Reading for research

Introduction • Why read? • Coping with the research literature • Basic reading strategies • Using libraries • Using the Internet • Good enough reading • Reading about method as well as subject • Recording your reading • The literature review • Issues in reading • Summary • Exercises • Further reading

Introduction

Carrying out a research project in the social sciences will almost invariably involve the researcher in a significant amount of reading, particularly if they are not already well read in their subject area. The work and skills associated with reading for research – how to read, what to read, how to make sense of your reading – can be a major worry and barrier for the relatively inexperienced researcher. The purpose of this chapter, therefore, is to support you in developing and using your research reading skills.

The chapter is organized into the following sections:

- Why read? The importance of reading for research.
- Coping with the research literature: dealing with the volume and variety of reading available.
- Basic reading strategies: guidance on what and where to read.
- Using libraries: how to get the best out of them.
- Using the Internet: navigating the universe of information.
- Good enough reading: how to read.
- Reading about method as well as subject: the importance of understanding and exploring research approaches and techniques.
- Recording your reading: being meticulous.

- The literature review: how to put it together.
- Issues in reading: problems with too much or too little literature.

Why read?

It is possible to carry out research without engaging in much direct reading, though it would be unusual to do so without any new reading. This may happen, for example, where the constraints on the time available do not allow for much reading, or where the method and context are familiar, or where the researchers involved are being employed simply to administer questionnaires or carry out interviews for someone else.

We would argue strongly, however, especially where the research has an academic connection, that it is highly desirable, if not essential, to engage in related reading while carrying out a research project. Your research project needs to be informed and stimulated by your developing knowledge as you carry it out. Box 4.1 gives ten reasons for reading for research.

Box 4.1 Ten reasons for reading for research

- 1 It will give you ideas.
- 2 You need to understand what other researchers have done in your area.
- 3 To broaden your perspectives and set your work in context.
- 4 Direct personal experience can never be enough.
- 5 To legitimate your arguments.
- 6 It may cause you to change your mind.
- 7 Writers (and you will be one) need readers.
- 8 So that you can effectively criticize what others have done.
- 9 To learn more about research methods and their application in practice.
- 10 In order to spot areas which have not been researched.

As you look through Box 4.1 you may recognize many of the reasons given. You may be able to add others as well. You should also see, however, that a mixture of positive and negative reasons is given. You may read both for the delight of discovery and to cover your back. You may read in order to contextualize what you are doing or to impress your own readers with your knowledge of the literature.

Box 4.1 also suggests two other important points about reading for research. Thus, it is not just essential to read, but to read at different stages of the research project and to read for a variety of purposes (see Box 4.2). For the committed researcher, reading becomes a continuing and wide-ranging activity.

Box 4.2 Reading at different stages and for different purposes

Stages:

- at the beginning of your research, in order to check what other research has been done, to focus your ideas, shape your hypotheses and explore the context for your project:
- during your research, to keep you interested and up to date with developments, to help you better understand the methods you are using and the field you are researching, and as a source of data;
- after your research, to see what impact your own work has had and to help you develop ideas for further research projects.

Purposes:

- accounts of research on similar topics to your own;
- accounts of research methods being applied in ways which are similar to your own plans;
- accounts of the context relating to your project;
- to protect against duplication and enrich your arguments.

Coping with the research literature

To the novice researcher, it can seem like there is so much that needs reading, and that it is so difficult to get on top of or make sense of it. More experienced researchers, you may or may not be relieved to know, can have much the same concerns. But the new researcher may feel overwhelmed by the magnitude of these demands for quite a long time.

You may be concerned about:

- The volume of literature. The amount of material written on most subjects is already huge, and expanding at an ever increasing rate. How does the researcher get to grips with this?
- The variety of literature. There are so many kinds of literature (e.g. textbooks, journals, magazines, newspapers, policy documents, academic papers, conference papers, Internet materials, internal reports, novels, etc.) which may be relevant. How does the researcher use this range of sources?
- Lack of boundaries. Unless a project is very tightly defined, it may be impossible to judge which areas of the literature are relevant. How does the researcher avoid reading too widely or aimlessly?
- Conflicting arguments. As soon as you start reading, you are likely to be confronted by different opinions, arguments and interpretations. It may seem

that no two writers agree about even the most basic issues. How does the researcher assess these arguments, and place themselves within them?

Hint: If you find very conflicting arguments in your reading around, you may well have identified an issue or debate which would be worth exploring in your research project.

If you recognize these problems, are not sure where to start in reading the research literature, or what to do with it when you have read it, try Exercise 4.1 at the end of this chapter.

If you found this exercise relatively easy to do, you may not need to read this chapter in detail. If you found it difficult, don't despair, there are lots of helpful suggestions in the remainder of the chapter. Whatever you do, don't worry too much now: you don't have to do it all at once! If you can, allow yourself some time, especially at the beginning of your project, to be baffled and enthralled by the scope and variety of the literature available.

Basic reading strategies

This section offers some basic guidance on four related questions:

- · where to read;
- what to read;
- · whom to read;
- how to find what you need to read.

Where to read

The obvious place to read – at least, up until the last few years – may seem to be the library, particularly if you are doing a research project in an academic setting. Libraries come, of course, in different guises. They may be wideranging or specialized resources, general or academic in function, for reference only or available for borrowing. This last distinction highlights a critical point, that of access. While public libraries are available to everyone, and university libraries normally allow access to all bona fide researchers, some may impose restrictions on borrowing or charge fees, and others may prohibit access altogether.

Using libraries is the subject of the next section in this chapter.

The other obvious place to read, nowadays, is on your computer, making use of some of the vast range of materials available through the Internet. Compared to libraries, the material available on the Internet is much more variable in quality. You do, of course, need to have, or have access to, a computer and Internet connection. Given this, access is easy, though at times it may be frustrating and can be expensive.

Using the Internet is the subject of the next but one section in this chapter.

Beyond these sources, however, there are many other places in which you might read. Bookshops are an under-used resource from this point of view. They have the advantage of being up-to-date, but may be restricted to certain kinds of material (e.g. just books) and will usually have little that is out of print. You don't have to buy the books on display, but will be restricted in what you can do if you don't buy them.

Your employer, colleagues, supervisors, friends, fellow students and research subjects may have access to relevant materials which they may be willing to share with you. A key strategy here for the researcher, particularly those working in fields where written resources are restricted, is to exploit as many possible sources and venues for reading as are feasible. Books which are unavailable in your main library may turn up unexpectedly elsewhere, while your colleagues or the subjects of your research may have access to materials of which you are completely unaware. So, where possible, use a variety of sources for your reading.

What to read

The short answer to the question of what to read has to be to read as much, and as many different kinds or sources of texts, as possible. This will enable you to encounter a range of views and forms of presentation within the different kinds of writing appropriate to your topic.

The kinds of things you might read could include:

- books: of all kinds;
- journals: local, national and international, home and overseas, practitioneroriented or research-based, popular and academic, and abstracting journals;
- reports: produced by institutions or organizations of different kinds, including employers, representative associations, political parties, trades unions, voluntary bodies, community groups, central and local government, and international bodies;
- popular media: the daily and weekly press, magazines, radio and television broadcasts;
- computer-based materials: an increasingly important source, which may

include both textbook and journal materials as well as discussion groups and websites.

- *memos, minutes, internal reports*: produced by organizations you are studying, or which are relevant to your research topic.
- *letters, diaries*: and other personal documents produced by individuals of interest.

In using these different kinds of written sources, it will be useful to bear in mind a number of other distinctions between types of material for reading:

- *Published and unpublished literature*. Much that is of relevance to your research, perhaps because it is a relatively new field, may not be published. Unpublished material (e.g. committee minutes), though more difficult to access as an outsider, may be of critical importance to your research.
- Contemporary and classic works. While it is important to be as up-to-date as possible, this does not mean that you should ignore older materials. There may be key classic texts in your discipline which you should refer to. Or you may find that much the same issues which you are addressing have been tackled by others quite some time ago.
- Introductory and overview texts. All disciplines have produced one or more basic texts which summarize the development and current state of thinking. Typically designed for sixth form or undergraduate audiences, these texts can be very useful means for reading quickly into a new or unfamiliar subject area, or for refreshing your understanding.
- Edited collections and literature reviews. These may also be of particular use to you when starting your research, particularly if they have been recently published. Edited collections, including those published by the Open University as course materials, can be an excellent introduction to a given topic. Literature reviews may be invaluable as well, but do not place too much reliance on their opinions or selection. Wherever possible, refer to the original materials as well so that you can form your own views.
- Methodological and confessional accounts. In addition to reading books and papers which relate directly to the issues you are researching, you should also consider reading material on the approaches, techniques and methods you are using in your research project. These may focus on the methods themselves or on other peoples' experience of applying them. More guidance on this is given in the section on Reading about method as well as subject later in this chapter.

Finally, in your reading you should be aware of the extent to which texts present and make use of original data. A common distinction made is that between primary, secondary and tertiary sources. Primary sources mainly consist of original data, while secondary sources comment on and interpret data, and tertiary sources (e.g. textbooks) offer summaries of knowledge in a

particular area. You would be unwise to restrict your reading mainly to tertiary sources, though these can be valuable as an initial guide.

Whom to read

Faced with a bookshelf containing 20 or 30 books on the same topic, or decades of dozens of journals, it can be very difficult to decide where to start. You might choose one volume at random, or take a more considered view, perhaps selecting the most recent book written and published in your country.

In doing so, it is important to be aware of whom you are reading, where they are coming from, how authoritative a voice they have, and what their motivations in writing might be. In part, your aim should be to read a range of views, exploring both the founding thinkers or the great names of your field and the diversity of current opinions. Remember, however, that everybody is capable of being mistaken in their opinions or interpretations. That is, after all, the purpose of research writing: to stimulate further thinking.

You should be able to get plenty of guidance on whom to read, at least to start with, from your supervisor, manager, colleagues or fellow researchers. Some of the kinds of sources mentioned above, particularly literature reviews, are also excellent places to go for suggestions on who to read. As you read more and more literature, you will begin to build up a view of the most quoted or cited authors, and the classic texts; but you should also follow your own hunches and seek out less read materials.

Hint: Take some time to just browse – serendipity can be a wonderful thing.

How to find what you need to read

If you are a researcher tackling an unfamiliar field of study for the first time, you need to be able to get to grips with the relevant literature as quickly as possible. Your aim should be to become familiar with the key texts on your subject area, and to supplement this understanding with a broader and more selective reading around the topic.

You might find it useful at this point to look at the section on Focusing in Chapter 2.

Box 4.3 presents an eight-stage approach to finding what you need to read. For advice on how to read it, see the later section on Good enough reading.

Box 4.3 Eight stages for finding what you need to read

- 1 Take advice from available sources: your supervisor, manager, fellow researchers or students.
- 2 Locate books, journals or other materials that appear relevant by asking advice, browsing around, or using a library catalogue or Internet search engine (see the following two sections on **Using libraries** and **Using the Internet** for further advice). You will find that keyword searches can be particularly useful.
- 3 Once you have identified relevant shelf or Internet locations, look at other materials there which are relevant to your topic.
- 4 Once you have identified relevant journals in print or online look through recent issues to find the most up-to-date writing on your topic.
- 5 Read outwards from your original sources by following up interesting looking references.
- 6 Identify key texts by noting those that are referred to again and again. Make sure that you read the most popular or relevant of these. Seek out the latest editions.
- 7 As you develop a feeling for the literature relevant to your field, try and ensure that you have some understanding, and have done some reading within, its different areas.
- 8 Use the time and resources you have available to do as much pertinent reading as possible.

Using libraries

Almost any library, and particularly academic libraries, will have a wide range of facilities and resources available to support you in your research. They are not just about books! If you doubt this, or haven't been in a good library for a while, try Exercise 4.2.

You may have identified a wide variety of potential sources of information or advice, depending on your experience of using libraries. Box 4.4 details six main sources with which you will probably need to be familiar if you are going to do a reasonable amount of reading and you wish to be up to date.

Hint: Remember that all of the books on one topic, and with the same class mark, may not be gathered together on the same shelf or shelves. Oversize books and pamphlets are often separately shelved, some older books may be kept in store, while very popular books may be in a reserve section. You need to be able to identify and use all of these locations.

Box 4.4 Sources of information in the library

- Librarians. These are an endangered species, yet are usually keen and interested to help. Researchers owe a duty to librarians to make good use of them, and there is much that a librarian may be able to advise you on or help you with, if approached in the right way.
- **Catalogues**. These are now almost invariably computer-based. Whatever their format, though, you need to understand how a library is catalogued if you are going to make best use of it. Once you know how your subject interests are coded, you should be able to search for other materials sharing these codes. You should also familiarize yourself with searching using key words, subject titles or authors' names.
- Databases and computers. Larger libraries will normally house computerbased sources which go beyond the materials they house themselves. They will usually include terminals which are linked up to the Internet. A huge variety of databases (e.g. Academic Search Premier, ERIC) allow the reader to search for relevant materials using key words, and to scroll through summary or detailed information on these texts. Practice may be needed to make full use of the range of facilities available.
- Abstracts and reviews. Abstracts are mostly now only published in online form, and contain up-to-date summary material on recent publications in their fields. Reviews are contained in a wide variety of popular or specialist periodicals (available in print form and/or online), and can be an invaluable guide to what has been recently published that might be worth reading or is influential.
- Dictionaries and encyclopedias. Larger general and any specialist dictionaries and encyclopedias can also be a useful starting point, though they typically will not go far enough into any particular topic to be of continuing use.
- Open shelves. Finally, and perhaps most obviously, most libraries have a considerable area of open shelving, containing both books and journals (bound and current issues). Browsing these can guide you to which areas of the library are likely to be of most use, and indicate the scope of the library's holdings in particular areas. Many key texts are unlikely to be on the shelves at any one time, of course, as they will be on loan or in use, so this method should only be used in conjunction with other, more comprehensive forms of searching. Recall books on loan immediately if you think they may be of interest.

Note that we have started this list with librarians, and only ended it with what is perhaps the most obvious source, the shelves of books and journals themselves.

There are a number of other points which you should bear in mind when using your library, particularly if you are conducting your research at least partly for academic credit.

Reading journals as well as books

Don't neglect to read the journals relevant to your topic. These are the only reasonably up-to-date guide to thinking in your subject area, and will include much material that has not yet made, and may never make, it into books. If you are studying at a university, you should find that many of these are available to you online, as well as, or instead of, in the form of printed copies.

Accessing materials not in the library

You will probably run up against the problem of identifying materials which look of interest and then finding that they are not available in the library you are in. Three obvious strategies for responding to this problem are the use of alternative libraries or sources, accessing materials through the inter-library loan system, and using available electronic resources to access materials online. Each of these has associated costs. Practically, there are limits on what can be expected of any individual library and on how much reading a researcher can be expected to do.

The question of how much to read is considered in the section on **Issues in reading** later in this chapter.

Before you do try to access materials which are not in your library, make sure you have checked what is in them using available databases, abstracts or digests.

Photocopying

Where you cannot borrow materials, or do not have the time to bring them back, you may wish to photocopy selected items. Cost will likely be a limiting factor here, as will the legal restrictions on copyright. Nevertheless, many researchers make considerable use of photocopying facilities, spending limited time in the library and then reading what they have copied as and when convenient. Always make sure, however, that you have the full reference for any articles, chapters or extracts you photocopy.

Hint: When using a photocopier, you may find that it saves you money and time, so long as your eyesight is good enough, to use the 'reduce' button, printing two pages at half-size on one. It can also be a good idea to photocopy materials starting from the last page and working backwards: that way they come out of the copier in the correct order.

Using the Internet

There is no doubt that the opportunities for searching for information via the Internet are enormous. Indeed, the accessibility of this information makes it a very attractive source for research. However, having the world's library at your fingertips can also be bewildering and time consuming, as one link leads you on to the next. This is why a search using the Internet needs to be systematic and carefully managed, and requires you to keep an eye on the quality of the information you are accessing.

See the section later in this chapter on The literature review for further advice on systematic searching.

Box 4.5 indicates some of the Internet resources that will be useful for social science and humanities researchers. For many researchers, a first step on the Internet is to use a search engine, such as Google or Outlook Express. Google Scholar specializes in academic publications and resources. These should help you to locate the various sites that would be relevant to your topic. The search engine identifies these sites by using the key word or words that you enter. These key words are matched against, literally, millions of documents catalogued on the web to produce an index of sites of likely relevance.

However, the web is a huge resource, and the information it contains is placed on it by a huge variety of institutions and individuals. It is, therefore, absolutely essential to be able to distinguish between useful and useless information, and to assess the varied quality of the information found. Search engines use a scattergun approach, selecting any site that fits your key words regardless of the source or quality.

Health warning: Searches need careful refining if you are not to be inundated with lots of useless information.

Box 4.5 Key sites for social science researchers

Examples of Internet Gateways:

http://sosig.ac.uk/

The Social Science Information Gateway (SOSIG) provides access to key sites. Coverage includes anthropology, business and management, economics, education, environmental sciences, European studies, geography, government policy, law, philosophy, politics, psychology, research tools and methods, social welfare, sociology, statistics, women's studies.

http://www.hero.ac.uk

The Higher Education and Research Opportunities in the United Kingdom (HERO) gateway provides key information resources on the UK education sector. http://bbc.co.uk

Provides access to information on business, history, science and society, and many other topics.

Examples of specific sites for reports of research, bibliographic databases, research databases, and choosing and using software:

http://www.esrc.ac.uk

This is the site for the Economic and Social Research Council (ESRC), the key funding body for social science research and postgraduate studentships in the UK. Offers a fully searchable database of research it has funded.

http://www.data-archive.ac.uk/

Also funded by the ESRC, this Data Archive is based at the University of Essex and houses the largest collection of accessible computer-readable data in the social sciences and humanities in the UK. The archive can provide data to help in Masters and PhD research, especially for those working in the fields of economics, statistics, politics, sociology, accountancy, business studies, public health, welfare and history. It offers links to a range of other relevant information resources.

http://www.essex.ac.uk/qualidata/

Also funded by the ESRC and housed at the University of Essex, this is an archive of qualitative research data, mainly arising from ESRC funded projects. One of the aims of the site is to encourage the secondary use of archived qualitative data. It offers links to a range of other relevant information sources. http://caqdas.soc.surrey.ac.uk/

This is the Computer Assisted Qualitative Data Analysis Software site, again set up by the ESRC. Its aims are to disseminate information needed to choose and use a range of software programs that have been designed to assist with qualitative data analysis.

http://onlinegda.hud.ac.uk

Another ESRC-funded site, aimed at researchers and postgraduates, offering support in qualitative data analysis.

http://www.statistics.gov.uk/

The home of official UK statistics on retail sales, the public sector, inflation, population, employment and many other themes.

http://www.bl.uk/

This is the British Library site, including information on millions of books, periodicals, newspapers, manuscripts, maps, music scores and photographs.

Examples of search engines

http://www.ask.co.uk

http://www.google.com

http://www.googlescholar.com

http://search.yahoo.com

Examples of metasearch engines

http://www.allonesearch.com/

All-in-One houses hundreds of the Internet's search engines, databases, indexes and directories in a single site.

http://www.metacrawler.com

Examples of directories

http://www.ipl.org/ref/

The Internet Public Library offers directories and research facilities for academics

Web training

http://www.vts.rdn.ac.uk/

The RDN Virtual Training Suite aims to improve Internet information literacy and IT skills. It offers a set of free 'teach yourself' tutorials in a growing number of social science subject areas for students, lecturers and researchers who want to find out what the Internet can offer.

http://tramss.data-archive.ac.uk/

This is the web site of the Teaching Resources and Materials for Social Scientists (TRAMSS). Its target audience is MA and research students in quantitative social science research.

Because of concerns about quality and the sheer amount of information, attempts have been made to classify material on the web into useful categories. This is done through what are called *Internet gateways*. These are sites that edit sources of information, so they can direct you more immediately to what is relevant and appropriate. A key gateway for social scientists is the Social Science Information Gateway (SOSIG), based at Bristol University. This accepts only worthwhile databases and sources and classifies them into subject areas. SOSIG is compiled voluntarily by a number of institutions and libraries: for example, the staff of the Fawcett Library edited the Women's Studies page. You can search the whole system by keyword, or just browse to see what is there. SOSIG also offers free online training to students, researchers and lecturers through the RDN Virtual Training Suite. These training sessions are designed to help you learn what the Internet can offer in your subject area.

Hint: The web tends to run more slowly from about midday onwards (in the UK), which is when the USA begins to wake up. The evening is also a peak time for home users, benefiting from cheaper call rates. Early morning is, therefore, a good time to go online!

The adequacy of an Internet search – as when you are searching a library catalogue online – relates to the key words that you have entered. You need to take care that you refine your search appropriately. Most search engines use

Box 4.6 Too much or too little information?

Finding too many records?

Try narrowing your search by:

- Using AND to combine terms, e.g. social AND exclusion.
- Use phrase searching, connect terms using underscore, e.g social exclusion.
- Use the advanced search option and restrict your search to a section of the record, e.g. title.
- Exclude words or phrases by using NOT.

NB: AND will automatically be used to connect terms unless you type in a connector: e.g., if you type social exclusion the search will be social AND exclusion, but if you type social NOT exclusion, then AND will be overridden by NOT.

Not finding enough records?

Try broadening your search by:

- Using OR to combine terms, e.g. forest or woodland.
- Using truncation type the stem of a word followed by an asterisk to find any other endings: e.g. econ* will retrieve economy, economics, economist, etc. Be careful, however, as truncation can retrieve unwanted results: e.g. car* will find cars but will also retrieve carnation and carnage.

NB: If you switch on truncation by adding an asterisk in the search all the terms in that search will also be truncated. For example, econ* AND forest will retrieve economics, economist etc., but will also retrieve forestry, forester and so forth.

Boolean operators and syntax. This means that you can group words together, or exclude words, to ensure that your search is as precise as possible. For example, a search using the single word 'Education' or 'Business' will produce thousands of items of information. By refining the search to a specific area of education or business, using additional key words and one or more Boolean operators (e.g. AND, OR, AND NOT), you are more likely to find the sites that you are particularly interested in.

If, for example, you key in 'Adult AND Education', this should list all those items or titles that contain both words. Or, if you key in 'Business AND NOT Small', the search should exclude all items referring to small business. Box 4.6 (previous page) reproduces the Economic and Social Research Council's advice on how to restrict and extend your search on their database. This uses Boolean operators, but it also illustrates the usefulness of checking the 'help' tips on any system you are using to facilitate your search.

Good enough reading

How to 'read' a book in five minutes

If you are engaged in a research project, you will normally have to understand a great deal of published material of various kinds. If you attempt literally to read all of this it will take you ages. Most likely, you simply will not have the time to do so on top of all of your other plans and responsibilities. So, you will have to be much more selective in your reading of most of it.

Can you read books, reports and articles quickly and effectively for research purposes? Can you get to the gist of the argument and pull out the material or details you want within minutes? If you are not sure, try Exercise 4.3.

If you were able to complete Exercise 4.3 to your satisfaction, you probably need read no further in this section. If you didn't find the exercise so straightforward, have a look at Box 4.7 for some hints and advice.

You should, with some practice, be able to get to the gist of a book, report or article in five minutes. In many cases, this will be quite enough, and you can move on to read or do something else. In other cases, however, your initial reading will allow you to identify which parts of the book or article need to be read more carefully. But you should rarely need to read more than 25 percent of any book to get the best out of it for your own purposes.

Even this more detailed reading can be done selectively. You may find it particularly useful to scan relevant sections looking for passages which succinctly summarize or advance the argument. These sections are often worth noting down as potential quotations.

Box 4.7 Getting to the gist: some hints and tips

- Note down the author(s), title, publisher and date of the book, report or article. Keep this record, and any notes on the content, safely.
- Look for an introduction, concluding chapter, abstract or executive summary. If there is one, read it quickly, scanning the contents. If the book or report has a cover, publishers' blurbs may also be useful.
- If it is a book or report, look for the contents page. Identify any chapters which you think may be of particular relevance and focus on them, again starting from the introduction and/or conclusion. You can find your way through a chapter or section by using the sub-headings.
- If it is a book or report, look for an index. If there are specific points you are interested in (people, institutions, events, etc.), you should be able to locate from the index where they are discussed in the text.
- In the text itself, key points will often be highlighted, or in the first or last paragraphs. Similarly, the first and last sentences of paragraphs are often used to indicate and summarize their contents.

Hint: If can afford it, print off or take photocopies of key chapters or articles. You will then be able to mark these with highlighter pen, and make notes in the margins. Do this with books that you have purchased as well, or use post-its.

Finally, in case you are worried that the approach suggested here is in some way inadequate, let us assure you of the contrary. All researchers use these techniques, or something similar. We couldn't pursue our work, let alone have time to do things other than research, if we didn't. Many suggested reading techniques (see Box 4.8) are based on this kind of approach, and encourage you to interact with the text rather than repeat it uncritically or verbatim.

We must stress, however, that a superficial knowledge of the research literature relevant to your topic is not adequate. You will need to know enough about what has been written to intelligently criticize and summarize it. This means being able to give both a broad picture of the appropriate literature and a more focused account of those parts of that literature which are of particular significance.

How to critically assess what you are reading

Reading academic material is not just about becoming an elegant reader who can grasp the overall sense of a piece, translate jargon in order to extract facts from a text, while taking notes efficiently. Ideally, readers should learn to engage with a text in a way which enables them to assess its worth . . . being critical is learning to assess the logic and rationale of

Box 4.8 SQ3R and SQ4R: strategies for reading

SQ3R

The SQ3R reading method is a structured approach to reading that can be very helpful for learning or revision.

- Survey. Scan the material you want to learn to get a picture of the overall argument or the area covered by the book or article you are reading.
- Question. Ask questions of the text. Turn any headings or subheadings into questions, and then try to answer them in your own words.
- Read. Go through the text in the light of the question you have asked, and take notes at your own pace and in your own words.
- Recall. Close the book and try to remember what you have read. Try to write down what you remember in your own words. Only by testing your recall will you know how successful your learning has been.
- Review. Later, go back over all your notes to make sure you don't forget and to see how what you have learned relates to the course as a whole, your other reading and what you still need to do.

(Hay et al. 2002: 29)

SQ4R

- Survey and Question 1
- 2 Read to Answer Questions
- 3 Recite and Write Answers and Summaries
- Review

Advantages and disadvantages:

SQ4R is designed to help you focus on learning what is important to you . . . You learn to organise and structure your studying. You state your goals as questions, seek answers, achieve your goals and move on. You focus on grasping the key concepts . . . It is difficult to change old study habits . . . It takes more energy to ask questions and develop summaries than it does to let your eyes passively read printed pages.

(Walter and Siebert 1993: 89–96)

arguments and the quality of the substantiating data . . . it is being able to ask how important the flaws are, and so to weigh the worth of evidence. This means being able to ask questions of the text beyond what it means, what it is saying.

(Peelo 1994: 59)

Critical reasoning is centrally concerned with giving reasons for one's beliefs and actions, analysing and evaluating one's own and other

Box 4.9 Assessing an argument

Analysing

- Identify conclusion and reasons: look for 'conclusion indicators' [keywords to look for are 'therefore', 'so', 'hence', 'thus', 'should']; look for 'reason indicators' [keywords to look for are 'because'; 'for', 'since']; and/or
 - Ask 'What is the passage trying to get me to accept or believe?'
 - Ask 'What reasons, evidence is it using in order to get me to believe this?'

2 Identify unstated assumptions:

- assumptions supporting basic reasons
- assumptions functioning as additional reasons
- assumptions functioning as intermediate conclusions
- assumptions concerning the meaning of words
- assumptions about analogous or comparable situations
- assumptions concerning the appropriateness of a given explanation

Evaluating

- 3 Evaluate truth of reasons/assumptions: how would you seek further information to help you do this?
- 4 Assess the reliability of any authorities on whom the reasoning depends.
- 5 Is there any additional evidence which strengthens or weakens the conclusion? Anything which may be true? Anything you know to be true?
- 6 Assess the plausibility of any explanation you have identified.
- 7 Assess the appropriateness of any comparisons you have identified.
- 8 Can you draw any conclusions from the passage? If so, do they suggest that the reasoning in the passage is faulty?
- 9 Is any of the reasoning in the passage parallel with reasoning which you know to be faulty?
- 10 Do any of the reasons or assumptions embody a general principle? If so, evaluate it.
- 11 Is the conclusion well supported by the reasoning? If not, can you state the way in which the move from the reasons to the conclusion is flawed? Use your answers to questions 5 to 10 to help you do this.

(Source: Thomson 1996: 99–100)

people's reasoning, devising and constructing better reasoning. Common to these activities are certain distinct skills, for example, recognizing reasons and conclusions, recognizing unstated assumptions, drawing conclusions, appraising evidence and evaluating statements, judging whether conclusions are warranted; and underlying all of these skills is the ability to use language with clarity and discrimination.

(Thomson 1996: 2)

In everyday language, if someone is 'critical' we may be referring to a dressing down or personal attack. In research terms, however, critical reading, critical thinking and critical assessment refer to a considered, though not necessarily balanced, and justified examination of what others have written or said regarding the subject in question. An important skill at the heart of these processes is the ability to recognize, analyse and evaluate the reasoning and forms of argumentation in the texts and articles that you will read. This skill is called critical reasoning. Developing a systematic approach to the analysis of the arguments of others is an essential research skill. Box 4.9 (previous page) provides a summary of the key points involved in analysing and evaluating arguments, while Box 4.10 summarizes what is meant by a critical assessment of your reading.

Reading and writing critically can be difficult skills to learn. Exercise 4.4 encourages you to practice critical reasoning by applying the points in Box 4.9 to an article or short passage of your choosing.

Box 4.10 What is a critical reading?

- one that goes beyond mere description by offering opinions, and making a personal response, to what has been written;
- one that relates different writings to each other, indicating their differences and contradictions, and highlighting what they are lacking;
- one that does not take what is written at face value:
- one that strives to be explicit about the values and theories which inform and colour reading and writing:
- one that views research writing as a contested terrain, within which alternative views and positions may be taken up;
- one that shows an awareness of the power relations involved in research, and of where writers are coming from;
- one that uses a particular language (authors assert, argue, state, conclude or contend), may be carefully qualified, and may use an impersonal voice.

Hint: Being critical does not mean rubbishing or rejecting someone else's work. As a researcher and thinker you should be able to simultaneously entertain two or more contradictory ideas at one time.

The topic of writing critically is considered further in the section on ${\it How to}$ criticize in Chapter 8.

Reading about method as well as subject

Why read about method?

We have already stressed a number of times the importance of understanding your research approaches and techniques as well as the subject of your research. As the lists of further reading in this book indicate, there is a considerable published literature on research methods. As a researcher, you could gain a great deal from studying some of this literature. If you doubt this, consider Box 4.11, which identifies nine linked reasons for reading about method as well as subject.

Box 4.11 Nine reasons for reading about method

- You are going to be using one or more research techniques or methods in your project work, so it is as well that you understand as much as possible about them and their use.
- 2 You may need to evaluate a number of possible alternative approaches and techniques before deciding which ones you are going to use.
- 3 If you are likely to engage in a series of research projects, you will need to develop your understanding of the broad range of research methods used in your disciplinary or subject area.
- 4 In doing so, you will be developing your knowledge of research practices, and will be better able to reflect upon your own practice.
- 5 It will help you to justify what you are doing, or proposing to do, and why.
- 6 It will allow you to see research for what it is, a social process with its own varying conventions and changing practices, rather than as an artificial and objective set of procedures.
- 7 Your methods may be of more interest to you than the subject of the research.
- 8 You may need, or be expected to, write a methodological section or chapter in your research report or dissertation.
- 9 Simply to expand your knowledge.

Where to read about method

There are a variety of sources in which you can read more about methods:

- Methodological texts. These may review a range of methods or focus in more detail on just one or two. The extensive bibliographies included in this book include many examples of such texts.
- Methods journals. These specialize in articles on the use and development of particular methods. Some examples are given in Box 4.12. Subject journals sometimes also have special issues which focus on methodological questions.
- Confessional accounts. These are articles or books which tell the story of what it actually felt like doing research, what problems were encountered and how they were dealt with. They help to undermine the idea of research as a clear, fault-free process, and you may find them very supportive when you encounter difficulties of your own. You will come across quotations and references to these throughout this book.

Box 4.12 Some examples of methods journals

- Behaviour Research Newsletter
- Cognitive Psychology
- Development Psychology
- Education and Psychological Measurement
- Evaluation and Methodology
- Evaluation and the Health Professions
- Fvaluation Review
- Historical Methods
- International Journal of Qualitative Studies in Education
- International Journal of Social Research Methodology
- Journal of Applied Behavioural Science
- Journal of Contemporary Ethnography
- Journal of Philosophy, Psychology and Scientific Methods
- Qualitative Health Research
- Qualitative Inquiry
- Sociological Methodology
- Sociological Methods and Research
- Studies in Qualitative Methodology

(Note: This list is illustrative rather than comprehensive. It includes journals which specialize in discussing and analysing methods, those which have a methods section, those which regularly contain articles which focus on methods, and those which report research using particular methods. An increasing number of methods journals are available online.)

• Reports on methodology in published research. Any research paper will probably give some indication of the methods used to conduct the research described. This may be minimal or fulsome, and may include reflections on problems that occurred and suggestions for changed practice in the future.

The last of these sources, we suggest, is possibly the most problematic, as Exercise 4.5 may well reveal. Many published reports of social research contain relatively little discussion of the methods and techniques employed. Where methods are described, the tendency is to present them in a relatively unproblematic light, so that the research strategy is difficult to evaluate or question. In subject areas where methodology has not been a major preoccupation, as in policy analysis, a growing emphasis can be detected, however, towards making underlying concepts and processes more visible.

It would certainly be difficult to replicate most pieces of research using just the information contained in a journal paper. This is partly, of course, a function of the restricted length of most research articles, and of the pressures to focus on reporting and interpreting results in the available space. Yet it scarcely represents what might be called good practice.

It is usually necessary to study lengthier, and often unpublished, research reports, where these are available, in order to get a full understanding of the process of research. Even these may be inadequate, however, in which case a direct approach to the researcher(s) concerned is the only option.

Recording your reading

Meticulousness, along with creativity, flexibility, persuasiveness and the ability to get funding, has to be one of the most prized qualities in the researcher. Being meticulous, from the beginning of your research project right through to its end and beyond, will save you time and trouble in the long run.

This is particularly important when it comes to recording your reading. You should resolve, right from the start, to note down full details of everything you read. These details should include:

- the author or authors;
- the title of the paper, report or book;
- the date of publication;
- if it is a book or report, the publisher and place of publication (and the edition, if there has been more than one);
- if it is a chapter in an edited book, the title and editor of the book, and the page numbers of the chapter;
- if it is a paper in a journal, the title of the journal, volume and issue number, and pages;
- if it is a web site, the address and the date you accessed the information.

All of the references listed in this book contain all of this information. In addition, you should note the location and page number(s) of any material which you may quote.

There are a number of ways in which you might collect and store this information. Index cards used to be the conventional way, since they can be kept in alphabetical or some other kind of order, as best suits your needs. Box 4.13

Box 4.13 What to put in your records

Partington, D. (ed.)

Essential Skills for Management Research

London, Sage, 2002.

Organized in three parts: philosophy and research (philosophical underpinnings, ethical considerations); research processes (theory development, successful writing, acknowledging the individual); approaches and techniques (research design, ethnographic approaches, grounded theory, case studies, cognitive mapping, repertory grids, laddering, action research).

Stake, R.

Qualitative Case Studies

pp. 443-66 in N. Denzin and Y. Lincoln (eds), The Sage Handbook of Qualitative Research.

Thousand Oaks, CA, Sage, 3rd edn, 2005.

This chapter reviews, with examples, theory and practice of case study research.

Mullins, G. and Kiley, M.

'It's a PhD, not a Nobel Prize': how experienced examiners assess research theses.

Studies in Higher Education, 2002, 27 (4): 369–86.

Using a sample of 30 experienced Australian examiners, reports on the processes they go through in assessing PhDs.

Winter, G.

A Comparative Discussion of the Notion of 'Validity' in Qualitative and Quantitative Research.

The Qualitative Report, 4 (3, 4), March 2000.

(Available: http://www.nova.edu/sss/QR/QR3-4/winter.html)

This article explores issues surrounding the use of validity in social research. It begins by exploring 'validity' in quantitative and qualitative approaches, and proceeds to examine the various claims to 'validity' made by researchers. The article concludes by suggesting that an understanding of the nature of 'truth' is central to the ways in which 'validity' is theorized.

contains some examples of what your records might look like. Whatever recording method you use, the information you store will be similar.

The contemporary alternative is to input all of your referencing details, together with a note of the contents and of possible quotations, directly into your computer. These usually have facilities for sorting your records, and for placing selected quotations directly in your text without the need for retyping. Specially designed software, such as Endnote, Procite or RefWorks (which can also do a lot more), can be very useful for these purposes.

See also the section in Chapter 5 on **Using computers**.

It may seem tedious, but if you aren't meticulous in this way, you will give yourself much trouble and irritation later, when you are trying to locate and check details, particularly when you come to the writing up phase.

The literature review

A research literature review is a systematic, explicit, and reproducible method for identifying, evaluating and synthesizing the existing body of completed and recorded work produced by researchers, scholars and practitioners.

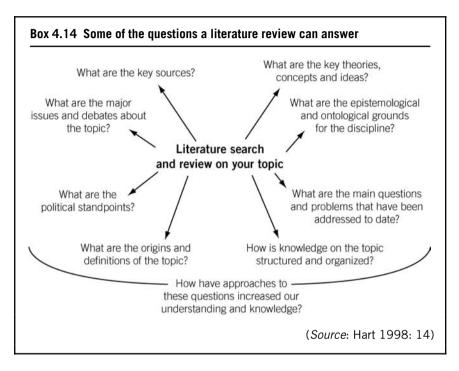
(Fink 2005: 3)

... research is greatly strengthened by placing your new information in the context of what is already known about the issue. Researchers call this process 'doing a literature search', 'survey', or 'doing a literature review' or 'study'. 'The literature' refers to all the available research on a subject. 'Literature search' refers to the process of finding the material, and a 'literature survey' simply describes the literature which exists. The terms 'review' or 'study' point to the importance of critically assessing the information you collect, and making sense of it in relation to your own research question. A good literature review is a key feature by which the quality of a piece of research is judged.

(Laws et al. 2003: 213)

The ability to carry out a competent literature review is an important skill for the researcher. It helps to place your work in the context of what has already been done, allowing comparisons to be made and providing a framework for further research. While this is particularly important, indeed will be expected, if you are carrying out your research in an academic context, it is probably a

helpful exercise in any circumstances. Spending some time reading the literature relevant to your research topic may prevent you from repeating previous errors or redoing work that has already been done, as well as giving you insights into aspects of your topic which might be worthy of detailed exploration. Box 4.14 provides an example of some of the questions a literature review can answer.



Nevertheless, it is possible to approach your literature review in a variety of ways, and with a range of different purposes in mind. Box 4.15 contrasts the range of different perspectives adopted by beginning research students with the more comprehensive strategy taken in carrying out systematic reviews.

A key point to note is that good literature reviews go beyond the stage of simply listing sources to offer an analytical study of the area, through which you can develop your own position, analysis and argument. A literature review is a critical summary and assessment of the range of existing materials dealing with knowledge and understanding in a given field. It may be restricted to books and papers in one discipline or sub-discipline, or may be wider-ranging in approach. Generally, its purpose is to locate the research project, to form its context or background and to provide insights into previous work. A literature review may form part of an empirical study or it may be a study in itself.

In undertaking a literature review, you should find the general advice given

Box 4.15 Literature and systematic reviews

A typology of literature reviews

- as a list . . . The primary focus is on the listing rather than on the knowledge contained within the literature represented . . .
- as a search ... Source materials act as an intermediary directing the researcher towards or providing an awareness of existing literature ...
- as a survey . . . the student's focus is on the literature, with his/her interest centred on the knowledge base of the discipline . . .
- as a vehicle for learning . . . the student's focus is beyond the literature and on his or her personal development . . .
- as a research facilitator . . . The impact of the literature moves beyond influencing the researcher to have an impact on the research project . . .
- as a report . . . The report is not only a synthesis of literature relevant to the research, it is a final representation of interaction with the literature.

(Bruce 1994: 224-5)

Aims of a systematic review

- (i) to address a specific (well focused, relevant) question;
- (ii) to search for, locate and collate the results of the research in a systematic way;
- (iii) to reduce bias at all stages of the review (publication, selection and other forms of bias);
- (iv) to appraise the quality of the research in the light of the research question;
- (v) to synthesize the results of the review in an explicit way;
- (vi) to make the knowledge base more accessible;
- (vii) to identify gaps; to place new proposals in the context of existing knowledge;
- (viii) to propose a future research agenda; to make recommendations;
- (ix) to present all stages of the review in the final report to enable critical appraisal and replication.

(Torgerson 2003: 7–8)

in the rest of this chapter of some use. For more specific guidance, have a look at Box 4.16, which offers a number of suggestions designed to make your review more focused, relevant and enjoyable. Recently, there have been a small number of publications produced that have been specifically written to help students with literature reviews. Examples are listed at the end of the chapter.

Box 4.16 Doing a literature review

- Ask your supervisor, manager, colleagues or fellow students for advice as to what is expected. If you are researching in an academic context, there may be quite precise expectations.
- Look at previous examples of literature reviews in your area of research. They may have been completed by former students or researchers in your institution, or published in books or journals. Many articles include at least a brief literature review. While you may take account of such previous reviews, try not to slavishly follow their structuring or argument. Read the sources referred to yourself wherever possible, rather than relying on others' interpretations.
- Make sure you include what are thought of as the key texts in your field, and that you locate this work within the broader traditions of your discipline, sub-discipline or subject area.
- If your work is going to be examined, and you are aware of the examiners' identities and/or their preferences, it is sensible to address these in your review. Examiners are human beings too. Refer to some of your examiners' work, demonstrate that you have read it, and do not be unduly critical.
- Structure your review in sections to reflect different approaches, interpretations, schools of thought or areas of the subject.
- Your review should both summarize what others have done and thought in the subject area, and indicate your own response to their work and conclusions. Be critical – just because a work is published, even if by one of the key thinkers in your field, this does not mean that it is the last word – but not destructively so.

You will find guidance on writing up your literature review in Chapter 8, Writing up.

Issues in reading

As a novice researcher, you are quite likely to encounter some difficulties in reading for your research topic. The most common problems raised are:

- nothing has been written on my research topic;
- there's too much;
- it's all been done; and
- how many references do I need?

These issues are complementary. Indeed, they may all be uttered by the same researchers at different points in the research process.

Nothing has been written on my research topic

This is unlikely to be literally true, if only because it is difficult to be quite as original as this suggests.

It may be that you are defining your area of interest too narrowly. It is, after all, unlikely that anything will have been written on your particular issue or combination of issues, using your chosen methods, and focusing on the particular cases or sample you have selected (if it has, consider changing your topic or approach slightly). But there is likely to be material on some or all of the issues of concern to you, perhaps in different contexts. And there will be books and papers on the method or methods you are using. And there may well be discussions of your cases or sample for other purposes. All of this material should be of some interest.

It may be that you cannot find relevant material and that you need further advice on how to get started.

Have another look at the section on **Basic reading strategies** earlier in this chapter.

If you are in this position, you might start again by focusing on the disciplinary debates which relate to your research topic, or by looking for relevant sections in basic textbooks by key authors.

If, however, it is really the case that you have stumbled upon a topic about which very little has been written which is accessible to you, you should probably consider changing your topic. Ploughing a little-known furrow as a novice researcher is going to be very difficult, and you may find it difficult to get much support or help.

There's too much

See also the section on ${\bf Coping}$ with the ${\bf research}$ literature ${\bf earlier}$ in this chapter.

It is normal to be overwhelmed by the volume and complexity of the available research literature, and much of this chapter is about how you respond and get to grips with this. The only answer is to start somewhere, eventually (soon hopefully) begin to see patterns and linkages, and to get as much support and guidance as you can. Set yourself reasonable and limited targets, and remember that you cannot be expected to do everything.

If you still feel, after a period of time, that there is too much, you should consider re-focusing and limiting your research topic, so that you just have to concentrate on one aspect of the broader literature you have discovered.

Hint: If you carry out a search of the literature using a computer database, and this results in hundreds of references, do not download them all. Narrow your search further, perhaps by limiting it to works published after a certain date, or by adding to or changing your keywords.

It's all been done

The worry that you will one day come across a piece of published research which effectively replicates what you are doing is a common research nightmare. It very rarely happens. It is highly unlikely that someone else will have made exactly the same research choices as you. There will be differences, however slight, in location, sample, size, instruments, context and/or issues considered. It is common, on the other hand, to come across material which closely relates to what you are doing, and which may suggest some changes in direction or focus. This is usually helpful.

See also the section on Panics in Chapter 8.

How many references do I need?

Even if you are carrying out a wholly library-based project, reading is only part of your research project. You need time to think about what you are reading, and to write. If you are doing fieldwork, you will also need lots of time to plan, carry out, evaluate and analyse this work, in addition to engaging in relevant reading.

Somehow, then, you need to be able to put boundaries on your reading. How and where? If you feel that you do not have much of an idea of the answer to these questions, try Exercise 4.6. This should give you a rough guide as to what you might aim for in terms of references, but only a rough guide. Some authors over-reference, seeming to show off by cramming in as many references in a page as possible. Others under-reference, appearing to assume that all of their readers have a good grounding in the field and are aware of the texts on which they are drawing, but perhaps giving the impression that they've read nothing. Some give bibliographies, but make little actual direct use of the works referred to in their text. Some never quote directly, while others produce texts which are little more than a series of linked quotations. There are also considerable differences in referencing styles between journals and publishers (see Box 4.17).

Box 4.17 Journal referencing practices

Three issues of different academic journals in the social sciences were examined:

- In one ethnographic journal, the number of references per article varied from 12 to 60.
- In one social policy journal, the number of references per article varied from 10 to 140. The latter, a literature review, was an extreme case.
- In one management journal, the number of references per article varied from 18 to 135. The latter, a research review, was again an extreme case.

While, in each case, the amount of literature cited was partly a function of the length of the article, this was clearly not the only factor.

You should be aiming for a balanced approach between these extremes, but one which you are personally comfortable with, and which takes account of any regulations or expectations applying to your research. Box 4.18 makes some suggestions as to how you should, and should not, make use of references.

You can not possibly read everything that might be of relevance to your research topic. So, as with other aspects of your research project, you have to reach a compromise between what you would ideally like to do and what is feasible, and do the best that you can within these constraints.

It is common to spend too much time on reading, proportionate to other aspects of the research project. You should try to get a good understanding of the literature as early as you can in your research, aiming to appreciate both

Box 4.18 Use and abuse of references

You should use references to:

- justify and support your arguments
- allow you to make comparisons with other research
- · express matters better than you could have done so
- · demonstrate your familiarity with your field of research

You should not use references to:

- impress your readers with the scope of your reading
- litter your writing with names and quotations
- replace the need for you to express your own thoughts
- mis-represent their authors.

the breadth of the literature and to understand in more depth the specific parts of it of most relevance to you. You should then move on to the actual research itself, but keep up with and return to reading to refresh, check and update yourself when you can.

Summary

Having read this chapter, you should:

- understand the vital importance of reading as part of the research process;
- feel more confident about how to find relevant materials to read;
- realize that reading for research is a very selective process;
- appreciate the importance of meticulously recording what you have read;
 and
- have a better idea of what is involved in producing a literature review.

Exercises

- 4.1 Find half a dozen books, papers, articles, reports or other materials which seem relevant to your proposed area of research. Taking no more than 30 minutes, produce a brief annotated bibliography of these materials, writing no more than a short paragraph on each item. Think about what you had to do in order to complete this exercise.
- 4.2 Pay a visit to a library (physical or virtual) you envisage using for your research project. Look around the library, and identify the main sources of information or advice you think you will find useful.
- 4.3 Pick up a book of relevance to your research, one you have not read before. Taking no more than five minutes, summarize the key message(s) of the book that relate to your research.
- 4.4 Take a short article or part of an article. Make a list of its conclusions, and of the reasons for these conclusions. How adequate do you think the reasoning in the article is?
- 4.5 Choose a research report, article or book. Can you identify the methods used in carrying out the research reported? Are any problems in the use of the methods discussed? How well justified do you find the choice of methods?
- 4.6 Get hold of one or more of the dissertations, theses or reports produced by researchers in your department or organization. Work out how long each dissertation, thesis or report is, and note how many references there are.

Further reading

In this section, we list a limited selection of books that are of particular relevance to the topics discussed in this chapter, together with an indication of their contents.

Black, T (2001) Understanding Social Science Research. London: Sage.

Focuses on the critical understanding of published research, particularly that using statistical analysis.

Brown, A. and Dowling, P. (1997) *Doing Research/Reading Research: A Mode of Interrogation for Education*. London: Routledge.

Designed to help the beginning researcher organize and evaluate the research that they read, and implement small-scale research projects of their own.

Fairbairn, G. J. and Fairbairn, S. A. (2001) *Reading at University: A Guide for Students*. Buckingham: Open University Press.

Deals with topics such as developing your skills as a reader, active reading, note taking, and where and when to read.

Fairbairn, G. J. and Winch, C. (1996) *Reading, Writing and Reasoning: A Guide for Students*, 2nd edn. Buckingham: Open University Press.

This text is in three parts: reading, writing and talking; writing as a student; developing coherent trains of thought. Advice is given on drafting, developing argument and understanding the text.

Fink, A. (2005) *Conducting Research Literature Reviews: From Paper to the Internet*, 2nd edn. Thousand Oaks, CA: Sage.

A thorough guide using checklists, examples and exercises. Topics covered include refining questions to guide the review, identification of subheadings and keywords, use of databases and the Internet, quality and reliability, and how to report the results.

Girden, E. R. (2001) *Evaluating Research Articles From Start to Finish*, 2nd edn. Thousand Oaks, CA: Sage.

Using examples of good as well as flawed articles, this book indicates how to critically read qualitative and quantitative research articles. Numerous questions are included to guide the reader.

Hart, C. (1998) Doing a Literature Review: Releasing the Social Science Research Imagination. London: Sage.

Considers the role of the literature review, the processes of reviewing, classifying and reading, argumentation and organization, mapping and analysis, and writing the review. Lots of practical examples.

Hewson, C., Yule, P., Laurent, D. and Vogel, C. (2002) *Internet Research Methods: A Practical Guide for the Social and Behavioural Sciences*. London: Sage.

Covers both using the Internet to access online material and its use for primary research.

Jones, S. (ed.) (1999) Doing Internet Research: Critical Issues and Methods for Examining the Net. Thousand Oaks, CA: Sage.

Includes chapters on methodological considerations for online research, studying online social networks, survey research, measuring Internet audiences, naturalist discourse research and cybertalk.

Locke, L., Spirduso, W. and Silverman, S. (2004) Reading and Understanding Research, 2nd edn. Thousand Oaks, CA: Sage.

Covers how to locate, select, read and evaluate research.

Mann, C. and Stewart, F. (2000) Internet Communication and Qualitative Research: A Handbook for Researching Online. London: Sage.

This book reviews online research practice and basic Internet technology, details the skills required by the online researcher, examines ethical, theoretical and legal issues, and considers power, gender and identity issues in a virtual world.

Rumsey, S. (2004) How to Find Information: A Guide for Researchers. Maidenhead: Open University Press.

Discusses how to formulate your search strategy, the use of conventional and online sources, referencing, copyright and plagiarism.

Torgerson, C. (2003) Systematic Reviews. London: Continuum.

Takes the reader through the stages involved in carrying out a systematic literature review, including the development of a protocol, quality appraisal, publication bias and data synthesis.