Writing an Effective Literature Review

A Study Guide

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INTRODUCTION

Whatever stage you are at in your academic life, you will have to review the literature and write about it. You will be asked to do this as a student when you write essays, dissertations and theses. Later, whenever you write an academic paper, there will usually be some element of literature review in the introduction. And if you have to write a grant application, you will be expected to review the work that has already been done in your area. However, just because we all have to do this a lot, doesn't make the task any easier, and indeed for many, writing a literature review is one of the most challenging aspects of their academic writing. In this study guide, I will begin by clearing up some misconceptions about what a literature review is and what it is not. Then, I will break the process down into a series of simple steps, looking at examples along the way. In the end, I hope you will have a simple, practical strategy to write an effective literature review.

However, before we get going, I need to manage your expectations. Some people come to a study guide like this thinking that it will help them understand the literature they are reading in their own field. I can't do that for you. I can only help you write about the understanding you already possess. You have to put the necessary work in to develop your own critical skills which often have to be honed over a long period through reading, attending lectures, seminars and conferences and discussing your own work and that of others with your peers. That is how you build your scholarship. What this guide is about is doing justice to that scholarship and making sure your readers are left in no doubt about your ability to critically evaluate the published literature.

WHAT IS A LITERATURE REVIEW?

This might seem like a very simple question. Of course, you know what a literature review is. Everyone knows what they are and what they look like. Well, if that's true why are they so often badly written, difficult to read and lacking in any meaningful critical evaluation of the papers and books being reviewed? So, let's start with a blank page and start by defining what we are talking about.

A literature review is a survey of published work relevant to a particular issue, field of research, topic or theory. It will never be about everything and should have clearly defined limits. This survey will certainly provide short descriptions of the sources being reviewed, but much more importantly it will also provide the reader with a critical evaluation of those sources.

Given the many misunderstandings about what is required of someone writing a literature review in academia, at this point it might be useful to state what a literature review is not, before looking at what it is.

It is not:

- A list or annotated bibliography of the sources you have read
- A simple summary of those sources or paraphrasing of the conclusions
- Confined to description of the studies and their findings

- Narrow and shallow in its approach
- Confusing and longwinded in the way you write about the papers
- Constructed in an arbitrary fashion.

It is:

- A critical evaluation of the literature you have read
- A synthesis of the available research in a defined area
- Broad and deep in its approach
- Clear and concise in the way you write about the papers
- Guided by a clearly defined, consistent concept.

When comparing what it is not and what it is, there are two key words to remember, and these are 'summary' and 'synthesis.' A 'summary' is merely a recap of the information you have read and often involves a simple paraphrasing of what the paper was about and what its conclusions were. In contrast, a 'synthesis' is a re-organization, or weaving together, of that information. Think of it like this. Imagine each of the papers you have read is a piece of coloured thread. If you snip the end off each thread and present me with a handful of these, it will be colourful and I will be able to see at a glance how many papers you have read, and I will have a brief summary of each, but that's not a literature review. Only when you take those threads and weave them together and then present me with a new piece of cloth, will that be a literature review. Only then will you have produced a critical piece of discursive prose.

Now, that might sound a very difficult task, but as we will see later when we look at how we write the review, there are some very simple things we can do to show our readers that we have engaged critically with the literature.

WHY DO I HAVE TO WRITE A LITERATURE REVIEW?

As mentioned in the Introduction above, you will find yourself being asked to review the literature and to write about it for a number of reasons.

As a student, you will be asked to do this to demonstrate your familiarity and understanding of the research that underpins your subject area. It serves as proof for your examiners that you have done the necessary work to identify and read the important papers relating to a specific topic. It also allows your examiners to glimpse inside your head to see what you think about what you've read. By reading how you write about the literature, they can see if you truly understand what you have read, and they can reassure themselves that you possess the necessary critical skills that underpin all scholarship.

As a researcher, you will be asked to review the literature not only to show your familiarity with it but also to place your own work into context and to ensure your work is seen as credible by your peers. Reading the way other people write about their work in your field also allows you to learn how it's done, what are the expectations in your field and how people think about their findings. Studying the way other people in your field go about analysing their findings and formulating their arguments will help you learn how to do this when it comes to writing about your own research work. You will be making connections between your own work and that of others and clearly demonstrating what contribution you have made to the scholarship in your field. All literature reviews collect what is understood about a topic up to a point in time and often indicates the direction for future research. As such, a

literature review can be an essential component of any research proposal and grant application.

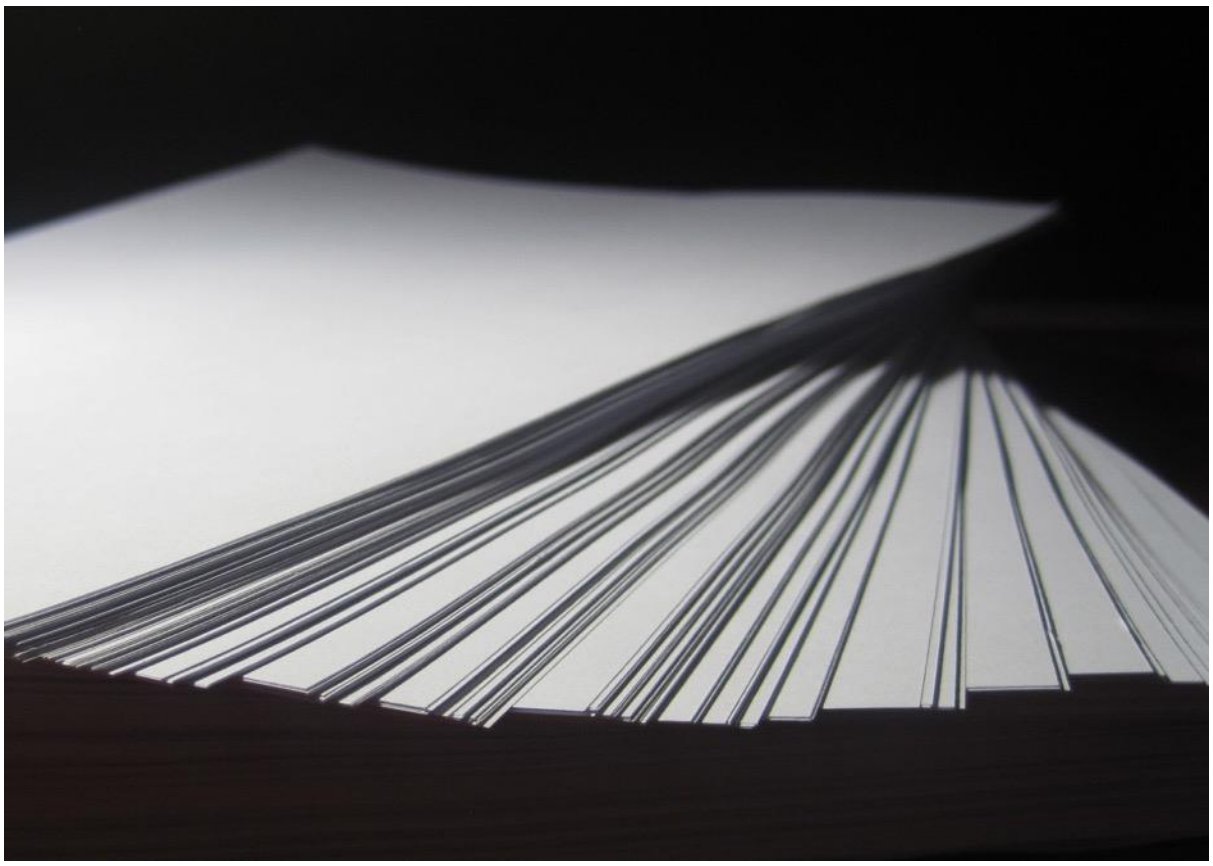
Systematic vs Narrative Review

At this point it is important to say that there are different kinds of review you may be asked to write. By far the commonest kind of review you will ever read or be asked to write in academia is the so-called 'narrative review'. In this type of review, you will use your judgement about the relevance and importance of different sources to your research question or the theories you are exploring. In other words, you will not necessarily include everything you have read on a topic. This is the kind of review you will find as part of most dissertations and theses, most academic papers and most grant applications.

In contrast, the so-called 'systematic review' is a very different piece of work. The purpose of such a review is to evaluate and interpret all available relevant research evidence in a defined field. To do this we have to adopt a highly mechanical, pre-planned strategy for identifying the literature, assessing it for quality and then writing about it. This involves writing a detailed methodology of your search strategy and your assessment strategy. When we are dealing with quantitative research, such an approach often also includes meta-analysis where the results of different smaller studies are grouped together and collectively re-assessed.

Now, the term systematic review has a very clear definition, but unfortunately the term is used loosely even in academic settings. Students may be asked to write a 'systematic review,' meaning only that they should adopt a thorough and scholarly approach. All literature reviews should be that, but a systematic review has a different aim and a very different methodology. Because of this confusion, I would urge anyone who is asked to undertake a systematic review to check exactly what they are being asked to write.

I do not plan to say any more about systematic reviews specifically, but much of what I will say below about how we write a literature review once we have identified and assessed our sources will be the same.



HOW DO I BEGIN?

You begin any writing project in academia not by writing at all, but by reading. And in the case of a literature review, the necessary first step is finding what you should read. I do not intent to go into detail here about how we search the literature. This will be a routine task familiar to most of you and will always involve the use of dedicated search engines. What I do want to mention, however, is the challenge that the literature poses in this respect. The problem is rarely one of finding too little to read and review and much more often one of being overwhelmed by the number of potentially relevant sources.

Deciding what to read

This is especially true when we start out trying to get to grips with a new topic or field. Any broad search of the literature will generally retrieve more papers than can be comfortably read and understood in a lifetime. Perhaps, if we could narrow down our search by focussing on specific aspects of our topic that would help. While that is certainly true, it's often the case that early on we do not know enough about the topic to know what might be relevant and what might not. So, we find ourselves in a quandary, unable to narrow our focus until we have read more, and unable to decide what to read because there's too much to deal with. How do we escape this vicious

circle? The first thing you should consider is speaking with someone who is more knowledgeable about the topic than you. This might be a supervisor or a more senior peer, but it will always be someone who is already familiar with the literature you are trying to tackle. They should be able to point you to useful starting points, perhaps they will recommend key journals, or research groups you should seek out. Of course, not everyone has that sort of resource readily available, so what should they do? Well, the next best thing is to use the expertise of a more knowledgeable person in your field, but one you have never met. And by that, I mean the author of a review article in your topic published recently in a good journal. The author of such an article will be a respected figure in your field who is thoroughly knowledgeable about the literature and their review article will highlight what he or she considers to be the most important sources. By looking at their list of references, it will quickly give you an idea of the kinds of papers you should be reading.

How to read a paper

When you do decide to read a paper, do so actively rather than passively. Often people say that they like to read a paper over first to see if it is useful, and if it is they will go back to it and read it properly. Let me tell you an inconvenient truth—in academia, you don't have time to do that. There is a lot to read, and more being published every day, so you have to develop a highly efficient way of reading and keeping up with the literature. The first thing you must do is always read actively. In practice, that means always reading with a pen in your hand, or with some way of taking notes. It also means reading anything in layers. Academic papers are not novels. They are not designed to be read necessarily from start to finish, and the amount of time you devote to any paper will vary depending on its relevance to you. The first thing you will read is the title, hopefully identifying relevant keywords. If the paper looks promising, you go to the next layer and look at the abstract. Only if it still seems to be potentially interesting and relevant, will you go to the next layer and engage with the main text, but even then, you may focus on the sections that are of most interest to you. There will be thousands of papers whose titles and abstracts you scan, fewer whose main text you study, even fewer where you read and re-read sections of the paper, and some where you have read it so often you can recite passages from memory.

As you read, develop a reviewer's mentality. This means you should be questioning everything you are reading, asking why they did that, how they came to that conclusion, what might be an alternative explanation. The more you learn about your topic, the more questions will come to mind and even if you do not yet know the answers to these questions, write them down as part of the notes you are taking on the paper. These questions can help you later when you are writing your review.

As you read different papers, look for themes that emerge. You may, for example, find agreement between different research groups or alternatively you may uncover differences of opinion. You may even identify areas of marked controversy in your field, with opposing schools of thought. And you may find completely unanswered questions where there are significant gaps in the literature. All of this will help you critically discuss the literature you have been reading, especially the connections you find between different papers. I like to think of it as a process of joining the dots.

Each paper is a dot on the page and as we read, we gather more and more dots, but we may also start to see patterns emerging. As we join the dots, a completely new picture may appear before us.

Getting organized

The commonest thing anyone says when they are in the process of writing a literature review is, "I know I read that somewhere." If you haven't said this yet, you will because very quickly we can lose track of our sources unless we are very organized.

In practice, this means having a system to keep track of the full reference citation and any notes you have taken. There are a number of dedicated software packages that can help here, such as Reference Manager, RefWorks, ProCite and Endnote and even the functionality in many modern word processing packages will do the job. Any of these software solutions will save you time by helping you organize and store your references, and they will also allow you to create your referenced document with in-text citations and your reference list based on the required style. If you don't have a system to keep your references organized, now is the time to get one. Find out what your colleagues are using and adopt that. If nothing else, you'll have someone you can go to for help you when you get stuck.

Some last thoughts

Just before we proceed to look in detail at how we might go about writing a literature review, it is worth pausing for a moment and thinking about what those who read them might want. I am thinking particularly here of the examiners who judge our essays, dissertations and theses.

The literature review has been cited by some examiners as "the second most deficient aspect" of the theses they have read. Incidentally, the number one spot is taken by problems of grammar and punctuation. Those same examiners when probed further talk about the specific problems they encounter. They state that the authors of literature reviews often fail to use recent literature, adopt a parochial approach to their review, exclude landmark studies, fail to discriminate between the relevant and the irrelevant and fail to demonstrate any ability to critically assess what they are reading. They even go on to conclude that the literature reviews they have to read are often, "lengthy, irrelevant, outdated, tedious, repetitive, bewildering and flabbergasting." So, with all that criticism ringing in our ears, let's look at how we might do better.

HOW DO I WRITE IT?

There is an enormous amount written about how to write. Some of this is helpful, some is complicated, and some is only useful if you already know how to do it, as it just serves to confirm what you already knew. I like to take as simple an approach as possible to advice about how to write. I do this because if it's simple, you might remember it and be able to put it into practice. So, let's start with the simplest thing of all—structure. Everything you write has three components: a beginning, a middle and an end and each serves a different purpose. In practice, this means your review will have an introduction, a main body where you review the literature and a conclusion where you tie things up. Let's look at each of these in turn.

Introduction

The first part of any literature review is a way of inviting your reader into the topic and orientating them. A good introduction tells the reader what the review is about – its scope—and what you are going to cover. It may also specifically tell your reader what you will not be covering. Overall, it's a device to help manage the reader's expectations of what's to come.

The introduction may also go into more detail about the position or point of view that you plan to adopt in the review. For example, your review may be about climate change, but you state in your introduction that you are going to focus on developments only in the last ten years and you will specifically address its impact

on agriculture. Alternatively, your review might be about Queer Theory, but you state in your introduction that you propose to adopt an historical approach to our changing understanding of gender and sex-based binaries and will focus on challenges to heteronormativity as depicted in mainstream cinema over the last fifty years.

Let's look at an example of an introduction. All the examples I have included are as generic as I can make them in the hope that anyone from any discipline can understand and appreciate the points I am trying to make.

Activity 1

Read the following paragraph and then try to answer the questions I have posed on your own before reading my answers.

> Human behaviour is complex, and many theories have been proposed to explain what motivates it. Although the literature covers a wide variety of such theories, this review will deal with three major themes that emerge repeatedly in published works. These themes are: the influence of rewards; the influence of peer pressure; and the influence of moral frameworks in which we operate. Although the literature presents these themes in different contexts, this review will primarily focus on their application to how we behave in times of crisis.

Questions:

- Is it clear what this literature review is going to be about?
- Do you have an understanding of what will be included and what won't?
- Are you surprised that no original sources have been mentioned?

Answers:

This paragraph is a good example of an introduction to a literature review. This example is four sentences long, but the length of the introduction will vary a great deal depending on the overall length of the literature review. It might be shorter, for example as the introduction to a paper, or much longer, for example introducing a literature review in a PhD thesis.

While the specifics of what this text is about are unimportant, what does matter for our purposes is its structure. Let's take a closer look at that. The first sentence is what is often called a "topic sentence", that is an introductory sentence at the head of a paragraph that tells the reader what this paragraph is going to be about. If each of your paragraphs has such a sentence, generally your reader will find your writing easier to read and follow. We know right away that this is all going to be about "Human behaviour", but in the second sentence we get some refinement of that and

are told that this review "will deal with three major themes". Not surprisingly, the next sentence tells us what those themes are. The last sentence offers one last importance piece of information to help orientate the reader. There, we are told that the review will further focus of one specific aspect of all this.

After reading these four sentences, the reader should be aware of what they are about to get if they read on. They won't learn everything about what motivates human behaviour, but they will learn about three major themes and specifically how these impact on behaviour in the particular setting of crisis.

Introductions like this can be thought of as a set of ground rules laid down by the author to help the reader. As such, it is not surprising that, as yet, we have not included any specific references. All that is still to come in the main body of the review.

Main Body

As we saw earlier, a literature review cannot be a simple summary and paraphrasing of what we have read but must include elements of critical evaluation of that literature. How do we do this? Well, there are two things we need to do. The first is very simple and you may think it is not even worth telling you about. However, I make no apology for what some will see as stating the obvious because I have read too may students' literature reviews that do not even do this. What I am talking about is simple integration of the sources you have read, highlighting similarities between some papers and differences between others. Let's look at an example of that to see what I mean.

Activity 2

Read the following paragraph and then try to answer the questions I have posed on your own before reading my answers.

> Maxwell and Brown (2018) found that the gross domestic product of Latin American countries fell by an average of 11% in the 1990s. Similarly, Jones and Chang (2019) showed that the economies of Brazil, Argentina and Chile contracted 10-14% during the same period. In contrast, Rossi and Ivanov (2021) reported that there were major upturns in productivity in Colombia, Venezuela and Peru from 1991-97 and relatively flat growth in most of the other economies in the region.

Questions:

- Is this just a simple summary of the literature that this reviewer has read?

- What does the word, ‘Similarly’ tell you about this reviewer’s understanding of the literature?
- Can you identify any signpost words that show evidence of integration?

Answers:

This text does briefly summarise and paraphrase the results of the publications mentioned, but it is not merely a laundry list of the papers. What the reviewer has done is something very simple but very important. They could have written:

> Maxwell and Brown (2018) found that…
> Jones and Chang (2019) showed that…
> Rossi and Ivanov (2021) reported that…

but they didn’t. They used simple signpost words to make it clear to their reader that they understood that the first two papers reached the same conclusions while the third came to a different conclusion. They highlight a similarity between the first two by linking them with the word ‘similarly’ and they highlight a difference between those two and the third paper by using the signpost phrase, ‘In contrast.’

The second thing we have to do in order to show that we are able to critically evaluate the literature we have read is to introduce our own critical analysis. This is more difficult than simply identifying similarities and differences between the papers you have read, but it is an essential part of a good review. It is also more difficult to illustrate with individual examples because there are many different ways you might do this depending on the nature of the source materials you are reviewing. For example, one of the main points you may wish to discuss is a controversy in your field of study—where some papers conclude one thing and others something different. You may want to discuss why this might be or even which conclusion you think, based on the strength of the evidence, is more plausible. You may wish to track the development of a research problem over time and along the way highlight what you regard as the most significant milestones and present your own take on the state of the art. You may wish to introduce evidence of your wider reading to help explain a gap in the literature that you have identified.

Whatever it is, analysis is usually about taking a metaphorical step back from the literature you are surveying and trying to look at the bigger picture. You might be asking yourself questions as you do so. For example, you might tell your reader about several important pieces of work that have been reported in the literature, but then pause to ask, ‘so what does that all mean?’ or ‘why are there conflicting findings?’ or ‘what about this group or approach or strategy that has never been tested?’ or even ‘could there be a different answer altogether, when we consider this new information?’

As always, the best way to explain this further is to look at some examples. Read over the following paragraphs and in each case try to answer the questions on your own before moving on to read my analysis.

Activity 3

Read the following paragraphs and think about these questions as you do:

- Do you get a sense that the author understands the papers they are writing about?
- Have they gone deeper that merely reporting what the papers found?
- Can you identify the point where the author steps back from the review to look at the bigger picture?

Example of analysis A

Schmidt and Cohen (2009) reported increased numbers of children contracting measles in the two years after the publication of concerns about the safety of the childhood vaccination programme in China. However, Dexter and Yamamoto (2012), when examining the same population over the same time period found no such increase. An explanation for these apparently contradictory findings may be found when their respective study designs are examined. Tufts and Larson (2002) have previously demonstrated markedly different outcomes when using self-reported disease rates versus laboratory-based diagnoses, thus highlighting the importance of choice of both study population and analytical method. A novel approach that avoids this potential source of error was recently presented by McDonald and Murphy (2021), who concluded that rate of measles per 100,000 population was unchanged during the period in question.

Here is another example of analysis. This time a problem is being looked at chronologically, but again at some point the reviewer is taking a step back from the literature to take in the bigger picture that is before them.

Example of Analysis B

Over the last century there has been a steady progression in our understanding of this problem. Goldstein and Rivers (1922) first defined the central research question and postulated a solution. However, the underlying premise of that hypothesis was later criticised by Jack and Kaminsky (1933) who proposed the use of a new theoretical framework. A major re-evaluation of the problem, taking into account developing methodologies,

was published by Ho and Lam (1955), but this was quickly superseded by the work of Ausberg and Hoffmann (1957). The latest developments have been the result of the application of Complex Number Theory to the problem and these have yielded a series of publications from the Toronto Group (Oliver, March and DuPont, 1998, 2002, 2003 & 2017). While many possible solutions have been proposed by that group, there is still significant controversy over which, if any, of these is correct. In this context, the recent work of Singh and Baxter (2021) purportedly offers a completely new way of looking at the problem. However, close analysis of their work reveals that despite using revised and updated terminology and positioning their approach within a 21st century context, they have relied almost exclusively on the approach originally proposed a century ago (Goldstein and Rivers, 1922).

With these thoughts in minds, let's take a look at two different versions of the same literature review. Read the two paragraphs below and decide, if you were an examiner reading these, which you would rate more highly.

Activity 4

Version 1

How competent are post graduate students at British universities when it comes to grammar and punctuation? This question has been studied using different methods in recent years. When academic staff in English universities were questioned, they reported a marked decline in the competence of their students' written English skills over the last ten years (McDonald and Grey, 2020). Redmayne and Heap (2021) concurred with these findings in their review of university application forms completed by post graduate students in 2019-20. However, no such decline has been found when 35 PhD theses submitted in 2019 were examined (Messi and Stone, 2020). This discrepancy may be resolved by looking at the only available comparative objective evidence. Armitage and Rossi analysed the number of errors in 167 Masters dissertations and PhD theses submitted between 1991-95 and a further 189 submitted between 2015-2019 and found no significant difference between the two five-year periods in either the Masters of the Doctoral group. We may therefore conclude that this is a problem of perception rather than reality.

Version 2

There have been a number of concerns raised in recent years regarding the competence of post graduate students in written

> English. Several major studies have been conducted and their findings are presented here. Green and Schmidt (2019) showed in a detailed analysis of questionnaires returned by 765 post graduate students that 23% had no formal training in the use of English grammar at university. Dixon and Partridge (2018) found that in the United States, 65% of the colleges they studied offered remedial grammar tuition to all their post graduate students irrespective of their discipline. Wong and Felippe (2020) reported that sales of English Grammar textbooks fell to an all-time low in 2018-19.

The first version is an example of good writing. The paragraph begins with a simple topic sentence in the form of a question that the paragraph then goes on to answer. Two examples of studies from the literature are introduced, and these are linked by the signpost words “concurred with these findings” showing us that the author understood that these two pieces of research were in agreement with each other. A third paper is introduced giving conflicting results and again this is signposted with the word, “However.” A discrepancy is identified, and then further analysis is presented in the form of another paper allowing the author to take that all-important step back to look at the bigger picture and come to a conclusion.

While the second version shows that the author has been busy reading papers and taking notes so they can paraphrase their findings, there is no sense that they have any deeper understanding of what they have read. Now, they may have a very good understanding, but the only evidence we have to base our opinion on is how they are writing about the literature. What they have presented is a laundry list of papers, one after the other, with no attempt at integrating their findings or of introducing any deeper analysis. At no point, do they take that step back to look at and comment on the bigger picture that is so important to a good literature review.

Conclusion

The final part of the story we have to tell when writing a literature review is to tie it up neatly. Just as introductions vary greatly in length depending on the overall length of the review, so does the conclusion. It may be a single sentence, a whole page or anything in between. What it shouldn’t be is merely a recap of everything that has gone before. Sometimes, it’s about coming to a specific conclusion about which of two theories has the greatest weight, which method is more robust, which school of thought is dominant and why. Other times it might be about highlighting what is missing from the literature. And if your review is part of a larger piece of work where you are reporting your own research findings, it may be a segue into that.

Grammar and Punctuation

While this is not really the place to give a lesson on the mechanics of writing English, it would be remiss of me not to mention such an important aspect of writing and one which upsets so many people. It’s often said that in an academic setting it doesn’t matter how you write, it’s what you write that’s important. Forgive me, but that is

rubbish because whatever you write will be read by human beings who all have petty little prejudices about how English should be written. Of course, the thrust of your argument and the development of your thesis are important, but it is so easy to be dismissed out of hand by readers who find fault with your misuse of the word however, and your inability to use an apostrophe. Here's what one academic said about it:

"Examiners appreciate work which is logically presented, focused, succinct, and in which signposts are used to help readers to understand the path they are taking through the work …One of the problems with work that is poorly presented is that the examiner tends to lose confidence in the candidate and can become suspicious that there are deeper problems of inadequate and rushed conceptualisation."

In other words, don't make it easy for them to put you on the rejects' pile. Pay attention to spelling, grammar and punctuation and if you have particular challenges in these aspects of writing, get some help and read a book about it. Most of the rules of English grammar and punctuation are quite simple—remember most of us learn them at elementary school, so it shouldn't be beyond anyone in higher education.

That said, here are a few quick pointers to make your writing better:

- **Sentences**
  Keep them short and express one idea per sentence. This is the single most important thing you can do to make your writing easier to read and understand, even though many academics seem to think only by writing page long sentences will they appear smart. They don't. They appear as if they don't know how to write.

- **Paragraphs**
  Group sentences that express and develop one aspect of your topic into paragraphs. Use a new paragraph for another aspect or another topic and as with sentences keep the paragraphs relatively short. Text with lots of paragraph breaks is more open and always easier and pleasanter to read.

- **Consistency**
  Use sentences and paragraphs with appropriate use of punctuation because incorrect punctuation can affect the meaning.

- **Exclamation marks**
  Never, never, never use these. No matter how wonderful or awful you think something is, there is no need in academic writing to exclaim it and shout it from the page. It just makes you look like an amateur.

HOW DO I REFERENCE IT?

When writing in an academic context you should be aware of the importance of properly referencing your sources to provide evidence of your academic integrity. Failing to cite your sources is plagiarism and all universities take this very seriously.

Plagiarism has many different definitions but all of them boil down to the same thing—theft. Plagiarism is about stealing another person's ideas, processes, results, or words without giving them appropriate credit. The simple rule to avoid plagiarism is to make sure that if you include any words, ideas, or results that you did not personally write, think up or collect, then you must cite the source and include it in a reference list.

Importantly, you must understand that paraphrasing someone else's words does not turn it into your idea, and a reference must still be given.

There are different ways of referencing text, and the two commonest in-text citation systems used are:

- Harvard: Also called the Name & Date system
- Vancouver: Also called the Number system

But even these have many variations and the most important thing you can do is to check what is required for the piece of work you are writing. If your literature review

is part of an academic paper, check what the journal's instructions are for referencing before you start writing. If your literature review is for a dissertation or a thesis, check what the requirements of your institution or department are. Similarly, if you are writing a grant application and including a literature review in it, check the funding body's instructions. And remember, in every case these requirements are not optional and any journal editor, examiner, or grant funding body will expect their instructions on referencing to be followed rigidly.

Often people are concerned about much or how little referencing they should include. My advice here is simple. If in doubt, reference it. It is much easier to take a reference out than it is to put one in. Whatever you are writing will go through many drafts and iterations before you reach the final version for submission. During this process, I think it is especially important to over-reference. If in an early draft of your review, you are discussing the details of a particular paper over several sentences, I suggest putting the reference to that paper at the end of every one of those sentences. The reason for this is that as you cut and paste and move text around, it is very possible that you could lose track of the text and its source. At the end of the editing process as you finalise your text, you can always delete any redundant over-referencing.

CONCLUSIONS

Let's tie things up. Here are the five things I would like you to take away from this study guide.

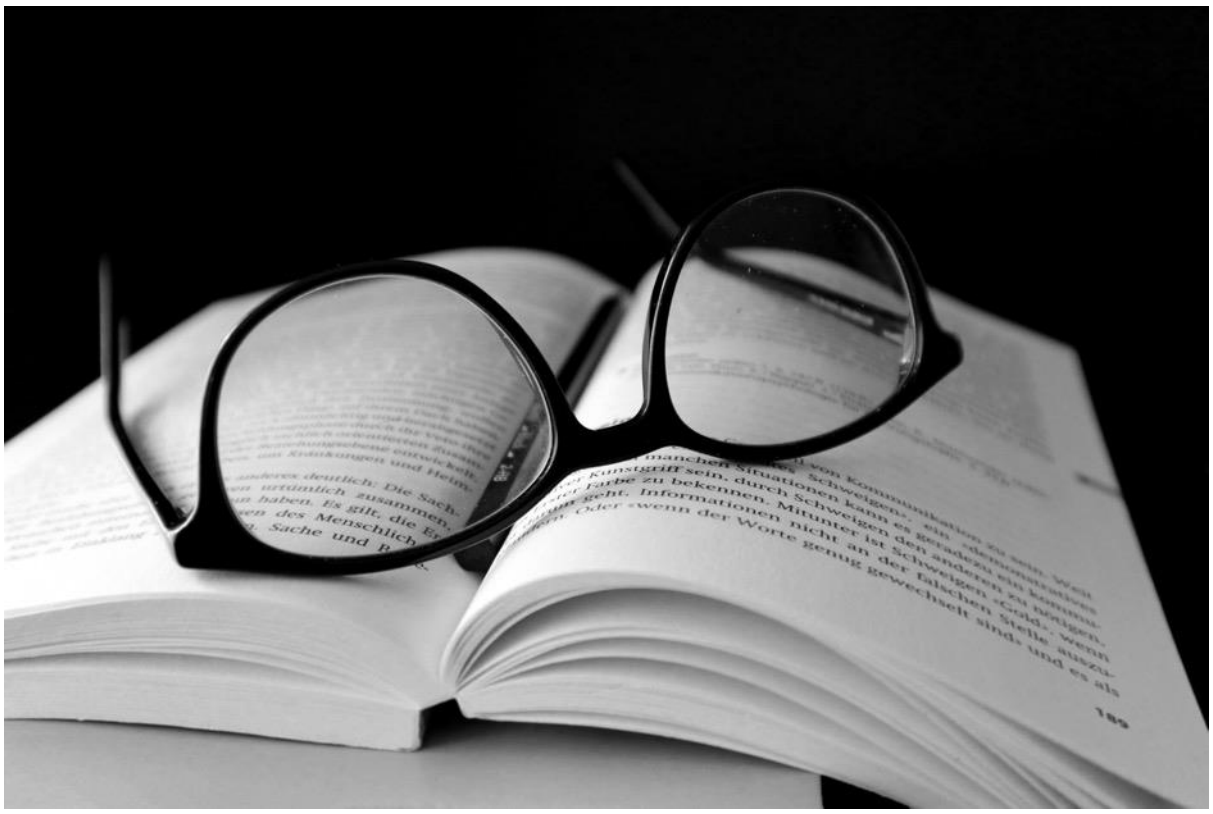
1. Read selectively, efficiently and actively
You can't read everything, so you have to choose wisely how to spend your limited time. Actively engage with the papers you read and always take notes as you read and pose questions, never taking anything at face value.

2. Keep track of your references and your notes
It's so easy to misplace something you have read and to waste hours trying to find it again. Make sure you develop a good system that works for you and use it.

3. Don't write a laundry list of papers
A literature review should be a synthesis of the papers you have read to tell a meaningful story about the literature, not a simple list of paraphrases of what each paper said.

4. Make your scholarship evident
Have you given any evidence in your writing that you have critically engaged with the literature? Have you found common ground and identified differences and even highlighted gaps? Have you taken that all-important step back from the literature to look at the bigger picture?

5. Write it as well as you can
The way you write the review matters, so spend the time necessary to get the spelling, grammar and punctuation right and please don't use exclamation marks.



FURTHER READING AND RESOURCES

There are a lot of books you can read that claim to teach you how to write. Here are a few that I think live up to their promises and which are written specifically with an academic rather than a business audience in mind.

Two books by the academic Rowena Murray are excellent:

- How to Write a Thesis, 4th Ed, Open University Press, London, 2017.
- Writing for Academic Journals, 4th Ed, Open University Press, London, 2020.

And if you would like some help with grammar and punctuation or other aspects of your academic writing, why not take a look at my two eBooks on the subjects?

- WordEasy: The Commonest Grammatical Mistakes in Formal Writing & How to Avoid Them, 2013.
- WriteEasy: A Strategy for More Effective Scientific Writing, 2014

If you want some bite-sized English grammar and punctuation guides in the form of animated videos, check out this You Tube channel:

- Writing Space. https://youtu.be/J25YJ8FzMxk

ABOUT THE AUTHOR

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I have worked in academia for over 30 years and for the last ten I have been running courses teaching under graduates, post graduates and academic staff a range of essential academic skills. Amongst these have been writing and presentation skills as well as time management and project management. I have also authored or edited more than 25 books and I write a regular blog entitled: The Business of Discovery which you can access here: www.researchet.wordpress.com You can also follow me on twitter: @ResearchET or visit my webpage: www.allangaw.com

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