there are a number of known papers that are key to your research and you want to locate other relevant or related publications. The most common approach to tracking down citations is “backward chaining,” following up references provided in the reference list of a known source. “Forward chaining” involves identifying articles which have subsequently made reference to a known article.

Sometimes, citation indexes are used to ascertain a work's credibility. If a paper has been widely cited it is considered to have had a strong impact on that discipline. In universities, this sometimes translates into a means of evaluating the quality of research output, and a numerical score known as an “impact factor” is derived from citation indexes. Ironically, highly controversial and perhaps not-so-credible papers can also produce high impact factors as they may be widely referred to in a less-than-positive light.

Want to know more about... Citation Indexes?



One widely used citation index is the ISI *Web of Knowledge*, which includes: Science Citation Index Expanded (often referred to as “Web of Science”); Social Sciences Citation Index; and Arts & Humanities Citation Index. Another citation index is Elsevier's *Scopus*. The Web (and in particular, the search tool *Google Scholar* can also be used as a tool for citation linking and we suggest some strategies for this in Chapter 8.

Citation indexes generally allow you to search for references in the same way as other databases do (e.g. by subject or keyword). However their real strength is when you already have a specific reference for which you want to locate related citations. In this case you are most likely to search by author or title, as shown in Figure 7.3.

Tips on using Citation Indexes

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Figure 7.3 Results of a search using a citation index

The screenshot shows the ISI Web of Knowledge interface. At the top, there is a search bar and navigation tabs. The main content area displays a 'Full Record' for an article. The article title is 'Deal-making and rule-breaking: behind the facade of equity in academia'. The author(s) listed are 'Lizalal SE, Binofaish J, Sheridan A'. The source is 'GENDER AND EDUCATION 17 (4): 431-447 OCT 2005'. The document type is 'Article' and the language is 'English'. The 'Cited References' count is 46, and 'Times Cited' is 0. The abstract discusses gender inequality in academia. On the right side, there is a 'Create Citation Alert' section with a 'CREATE CITATION ALERT' button. Annotations with arrows point to the author's name, the 'Cited References' count, and the 'Create Citation Alert' button.

Clicking on the author's name will take you to other papers by that same author.

This shows you that the article cites 46 references. By clicking here you can follow these up, and (if available) access them.

By creating a citation alert, any future papers added to the database which refer to this article will be e-mailed to you.

This indicates how you can link to related references or be notified in future as such articles become available. Example is from ISI Web of Science.

Enhanced access to full text

Your ability to access the full-text article found in a database will depend upon whether your library has subscribed to the particular journal. If the library subscribes to the journal in electronic format, you may be able to access full text through a service known as SFX. If the full text of the article is available through your library, the SFX software will tell you where it can be located. Your library will tell you whether they provide such a service, or alternatively, you may just see the SFX button

Specify the field you wish to search to ensure your results are more accurate.

By clicking on "Apply limits" you will be presented with an extra screen to refine your search.

Boolean logic operators allow you to combine terms to refine your search.

Select methods of limiting your searches below
Limits apply **only** to Keyword, Title, Journal Title, and Boolean searches
Search limits will remain in effect until you specifically clear them or until you close your browser

Set Limits	Search Limits
Language:	English English, Middle (1100-1500) English, Old (ca. 450-1100)
Location:	Bible Society's Library Central Science Library Medical Library
Date:	[] [] [] [] [] Range [] []
Medium:	Map Electronic Resource Globe
Item Type:	Journal Archive/Manuscript Music Score
Place of Publication:	Alaska American Samoa Arizona
Publication Status:	Currently Published Censored Publication Unknown

when you are searching. Note that SFX also provides a Citation Linker (citation index) facility.

Library catalogues

Library catalogues are an essential companion to database searching, in that when you locate a non full-text article in a database, you may then need to search for libraries

that hold the physical copy. For example, suppose in conducting your search you locate the article by Kjeldal cited in Figure 7.3. You note that the article is not provided in full text. You would then turn to a library catalogue to determine where you can access the journal *Gender in Education*. You would also need to remember to check that the library holds volume 17 and issue number 4. If the journal is not held by your institution's [p. 141 ↓] library, then you may need to arrange for document delivery (interlibrary loan) as described below.

Searching library catalogues

Searching a library catalogue is similar to searching a database (remember that the catalogue is just another type of database). The example below in Figure 7.4 illustrates what a library catalogue might look like.

Figure 7.4 Guided (advanced) search indicating the ability to refine your search results

The screenshot shows a search interface for the Cambridge University Library. It features three search rows with fields for search terms, Boolean operators (AND, OR, NOT), and search fields (Author Name, Title, Subject). A callout box explains that Boolean logic operators allow combining terms to refine searches. Another callout points to the 'Apply Limits' button, stating that clicking it leads to a screen for refining the search. Below the main interface is a 'Set Limits' section with various filters like Language, Location, Date, Medium, Item Type, Place of Publication, and Publication Status.

Database Name: Cambridge University Library & Dependent Libraries

Basic Search | Guided Search (e.g. Author/Title)

Search for: [] all of these Search in: Author Name

Search for: [] AND OR NOT as a phrase Search in: Title

Search for: [] AND OR NOT all of these Search in: Subject

25 records per page Search Reset Apply Limits

Boolean logic operators allow you to combine terms to refine your search.

- Select methods of limiting your searches below
- Limits apply **only** to Keyword, Title, Journal Title, and Boolean searches
- Search limits will remain in effect until you specifically clear them or until you close your browser

Set Limits Search Limits

Language:	English English, Middle (1100-1500) English, Old (ca. 450-1100)
Location:	Bible Society's Library Central Science Library Medical Library
Date:	[] [] = [] > [] < [] Range []
Medium:	Map Electronic Resource Globe
Item Type:	Journal Archive/Manuscript Music Score
Place of Publication:	Alaska American Samoa Andorra
Publication Status:	Currently Published Ceased Publication Unknown

Boolean logic and applying limits on searches will enhance the relevance of your search results. Example is from the University of Cambridge library catalogue.

Locating and consulting a range of library catalogues

There may be times when it would be useful to consult library catalogues other than that of your own institution. While locating an item in a library on the other side of the globe may seem of limited use, such a search allows you to:

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Feature Website: LibDesk

<http://www.libdex.com>

Many libraries have their catalogues publicly available on the Web and a very useful tool for locating them internationally is LibDesk. Consider, for instance, a project where you become aware of a legal precedent established in Alberta, Canada which is relevant to your own research. By using LibDesk you can browse library catalogues by country, which can then lead you to a link to the catalogue of the Law Society of Alberta.

Books in – and out-of-print

<http://BooksInPrint.com> (<http://booksinprint.com>) is an authoritative bibliographic resource which provides a listing of in-print, out-of-print and forthcoming books. It also lists audio and video titles. This is particularly helpful for finding or checking full bibliographic details of resources and locating a reasonably definitive list of publications, ensuring that you can be confident about knowing what books have been published in your field. If your institution has a subscription, you can also read the first chapter of many print-based publications.

Other valuable sources of information are online bookstores or book dealers. Some specialize in out-of-print material, including books, maps, prints, manuscripts and photographs, particularly useful if you are doing historical research.

Want to know more about....



Books in and out-of-print?

Books In-Print

http://Amazon.com	http://www.amazon.com
http://BookBrain.co.uk	http://www.bookbrain.co.uk
Co-op Bookshop	http://www.coop-bookshop.com.au

[p. 143 ↓] (Continued)

Books Out-of-Print

Alibris	http://www.alibris.com
Bibliopoly	http://www.bibliopoly.com
BookFinder	http://www.bookfinder.com
See also BUBL's list of bookshops	http://bubl.ac.uk/link/types/bookshops.htm

Electronic books (e-books)

A number of sources now exist for electronic access to the full text of books. Some are provided by libraries, others by publishers, while community groups and other networks also digitize copyright-free or out-of-print publications and distribute these to others online. Table 7.9 gives a sample (not exhaustive) of sites that distribute e-books and other digital resources.

University of Virginia e-books	http://etext.lib.virginia.edu/ebooks	Classic British and American fiction, major authors, children's literature, American history, Shakespeare, African-American documents, the Bible. Provided in either Web (HTML) format or for use with Microsoft Reader or Palm Reader
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Project Gutenberg	http://www.gutenberg.org	Thousands of free electronic books which are produced by volunteers
Academic Materials from e-bookopolis	http://e-bookopolis.com	Commercial distributor of e-books to subscribers
Netlibrary	http://www.netlibrary.com	Commercial distributor of e-books to subscribers
http://eBooks.com	http://edrs.com	Commercial distributor which allows purchase of whole or part of e-books
http://Amazon.com	http://amazon.com	Well-known online book seller. Some publications can be purchased in electronic format
Online Books	http://www.cs.cmu.edu/books.html	Produced by John Mark Ockerbloom from the University of Pennsylvania. Free access
NetLibrary	http://www.netlibrary.com	Commercial distributor of e-books to subscribers

[p. 144 ↓] See also Chapter 10 for other sites specializing in electronic access to primary documents and data. Check whether your library subscribes to services that provide access to scholarly texts in digital format.

Some e-books are designed to use specific software such as ebrary (<http://www.ebrary.com/corp>), Microsoft Reader (<http://www.microsoft.com/reader>) or eReader (<http://www.ereader.com>) while others use formats such as PDF (see Chapter 2). Most are able to be read on any standard computer with the appropriate software installed, but some formats also can be read using a Palm or Pocket PC or other handheld device. Most e-book reading software allows you to take notes while reading, make annotations related to specific parts of your text, search for occurrences of particular words, mark or highlight segments of text and then index these notes.

Periodical directories

Although literature databases are an important way of identifying key journals in your field, there are nevertheless many journals that are not indexed in commonly accessible databases. For example, as the majority of databases are biased toward literature from western countries, other internationally important journals may not be represented. To feel confident that you are well informed about publications in your discipline, you may be wise to look beyond standard databases.

Ulrich's Periodicals Directory (<http://www.ulrichsweb.com>) provides comprehensive information on journals (or serials) published throughout the world on all subjects, including those published irregularly, those that are circulated free of charge and those that are accessible only through paid subscription. Most producers of journals register their publication with Ulrich's as it is considered the most comprehensive and authoritative source (see Figure 7.5).

Tools for locating specific resources

You will find a range of other search tools available online which can assist you to locate specific types of resources other than books and journals, a sample of which is summarized in Table 7.10.

Interlibrary loan and document delivery services

With the exponential growth in available publications, you cannot expect your local library to hold all resources necessary for your research. However, almost all university libraries offer interlibrary loan and document delivery services which enable them to access literature held in other libraries.

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Figure 7.5 Sample results screen from Ulrich's Periodicals Directory

As with most search tools, an advanced search option is also available to refine your results.

Symbols are used to indicate whether journals have a (paid) review available, are refereed, are available in electronic format or are available with open access, as indicated in the legend.

Search Results: Displaying 251-275 of 1,517 results
Keyword: forestry

REVISIONS SEARCH | NEW SEARCH

View Selected | View All - This Page, or Add to List

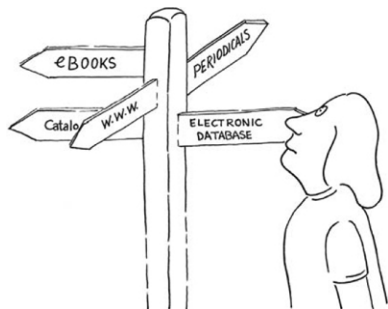
TITLE	PUBLISHER	COUNTRY	ISSN	START YEAR	STATUS	PRICE
Central America Forestry Journal	CATIE	Costa Rica	Not Supplied	1992	Active	USD 25.0
Central Asian Environmental Forestry	Hirbinger Communications	United States	1087-0491	1996	Active	USD 18.5
Centralblatt fuer das Gesamte Forstwesen	Bundesamt und Forschungszentrum fuer Wald	Austria	0008-9583	1875	Active	Contact Publish
Centre d'Ecologie Forestiere et Rurale, Communications	Centre d'Ecologie Forestiere et Rurale	Belgium	Not Supplied	1943	Ceased	See Full Record
Centre de Recherche et de Promotion Forestieres, Documents	Centre de Recherche et de Promotion Forestieres	Belgium	0775-3446	1968	Ceased	See Full Record

LEGEND

- ★ Reviews
- ☞ Refereed
- Ⓔ Electronic
- ⊕ Open Access

TITLE [v] Click again to sort ascending.

The example search used the subject “forestry”. The results indicate the international coverage of the database.



Many publishers, database providers and other private companies also provide document delivery services, which can be accessed by either institutions or individuals. Users usually either subscribe to the service (with monthly or annual fees) or pay per article requested using a credit card.

[p. 146 ↓]

Newspapers	
http://Onlinenewspapers.com	http://www.onlinenewspapers.com
Newslink	http://newslink.org
http://Nettizen.com	http://www.nettizen.com/newspaper
Australian Newspapers Online	http://www.nla.gov.au/npapers
Dissertations and Theses	
ProQuest Dissertation	http://wwwlib.umi.com/dissertations
Abstracts on the Web	
Australian Digital Thesis Program	http://adt.caul.edu.au
UMI's Dissertation Publishing	http://www.umi.com/products_umi/dissertations
Conference Proceedings	
ProceedingsFirst (FirstSearch)	Check with your librarian to see whether your institution has access
Maps and images	
Alexandria Digital Library	http://www.alexandria.ucsb.edu
See also Chapter 10 in relation to digital repositories	

Where these delivery services operate via fax or electronic transmission, you may receive an electronic or hard copy of that important article within a day or two. Examples include Ingenta Connect (<http://www.ingenta.com>) and Infotrieve (<http://www4.infotrieve.com>).

Your most valuable resource – the reference librarian

Perhaps the most important literature searching tool of all is the reference librarian. Getting to know your librarian could be the one of the best investments of time you make. Librarians keep up-to-date with technological developments and are trained in advanced searching strategies, so they will be able to advise you on the best place to begin your literature searches and how to make the most of the range of search tools available.

Monitoring literature

Although you may conduct quite a comprehensive literature review early in your project, you will need to keep monitoring the literature throughout your research, right up to the point of finalizing your dissertation or report.

[p. 147 ↓] While this may feel like a daunting prospect, there are techniques you can utilize to streamline the process.

As you continue your research, you will progressively identify core sources of relevant information that are regularly updated, such as:

You are likely to discover such key sources early in your research process, but how will you remember to keep returning to them as your work progresses? While it may seem an unforgettably high priority at the time, in another 6 months this urgency may have completely slipped your mind. A number of strategies can keep you up-to-date without having to rely solely on your overworked memory. Such strategies include:

Table of contents services

Many publishers of journals offer alerting services that allow you to sign up to receive an e-mail each time a new issue of the journal is published, usually containing the table of contents. In most cases you can link directly to a webpage containing the abstract and, in some instances, the full text (although you may need to pay for this latter service).

Journal monitoring lists

As table of contents services are not provided by every journal, we suggest putting in place supplementary systems for methodically monitoring key journals in your field. A journal monitoring list can record:

[p. 148 ↓] Of course the same document might equally include links to other types of information resources that you need to return to regularly, such as conference websites. In this case you can annotate what time of the year the conference occurs, and thus know when to return to the site each year. You can use a spreadsheet or a table created in a text document for this type of monitoring (see Figure 7.6). You can also include website addresses as hyperlinks, providing ready access to further current details. Once you have created such a list, of course, you need to revisit it as part of a regular routine (see Chapter 3 in relation to notes and reminders).

Figure 7.6 A journal monitoring list, set up using a spreadsheet

Record here how you become aware of new content published in the journal.

	A	B	C	D	E	F	G
	Title/Source	Category	Monitoring Location	Format	FT Location	Date last Accessed	Notes
1	Australian Journal of Gender Studies	Gender	Uni Library	FT	Uni Library	Jul-06	2004- only held locally. (305.452/C
2	British Journal of Management	Manage	Current Contents	Abstract only	Place ILL	Jan-06	
3	Canadian Journal of Business Leadership	Bus	Proquest	FT	On-database	Mar-06	
4	Gender Studies	Gender	E-mail alert	FT	Supervisor	Jun-06	Ask Don if I need articles
5	International Journal of Business Studies	Bus	E-mail alert	Abstract only	Place ILL	NA	
6	Learning and Leading	Manage	E-mail alert	FT	Uni Library	Mar-06	1995- held locally (376.345/LEA)
7	Qualitative Research Methods	Method	Current Contents	Abstract only	Place ILL	May-05	
8	Women in Management	Gender	Proquest	FT	On database	Jan-06	
9							

The category might align with your general filing schema.

Whether full text or abstract only.

Where the full-text item can be found. ILL means inter-library loan.



See the **Organizing and Managing Your Research Website**

for templates for recording search results.

<http://www.sagepub.co.uk/phelps>

Research-in-progress databases

It is very helpful to have access to papers before they are actually published, particularly in fast-moving fields of research such as medicine, political science or environmental science. While your informal networks can be a good source of such papers, a number of databases exist that allow you to access such information. Generally these are country or sector specific. Examples are provided in Table 7.11.

[p. 149 ↓]

The (U.S.) Federal Research In Progress Database	http://grc.ntis.gov/fedrip.htm	Information about ongoing federally funded projects in the fields of the physical
--	---	---

		sciences, engineering and life sciences
Research in Progress Catalogue (Canada)	http://www.nonprofitscan.ca/progress.asp	Information about ongoing and recently published work on the Canadian non-profit sector
Australian Research Council Research Outcomes: Grants	http://www.arc.gov.au/grant_programs	Information about grants allocated by the Australian Research Council



Over to you.

Notes

1 Phelps *et al.* 2006.

2 For example, Hart 2000; O'Leary 2004; Oliver 2004.

3 Adapted from Ellis 1989.

4 Derived from Henninger 1999.

<http://dx.doi.org/10.4135/9781849209540.n7>