

Project: Literature review

You will submit **one printed copy** of the review for approval and evaluation to the tutor facilitating the individual work and you will present your work (Powerpoint presentation) in a group session at the end of the course.

You will bring **another copy** of your review to the state examination, when you will present its short summary. The evaluation (mark) of the review is a part of the state examination evaluation.

Literature review surveys scholarly articles and other sources relevant to a particular issue, area of research, or theory, providing a description, summary, and critical evaluation of each work. The purpose is to offer an overview of significant literature published on a topic.

An effective review analyses and synthesizes material, and it should meet the following requirements (Caulley, 1992):

- Compare and contrast different authors' views on an issue
- Group authors who draw similar conclusions,
- Criticise aspects of methodology,
- Note areas in which authors are in disagreement,
- Highlight exemplary studies,
- Highlight gaps in research,
- Show how your study relates to previous studies,
- Show how your study relates to the literature in general,
- Conclude by summarising what the literature says.

A literature review has a number of purposes. It enables you to:

- Define and limit the problem you are working on,
- Place your study in a historical perspective,
- Avoid unnecessary duplication,
- Evaluate promising research methods,
- Relate your findings to previous knowledge and suggest further research.

As can be seen from the purposes above, the literature review is an exploration of an area, which at best will provide definition and a framework for a piece of research. Most students are not experts in their chosen field before they start their reading. The idea of the literature review is to develop a good working knowledge of the research in a particular area. The final written review should reflect the results of this preliminary research. So, a good literature review raises questions and identifies areas to be explored. The review should give an idea of the work that has been carried out in the subject area, preparing the reader for the study that is to follow.

The rationale

A good literature review presents a clear case and context for the project which makes up the rest of the thesis. Even if you are writing your review before you start your data collection, it is important to make clear the relationship of previous research to your thesis project.

This relationship between past work and your rationale is the most important influence on the structure and length of your literature review. Keep in mind that your purpose is important, because it will help to focus and direct your reading.

Critical reading and evaluation of web based material

Unlike published material, such as books and journal articles, which go through a process of editing and peer review, material on the Web is not subject to any standards or review process. Information on the Web can also be written by anyone - resulting in a wide range of quality of information as well as style and format. Because this is the case there are some important evaluation criteria to keep in mind when using Web resources:

Authorship	Who is the author of the page or site? What are the credentials and/or qualifications of the author? Is there a statement of what the site sets out to achieve?
URL affiliation	Look at the URL to determine what type of organization produced the site - .com - commercial site .edu - academic site .gov - government site .org - usually a non-profit organization .net - networked service provider
Content	Who is the intended audience of the page - novice, expert, etc? Are references, citations, or links to other resources included? How has any data that is presented been gathered? Unpublished or published data?
Bias	Information is often presented from a particular point of view or used to support an argument - is the author affiliated with any organization? Are there links to sites which represent only one side of an issue?
Currency of information	When was the page last updated? How recent is the data presented on the page?

Asking questions

You should have some specific questions in mind as you read. These may be quite general ("Have there been any specific studies on the role of women in electoral lobbying?") or more specific, ("Are these results comparable with the Japanese study using the same questionnaire?"). These sorts of questions will help you concentrate and deal with the material in an active manner. If you are looking for specific information, you don't need to summarise the whole article or book.

Keeping a list of questions in mind will sharpen your analytical skills and help you keep an objective outlook on your material. Here are some sample questions aimed at eliciting a criticism of experimental methodology:

- What were the authors trying to discover?
- Why is this piece of research important?
- What was measured?
- What information do you have on the sample?
- How was the data collected?
- What were the results?
- What do the authors conclude and to what do they attribute their findings?
- Can you accept the findings as true?
- How can you apply these findings to your own work?

When results are conflicting, you might find it useful to ask the following questions:

- How similar were the programs used?
- Were different measurement instruments used?
- How were the programs evaluated?

These questions will form the basis of your written review. Asking them as you read will tend to slow your reading process down, because you will be thinking as you go. However, doing your critical work early will make the process of writing a critical review much easier. If you take comprehensive notes in your own words as you read and think you will have done the really hard work before you start to write.

Taking notes

Your note taking should reflect your reading questions. Summaries have their uses, but they aren't the building blocks of a good literature review. Taking notes and making critical comments is more useful.

Keep in mind that although taking notes is time consuming, much of it will be directly usable later. For this reason, it is useful to take notes using your computer, rather than in longhand. This can also contribute to a sense of the progress of your thesis, rather than thinking of the reading as being somehow separate from the writing.

- When you take notes, you may like to try splitting your notes page in two.
- Write your summary of the authors conclusions and evidence in one column.
- In the other half of your page, note your reactions to what you have read.
- Comment on methodology.
- Make connections between your project and what you are reading.
- Compare and contrast the views of other authors.
- Make a note of what you think about the material.
- Even comments like "These arguments are confusing" or "I don't understand this" may be useful.

This two column system has several advantages:

- It keeps you thinking about the major issues and ideas.
- You will be able to differentiate between your views and the work of others, thus reducing the risk of plagiarism (your material is on one side of the page, everything used from the other side of the page **must** be acknowledged.)
- You are more likely to filter material and therefore take a more critical approach.

An alternative to the two columns is to use two colours of pen - one for your ideas and the other for quotes and paraphrases. If you prefer writing your notes on file cards, this may be a better choice.

It doesn't really matter how you organise and write your notes as long as you:

- Keep track of the difference between your ideas and those of other authors
- Make sure your notes are legible
- Remember to provide clear references including page numbers in case you want to look at the original material again, or cite it in your review.

Plagiarism

Because a literature review is based on the work of other authors, you must be very careful to separate an author's evaluation of research from your own. Organisation and scrupulous note taking and referencing are the best ways to ensure that your work is correctly referenced. Make sure that you understand what needs to be referenced:

Plagiarism of ideas occurs when you paraphrase facts or arguments without citation. Anything you get from a book, even if you write it in your own words, needs to have a citation or footnote.

Plagiarism of words happens when you copy another author exactly without putting the words in quotation marks. This type of plagiarism may occur in conjunction with plagiarism of ideas, or on its own. Even if you provide citation information, you also need to put the text in quote marks, or you will be plagiarising. Citations of quotations ought to include page numbers.

Starting to write the literature review

If you are reviewing and typing up comments as you go, you should have quite a lot of material already on the page when you start to create your draft. This is where all those notes written in your own words will really pay off. When you think about it, you have probably already written a good portion of your review. Make some decisions about structure, and start stringing those notes and comments together.

Constructing your argument

In order to write a cohesive literature review, you need to present a clear line of argument. That means taking all those critical comments you made in your reading notes and using them to express an academic opinion. A well argued literature review will demonstrate the following qualities:

- A clear relationship between the author's (ie. you) arguments and the evidence. Linking sentences within the passages are used to indicate these links and connections. Summary statements are used at the end of sections to draw conclusions.
- Opinions are backed up with facts and theory in the literature. Examples, citation and quotations are used where appropriate.

- Differing opinions are accounted for, rather than ignored. The author presents his/her evidence, and also makes some attempt to acknowledge opposing viewpoints. The author makes clear his/her preferences rather than 'sitting on the fence' or leaving it to the reader to draw conclusions.
- The sections of the review are clearly connected. There is an outline statement in the introduction which makes the order of the arguments clear, and gives some reason for the author's choice in ordering the material.

A final checklist

Selection of sources

- Have you indicated the purpose of the review?
- Are the parameters of the review reasonable?
- Why did you include some of the literature and exclude others?
- Which years did you exclude?
- Have you emphasised recent developments?
- Have you focussed on primary sources with only selective use of secondary sources?
- Is the literature you have selected relevant?
- Is your bibliographic data complete?

Critical evaluation of the literature

- Have you organised your material according to issues?
- Is there a logic to the way you organised the material?
- Does the amount of detail included on an issue relate to its importance?
- Have you been sufficiently critical of design and methodological issues?
- Have you indicated when results were conflicting or inconclusive and discussed possible reasons?
- Have you indicated the relevance of each reference to your research?

Interpretation

- Has your summary of the current literature contributed to the reader's understanding of the problems?
- Does the design of your research reflect the methodological implications of the literature review?

References: Key the references at the end of the manuscript. Cite the references in text in the order of appearance. If there are more than three authors, name only the first three authors and then use et al. Example references are given below:

Journal article

I. Guarino A, Spagnuolo MI, Giacomet V, et al. Effects of nutritional rehabilitation on intestinal function and on CD4 cell number in children with HIV. *J Pediatr Gastroenterol Nutr* 2002;34:366-71.

Book chapter

2. Todd VR. Visual information analysis: frame of reference for visual perception. In: Kramer P, Hinojosa J, eds. *Frames of Reference for Pediatric Occupational Therapy*. Philadelphia: Lippincott Williams & Wilkins; 1999:205-56.

Entire book

3. Ming S-C, Goldman H. *Pathology of the Gastrointestinal Tract*. Philadelphia: Lippincott Williams & Wilkins; 1998.

Software

4. Epi Info [computer program]. Version 6. Atlanta: Centers for Disease Control and Prevention; 1994.

Online journals

5. Friedman SA. Preeclampsia: a review of the role of prostaglandins. *Obstet Gynecol* [serial online] January 1988;71: 22-37. Available from: BRS Information Technologies, McLean, VA. Accessed December 15, 1990.

Database

6. CANCERNET-PDQ [database online]. Bethesda, MD: National Cancer Institute; 1996. Updated March 29, 1996.

World Wide Web

7. Gostin LO. Drug use and HIV/AIDS [JAMA HIV/AIDS web site]. June 1, 1996. Available at: <http://www.ama-assn.org/special/hiv/ethics>. Accessed June 26, 2007

The above text is based on: Conducting a literature review. University of Melbourne.

Available at: <http://www.lib.unimelb.edu.au/postgrad/litreview/home.html> Accessed April 20, 2009