

AIRS

Advanced Information Research Skills

AIRS Module 7

Organising the literature



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Module 7: Organising the literature

[Workshop presentation \(YouTube, 45m57s\)](#)

Learning objectives

This module outlines the facilities and software available at QUT to assist you with organising and managing your source material and notes. By the end of this module you would have considered:

- the assistance that is available to you at QUT
- an organisational structure to manage the literature you are collecting
- file and information management features of bibliographic software
- coding the literature according to your research question concepts
- writing and organising your notes.

Applying the content to your resource log

As you progress through this module, consider, and refer to the requirements of the resource log and apply your learning to each question.

Resource Log

Organising the literature (10 marks)

- a. Name, describe and evaluate a bibliographic management software application that might be useful to you for your research, then list the advantages and disadvantages. [See [Module 7.2](#)].
- b. Identify areas of literature relevant to answering your research question, and list the codes you will use to categorise and organise your literature, e.g. **Area:** Knowledge management, **Code:** KM [See [Foss & Waters \(2007\)](#) and [Module 7.3](#)].
- c. Describe method/s you might use to:
 - i. make useful notes
 - ii. organise your notes to access and use your ideas and research findings [See [Module 7.4](#)].

7.1 Specialist research software

QUT provides access to various specialist research software programs. To install specialist research software, go to [Software downloads](#) and explore the various categories to find the relevant programs.

Online research support

Find the information you need when you need it through these useful links:

- [Conducting research](#), including managing your references, copyright and intellectual property, research ethics and integrity and a whole lot more.
- [Training and workshops](#) - these workshops and modules will help you improve your research skills, develop transferable skills and engage with industry. Complete our HDR skills audit to help choose the right modules for you.
- [QUT cite|write](#) is an introductory guide to citing, referencing and academic writing and is suitable for understanding and applying basic referencing and citing rules. However, as a researcher with more advanced requirements for publishing and attribution, you will need to refer to specific style guides for your discipline.
- [Get individual help](#), including candidature support, Library support, consultations, research data support, writing support and a host of other assistance.

Activity – Engage with QUT Library or eResearch

Book a study room, enrol in a class or access an online resource to further your research skills.

7.2 Bibliographic management

A research thesis demands that you read and record a great deal of information in print and electronic form. As you progress through your research, you will gather hundreds or even thousands of references that you will need to cite and acknowledge in your writing. You must have a system to record, store and easily retrieve these references, and it is important that you establish this system early in your research.

Bibliographic management tools are designed to assist researchers to track and recall references to relevant literature. Most bibliographic management tools also allow you to automate in-text citations and automatically populate a bibliography at the end of your document. Correctly using a bibliographic management tool will save you a significant amount of time with writing your thesis, and formatting papers for publication. This section introduces you to common bibliographic management tools.

Bibliographic management software

Certain bibliographic management tools are more appropriate for specific research needs. There are a range of web-based open source tools; some will also provide mobile interfaces. Most of the common tools will allow you to save, share and access your reference lists on multiple platforms and devices. Wikipedia also has a [comparison entry](#) on the major different software available, including Papers, RefWorks and CiteULike. QUT Library has [a guide to bibliographic management software](#) that discusses the strengths and weakness of several options including EndNote, Mendeley, Zotero and BibTeX, which are the most commonly used tools at QUT. Additionally, the Research Students Community Site has a number of [resources on how to use EndNote](#).

EndNote

QUT has an institutional licence for [EndNote](#). This licence permits current staff and students to download the software to personal computers and devices and to use the software at university, the workplace and at home. EndNote works with MS Word.

Endnote is fully supported at QUT. QUT Library conducts workshops throughout the year, and your Liaison Librarians can provide individual assistance with setting up your Endnote library. [HiQ](#) provides assistance with installation and technical issues and the library runs EndNote Essentials workshops.

To use Endnote:

- [download EndNote software](#)
- [enrol in an EndNote Essentials workshop](#)
- look at the [EndNote Training YouTube channel](#)
- seek complete discipline or database specific help via your [Liaison Librarian](#).

Watch the video: [How to Use EndNote in 5 Minutes: Windows \(YouTube video, 5m01s\)](#)

Watch the video: [How to Use EndNote in 6 Minutes: Macintosh \(YouTube video, 5m19s\)](#)

Zotero

Zotero is a free to use referencing management software tool, it helps you keep your library of sources organised and assists in collecting, storing, and citing those sources.

You can also install the Zotero Connector browser extension to let your browser automatically sense content as you browse the web and to save it to Zotero with a single click.

Further information on [how to use Zotero](#) can be found on the Research Students Community site.

Mendeley

Mendeley is a free to use software which enables you to collect bibliographic references, organise your citations, and create bibliographies as you write. The Mendeley Desktop client integrates with your account in the Mendeley web-based repository.

Groups of authors can collaborate using Mendeley. Researchers can share references online, in public or private groups, and search for papers in the Mendeley group database of over 30 million papers.

Mendeley is also an academic social network where you can showcase your research. Mendeley can help you connect with other scholars and the latest research in your subject area.

Further information on [how to use Mendeley](#) can be found on the Research Students Community site.

BibTeX

BibTeX is a text-based file format used to describe and process lists of references, mostly for LaTeX documents. A formatted BibTeX file can be converted to a bibliography of any format, using a third-party converter of some kind.

BibTeX allows you to store references in an external, flat-file database which can be linked to any LaTeX document. References in the database can then be cited in the document.

BibTeX is best suited for formatting bibliographies in technical documents, including complex mathematical formulas.

Further information on [how to use BibTeX](#) can be found on the official BibTeX website.

Activity – Use a bibliographic management tool to start a library

Decide what bibliographic management tool to use. If you already know what you want to use or are already using one that you are happy with, go to step 5. Otherwise, follow the process below:

1. Find out what your supervisor or research student peers use to manage their references.
2. Ask them why they use that particular tool and see if it matches your own needs.
3. Refer to QUT Library's [guide to referencing software](#).
4. Install the bibliographic management tool you have chosen.
5. Import references into your bibliographic management tool to create a reference database.
6. Choose the bibliographic referencing style appropriate to your thesis.
7. Insert an in-text citation with your bibliographic management tool.

7.3 Coding the literature

Once you have a bibliographic management system in place, you can begin your reading and coding the literature for relevance to your research question. This section will help you create a code to skim, scan and select literature efficiently and effectively.

Background reading

Foss, S.K. & Waters, W. (2007). *Destination dissertation: a traveler's guide to a done dissertation*, pp. 75–112. Maryland, MD: Rowman & Littlefield Publishers, Inc.

Wallace, M. & Wray, A. (2011). *Critical reading and writing for postgraduates*. London: Sage.

How to start

Students often think that a research topic is established *after* reading the literature. However, reading the literature is best done *after* defining a research question. A well written research question helps you to quickly read and scan the literature for new ideas or 'research gaps' while remaining focussed on your topic. You may alter and narrow the scope of your research question as you progress through the research process while remaining confident that you are answering your question directly.

Categorising your literature

The categories you need to code your literature come directly from the terms of your research question. The key terms of your research question become the major areas of your literature review. The categories of literature need to form a logical sequence of ideas that lead to a coherent, well-argued position.

Example: The bodies of literature relevant to answering the research question: 'What factors characterise a successful mentoring relationship for minority students?' would include:

- factors of successful mentoring
- factors of successful academic mentoring of minority students
- factors of successful academic mentoring of university students
- factors that affect the completion of graduate degrees (you would include this body of literature because you are defining *successful* in the question as completion of degree).

Then you need to establish a system for coding reference material for each category. Coding allows you to categorise literature according to themes and sub-themes, such as relevant topics, points of view, research inter-relationships, or new or challenging ideas and theories. Using the coding system helps you avoid writing notes on areas of interest that aren't directly relevant to your research question.

To begin, establish a coding system that is meaningful to you as you plan the first version of your literature review outline (headings, paragraphs etc.). Consider using:

- a word or short phrase
- a numerical code
- an icon
- an acronym
- an abbreviation.

You can also use software such as [Leximancer](#) to help you with coding your literature. Leximancer examines a body of text and produces a ranked list of terms based on frequency and related occurrence. These terms are then visually represented to show connections between concepts.

Watch the video: [Introduction to Leximancer \(YouTube video, 8m04s\)](#)

Activity – Coding your literature

1. Identify the categories of literature you need to cover in your literature review from your research question. Add these to your resource log.
2. Determine a code that delineates each of these categories.

7.4 Keeping useful notes

Notes allow a researcher to quickly remember, access, and utilise ideas with academic integrity. Notes consist of four components:

1. a summary, direct quote or paraphrase of the author's words/ideas
2. your own comments, ideas, analysis reflections, reactions to these words
3. bibliographic reference
4. a code that connects the note to a concept from your research question.

In this section you will learn about methods to read and keep useful notes. You can effectively use one or more of these techniques depending on your preferences.

Reading

Good note-taking relies on efficient reading techniques, particularly skimming, scanning and in-depth reading.

Skimming

Skimming is used to quickly get the main ideas and logic of a text. To skim, look quickly over the page noting the abstract, headings, and words in italics, diagrams, introduction, discussion and summaries. Summaries are often indicated with words such as:

- this paper/research will
- in summary
- to summarise
- therefore
- in conclusion.

Scanning

Scanning is used for finding particular words or phrases in a text. Use scanning to quickly locate specific information or concepts relevant to your research question before reading in more depth. Move your eyes quickly over the page and look at the first sentence of each paragraph to:

- identify new concepts or terminology so you can check their meaning
- find information on a specific topic
- find key words that indicate the scope of the text
- look at the first sentence of each paragraph to get a feel for the content.

The main thesis of an article often uses words such as:

- core
- central
- major
- significant
- underpinning
- most important
- crucial.

As you scan the document, highlight and code sections that are directly relevant to your research question.

The fast reading techniques of skimming and scanning will save you a lot of time and frustration as you explore and categorise literature for your research. Practising these techniques will make you a more efficient and effective researcher. For more fast reading resources see books in the QUT Library catalogue on [postgraduate reading techniques](#).

This [video](#) gives some tips on how to best skim and scan journal articles. You can view other videos in this series to gain further tips about how to engage meaningfully and critically with your reading via this [playlist](#).

In-depth reading

In-depth reading is when you read every word in a section of reading such as a journal article or book chapter. In-depth reading allows you to analyse information more carefully and write detailed

and comprehensive notes. Limit in-depth reading to critically important texts that will substantially impact your argument.

This [video](#) shares a student's perspective around how to best engage with your reading and how to write detailed and comprehensive notes as you do so.

Writing notes

Writing notes can be done directly onto a book or document, or using specific software on your computer or mobile device. You may need to use a variety of methods depending on the resources you are annotating. Be diligent and consistent with your note-taking and note management to ensure you can track and use prior research to meet your current writing needs.

Establish a system of organising your written annotations.

LATCH

Watch these interactive videos, which highlight the LATCH and Literature Grid method of notetaking.

- [Notetaking Part 1: The Literature Grid](#)
- [Notetaking Part 2: LATCH](#)

Dr Inger Mewburn has an excellent blog post on how to '[tame the literature dragon](#)'. She recommends coding each piece of information via Location, Alphabet, Time, Category and Hierarchy (LATCH). The LATCH system is described in more detail in the book [Information Anxiety 2](#) by Richard S. Wurman (the creator of TED Talks).

- Location - How is the author situated in the debate being considered?
- Alphabet - Keep your information in alphabetical order.
- Time - Order your notes in the order that the referenced articles were published.
- Category - Sort notes by themes that can be used as sections within a chapter of your thesis.
- Hierarchy - Order your categories to establish the logic of your literature review. Each category will play a different critical role in how you present your ideas.

A literature grid or source grid can help you keep track of your key sources and help to identify strengths and gaps of each paper that you read. It's a good place to keep a record of direct quotes and the associated references. [Example Literature Grid \(Word DOC, 13.5KB\)](#)

The LATCH Method and Literature Grid are just two examples of systems you can use to create and organise your notes. For others, such as the Cornell Method, see California Polytechnic State University's [Note Taking Systems](#).

Directly onto hardcopy

As you read your own copy of a book or printed article, code the text with the system you have chosen and write notes in the margins or on the back of the page. Be sure to code each comment and then copy those comments into a blank document (with full reference including page number) for future use.

Software and mobile apps

Using an electronic system for making and recording notes allows you to manage your notes more efficiently through the use of tags, keywords or metadata. Establish a consistent format to allow you to easily distinguish your own thoughts and ideas from quotes or ideas of others.

Many bibliographic management tools (e.g. [Endnote](#), [Mendeley](#), [Zotero](#)) also include ways to keep notes on each reference. Using these tools in combination with specific note-taking tools can be a useful strategy for managing your notes from reading the literature and notes from attending research seminars or meetings with your supervisor or research team.

- [Evernote](#) is designed for note-taking and archiving text, websites, pictures, voice memos and handwritten notes. You can photograph a concept map from a whiteboard or notepad and then store it electronically with keywords, tags etc.
- [Scrivener](#) works like an electronic 'index card' system. It allows you to move your notes and ideas around, trying different logical structures and connections.
- [Papers](#) (Mac, PC and iOS) stores all your PDF documents and allows you to write notes on each page and bookmark those notes. Your PDFs become a database of references that you can keep with you and access easily any time, synchronised across your computers and mobile devices.
- [Microsoft OneNote](#) acts as a notebook divided into various sections, and within each section you can create any number of pages. Use OneNote with various software packages, access, edit and manage your notebooks anywhere anytime using multiple devices.

For more ideas, ask your supervisor and peers how they manage their notes.

Activity – Making useful notes

1. Choose one of the note-making strategies listed above.
2. Skim and scan quickly through ten references, coding and writing brief notes for later use.
3. Keep your own ideas clearly separated from the authors'.

When you are ready to start writing, it can be useful to print your notes and cut them up into sections. Then, get a big piece of cardboard or paper to arrange these sections graphically into sub-sections and to write your own ideas around them in the empty space. Physically moving sections spatially can generate new ideas about how ideas fit together or relate to one another. Use the critical thinking template from [QUT cite|write](#) to conceptualise your argument and the logical structure of how your notes provide evidence for answering your research question.