AN INTRODUCTION TO LITERATURE REVIEWS

OVERVIEW
The very words ‘literature review’ seem to generate a lot of anxiety among students who meet the phrase for the first time. What is this new mysterious form of academic writing? How do I go about creating one of them for myself?

In many ways, a literature review is a form of research report, where the ‘data’ are the readings that have been located and the major part of the report is the analysis of that ‘data’. And this is perhaps the heart of the matter – analytical insight. A review must not simply describe or summarise the literature, a review must critically assess that literature.

Thus, an effective review analyses and synthesises the published work on a topic and should (University of Melbourne Library, 2012):

- Summarise and evaluate findings,
- Compare and contrast different authors’ views to:
  - Group authors who draw similar conclusions, and
  - Note areas where authors are in disagreement,
- Highlight exemplary studies,
- Note gaps in knowledge.

A literature review may stand alone (eg as a published paper or coursework assignment) but a review is often an essential piece of preparation for a research investigation (eg a thesis project). A literature review which is preparatory to a research project should therefore also (University of Melbourne Library, 2012):

- Highlight the gap(s) in knowledge to be addressed,
- Define and limit the problem to be worked on,
- Ensure duplication is avoided (unless that is the purpose),
- Evaluate potential research methodologies and procedures.

In addition to all these expectations, writing a literature review also demands considerable skill in information retrieval: the ability to scan the literature efficiently, using manual or computerised methods, to identify a set of useful articles and books (Taylor, n.d.). The AUT librarians are the information retrieval experts so don’t hesitate to consult a liaison librarian for assistance. (To find the librarian responsible for each discipline at AUT, see [http://www.aut.ac.nz/library/study/liaison](http://www.aut.ac.nz/library/study/liaison).)
DEFINING THE TOPIC / LOCATING RELEVANT LITERATURE
It is very important to be clear about the focus of a review, so some time spent thinking about this and, maybe, engaging in some preliminary reading can help define the topic. This allows us to be clear about boundaries, by determining the issues to be included, and the issues to be excluded (and why).

With a well-defined topic a detailed search of the literature can be conducted with specific goals in mind. The search must be systematic: it must consider the key authors, journals and databases, and also the appropriate search terms that will generate optimal results. Also, the reference lists of readings themselves provide more avenues to pursue for key articles. Finally, and as far as possible, a literature review must engage with the primary literature – the review must not rely on other people’s assessment of a particular study.

Once we have begun to collect relevant books, articles and other documents, we should try to structure the reading to first gain an overview and then move progressively deeper, exploring the fine details only where they are relevant to the particular topic of the review. This arrangement also means that the detailed studies can be more fully and properly understood because they will be read with the essential background and context already in mind.

Also, it is important not to get side tracked. We should choose to read what is necessary and relevant, not what is easy or appealing. Despite this, what is really relevant may only become clear when planning and writing the literature review begins, and it is necessary to shape the ideas and arguments to build a coherent, logical and comprehensive review essay.

READING EFFECTIVELY, READING CRITICALLY
Just as we might wish to write clearly and effectively, so we might consider how to read more effectively too. Some students have considerable difficulty in coping with the amount of reading that must be covered at the postgraduate level, especially if they favour more active, practical or kinaesthetic styles of learning.

We retain only 10% of what we read if we sit scanning page after page in an otherwise passive manner, but we retain 80% of what we experience. Therefore, in order to maximise our productivity when reading, we must turn reading into a much more active process — one which is under our own control.

For example, should a paper or a chapter be read in a linear fashion, like a novel? There is a more efficient approach, which aims to use reading time as wisely as possible: First we might read the key parts of a paper/chapter: Title and Abstract. We might scan the headings and subheadings throughout the text, and move on to read the Introduction and Conclusion. Then we can decide if we really need to read the rest of the paper – and if not, we can move on to something more worthwhile. If we
do read the entire paper/chapter, we have made a deliberate and informed decision to do so; but alternatively we might decide that a small section is all that is relevant to the task at hand.

Reading critically
As well as reading effectively and efficiently, we must also read critically.

The move to a more critical understanding of a particular academic discipline is one of the major developments a student must undergo in working at the postgraduate level … analysing the work of peers in the profession critically, weighing the value, significance and worth of one piece of work against another, against the student’s own criteria. Some people can feel daunted by the prospect of such tasks. Nevertheless, they must be tackled because, as noted in the overview, literature reviews deal fundamentally in critical assessment of other people’s work.

See Appendix A for a critical reading checklist, a tool which can help unlock an analysis of a research journal article through a detailed ‘interrogation’ of the text.

Effective critical reading as preparation for writing
In the context of reviewing the literature, reading and writing are not separate endeavours but interacting processes. It is important to read with pen in hand, or computer document open for note-taking, so that we are ready to record our understanding, responses and insights as we read … it is hard to reconstruct the thinking process we followed weeks (or, sometimes, months) later when we come to write the text of the literature review.

It is useful to take notes both on the content and the critical response to it. However, we should bear in mind that it is important to keep separate own views and the published ideas and findings of others, and the ‘two-column system’ can help with this: in the left column summarise the reading, and in the right column record observations, comments and critical responses.

Summary
Take control of the reading process by making it a much more active experience:

1. Organise the sequence of readings to gain an overview before plunging into in-depth research on particular points
2. Ask the question: what can we expect to learn from each paper/chapter/book
3. Take notes on the content
4. Critically assess the paper
5. Note the critical assessment
WRITING THE LITERATURE REVIEW
Comprehensive and thoughtful notes on the readings go a long way towards completing a written literature review. However, it is also necessary to organise this mass of material. And this is the most important step of all, for two reasons:

1. it provides the logical structure that is fundamental to the analysis and assessment which the review provides – and that, to a large extent, determines the quality of the review.
2. it helps break down the review into sections – this makes the writing easier, because there are several smaller writing tasks rather than one huge task.

Organisation of the literature review
A literature review is not an uncritical summary or a “shopping list” of readings … the objective is a critical review of the literature. In planning the writing, it is vital to find some way to bring order to the chaos of a large number of assorted readings: a way to group the readings so that they can be critically examined in the most effective, logical and coherent way. Each specific group of readings will form a section of the review.

Depending upon the nature of the chosen topic, the review might be organised in one of the following ways (Cone & Foster, 1993):

- **Related dependent variables**: eg, “What are the factors that influence retail store sales volume” – organise by studies focussing on specific factors: price, packaging, store display systems, product size, etc.
- **Type of research design** used in the selected studies.
- **Chronological organisation** – be very wary of using a chronological organisation; if there are a number of themes developing over time, the literature can leap about between themes and may actually be quite incoherent.
- **Organisation by theoretical premises** – if the chosen field of interest contains several competing theories, they can be discussed in turn and then brought together in a critical analysis.
- **Grouping similar findings** of previous research.
- **Any other method** that makes sense of the literature.

There are many ways to approach this task, which may be spread over several weeks of thinking and reading. The planning and organising can be achieved by mindmapping emerging themes, or constructing lists; file cards or “post-it” notes are very handy as they can be moved around to see how different groupings look.

However, perhaps the most thorough approach has been suggested by Webster and Watson (2002). These authors propose creating a table (using, for example, MS
Excel) to record each reading and the key issues, methodology, findings, critical notes, etc. With these details collected in a single worksheet, which slowly builds as the each article is read, the readings can be gathered together around key themes as they are identified or isolated. These themes then form the major sections of the review.

**Emphasis**

Another way to look at the construction of the literature review is to use the analogy of filmmaking: the idea of ‘long shots’ and ‘close ups’ (Rudestam & Newton, 2001). Long shot material is background or “fringe” material — it needs to be there to provide context, and should be acknowledged, but a detailed appraisal is not required. By contrast, the close up is reserved for the key material which is centrally relevant to the review topic, and it is these papers which must be analysed critically.

**Developing the critique**

An important task in critically assessing the literature as a *body of work* (rather than as isolated items) lies in clearly establishing

(i) the links between the various readings that have been selected, and
(ii) the links between these readings and the central topic.

Unfortunately, a common mistake in academic writing is the assembly of lots of research without any obvious explanation of how it all fits together to form a unified whole. But the creation of a *synthesis* of the literature is essential in writing a review.

In developing a synthesis, it is important to recognise that the various bits of your research will not “speak for themselves”. The thinking that has been applied must be explained, step by step (Rosenwasser & Stephen, 2000). In summary, then, the review must clarify:

- what the literature means, *in your view*; and
- how it connects together and how it connects to the central topic.

So the various pieces of research must be compared, and the similarities in and differences between readings identified. The ideas emerging from the literature – and your analysis of it – must be assessed, refined and developed; examples must illustrate these ideas where possible; and the deeper concepts which underpin the area of study must be sought.

Clearly this sort of activity is far removed from simply summarising what has gone on in the past work in the field. The critical thinking, creative insights and connections that you provide come to the fore in a successful literature review. Despite the focus of the writing being apparently directed entirely towards the published work of others, as the author of a review you are fully present in what you write.
A final check
When the review has been drafted, the checklist in Appendix B can help ensure all the important elements of a good review are present.

REFERENCES


APPENDIX A: A CRITICAL READING CHECKLIST

Conceptualisation
- What are the major issues being investigated?
- How clearly are the major concepts defined and/or explained?
- Does the literature review present a balanced summary of previous work?
- Does the literature lead to an adequately substantiated research question or hypothesis?
- Does the literature review clarify the significance of the research question or hypothesis?

Research question/hypothesis
- Is there a clearly stated research question?
- Are there clearly stated hypotheses?
- Are the relationships among the main variables explicit and reasonable?
- Are the hypotheses stated in a way that makes them testable and the results, no matter what, interpretable?

Method
- Is the design appropriate for the research question?
- Is the method of sampling appropriate for the research question and design?
- Does the method employed adequately control for extraneous variables?
- Could the research design be improved and, if so, how?
- Are the variables clearly and reasonably operationalised?
- Is the reliability and validity of data discussed?
- Are ethical issues addressed?
- Are data collected and managed systematically?
- If sampling is used, are the samples techniques specified and appropriate?

Results
- Are the data appropriate for the study?
- Is the description of data thorough?

Discussion
- Are the control variables adequately handled?
- Are the data analysed appropriately?
- Are the statistical techniques appropriate?
- Are the conclusions of the study consistent with the analyses?
- Can the results from the samples reasonably be generalised?
- Are alternative conclusions discussed and accounted for?
- Are the theoretical and practical implications of the study adequately discussed?
- Are the limitations of the study noted?
Summary considerations

- What is your overall assessment of the adequacy of the study for exploring the particular research problem?
- What is your overall assessment of the contribution of the study to this area of research or professional practice?
- What meaning and relevance does the study have for my professional practice?
- Does the study help me understand the context of my practice?
- Does the study enhance my knowledge about my practice?

Sources
APPENDIX B: A LITERATURE REVIEW CHECKLIST

Selection of the material
- Is the purpose of the review clear?
- Are the parameters of the review reasonable? Why are some papers included but others omitted?
- Are recent developments emphasised?
- Is the focus on the primary literature, with only selective use of secondary sources?
- Is the selected literature relevant?

Critical evaluation
- Is the review organised thematically?
- Is the review organised logically?
- Is there greater emphasis on the more important issues, and less emphasis on peripheral matters?
- Are experimental methods and designs critiqued?
- In situations where results conflict or are inconclusive, is there a discussion of the possible reasons why?

Interpretation
- Does the review contribute to the reader's understanding of the research problem?
- Does the design of the research method reflect the conclusions drawn for the literature review?

Source