# Writing the literature review

There are a number of purposes for reviewing the literature when writing a thesis or dissertation. One important purpose of a literature review is to contextualize the student's research. This review may focus on previous research on the topic, or it may focus on background theory which is relevant to the project, or both. And, it should describe and synthesize the major studies related to the topic of the research. It should also demonstrate the relationship between the project and what else has been done in the particular area. This backgrounding of the project should lead to what is being researched and why (i.e. it should lead to the gap (or gaps) in the field that the thesis or dissertation is aiming to fill). All of this will vary depending on the level of thesis or dissertation the student is working on.

## What needs to be included in a review of the literature?

A literature review needs to focus on the major findings of the studies that are reported on. It also needs to include critical comment on these studies, telling the reader which are the best studies, and why, rather than just presenting factual information about the studies that are being reviewed. In short, the literature review should focus on:

- the key issues which underlie the research project;
- the major findings on the research topic, by whom and when;
- the main points of view and controversies that surround the issue being investigated;
- a critical evaluation of these views, indicating strengths and weaknesses of previous studies on the topic;
- general conclusions about the state of the art at the time of writing, including what research still needs to be done; that is, the gap that remains in the research that the study will aim to fill.

### *How to organize the literature review?*

The literature review may be arranged according to the various questions to be asked, the various topics and sub-topics that are central to the study, the specific variables in the study, chronologically from oldest to more recent research, different points of view, or a combination of these. Nonetheless, There is no single 'right way' in which to organize the review of the literature. For, it is often the nature of the research problem which determines the organization of this part of the dissertation.

Writing literature review is an important part of the thesis and dissertation writing process. It is where students 'show what they know' as well as what they 'think about what they have read'. Students are expected not just to know the literature on their topic but also to critically evaluate it.

## Writing the Methodology

Though, the writing the Methods or Methodology section is often perceived as 'comparatively easy and straightforward' (Swales 2004: 224), it may require a more elaborated methodology component.

Which may require multiple drafts as the student comes to understand the need to provide justification and argumentation and not simply a list of procedures followed and materials utilized. In this section, researchers need to:

#### 1. Explain how the study was carried out

The Methodology section should explain how the research was conducted and how the data were obtained: how the particular method(s) were used. This section will require a detailed description of the research processes and procedures as well as an explanation of the reasons for doing so. Writers should consider the extent to which the method(s) chosen have shaped their data. For example, in qualitative research, writers will need to describe:

- how they obtained their informants or drew their sample;
- the location/setting of interviews;
- the themes covered in the interview;
- piloting, adjustments made, reasons for this;
- how they overcame obstacles they encountered.

Knowing how the data were collected helps the reader evaluate the validity and reliability of the results as well as the conclusions that are drawn from them. Replicability of the study is also an important consideration and is another reason for the detailed description of methods and procedures.

### 2. Introduce the theoretical paradigm or framework in which they are working on

Methodology refers to the theoretical paradigm or framework in which the student is working; to the stance s/he is taking as a researcher (e.g. choosing a quantitative or qualitative paradigm) and the argument that is built in the text to justify these assumptions, theoretical frameworks and/or approaches as well as the choice of research questions or hypotheses. The Methodology develops an explanation as to why the research method(s) under discussion have been chosen. The section will probably require a restatement of research aims/questions and involve explaining to the reader how the chosen research method(s) will help answer the research questions.

### 3. The Method & Justification of choosing the research techniques

A sophisticated Methodology chapter reviews the methods used by other (seminal) studies in the student's area and comment on their limitations and strengths in terms of the methods utilized. Thus we see clearly that the description of the methods employed should never be merely a description but always link to the writer's broader rhetorical purpose – to persuade the reader that this is a serious piece of academic research, building on, while adding new knowledge to, a solid tradition, by means of reputable methods of investigation. By definition, methods refers to the actual research instruments and materials used. The chosen methodology informs the choice of methods and what counts as data. For example, interviews, participant observation and discourse analysis are methods commonly used in qualitative research, whereas in quantitative research the methods and materials used in a laboratory or other experimental setting will require detailed description. The writer needs to discuss why a particular method was selected and not others. The writer should refer to the literature on the method(s) under review and justify their choice using

the literature. The justification should revolve around the intrinsic value of the research method chosen in terms of yielding the data that will enable the student to answer the research questions but could also address issues like limited time, the fact that it is a preliminary study, financial constraints, etc.

# 4. Highlight the Data Gathering Tools, Population and Sampling

#### 5. How the data are processed

It is also essential to describe how the information obtained in the research process was analyzed. This section may vary in length depending on the amount of explanation that is needed in the specific field of study. The degree of explanation needed reflects the degree to which there is agreement or shared understanding in the field; the greater length of methods sections in the social as compared to the hard sciences suggests less unanimity as to methodological practice (Brett 1994). The language used is often impersonal, with verbs in the passive voice, in order to focus on the processes involved. This section should also discuss any problems encountered with the analysis or limitations.

## Writing the Results/Findings

The second-language student is confronted with options as to how to structure and organize their data, present the results or findings of their research, and begin to put forward the knowledge claims they wish to make. To a great extent, the discipline in which they are working and the research paradigm, whether quantitative or qualitative, will shape the decisions they make as to whether, for example, they opt for a separate chapter entitled 'Results' or 'Findings' or have a series of Discussion chapters which integrate findings and discussion of the findings, with no identifiable generic headings. In qualitative research in particular, it is less likely that separate Results/Findings sections will be discernable. Descriptive chapter or section titles are common and, depending on the type of analysis used, organization is often thematic. The challenge that the second-language student faces is often organizational. It is important that students are aware of the possibilities available to them, and the supervisor can provide guidance in this area through directing students to take note of common practice in the field of study.

However organized in terms of chapters and sections, every dissertation will contain presentation and discussion of results/findings. It is vital that the second-language student understands that successful Results sections are never mere presentation or reporting but always involve selecting and ordering the data in a way that is designed to guide the reader to the understandings the researcher wishes the reader to come to. The writer must thus draw out the significance of the data, highlight significant trends and comparisons, and keep indicating to the reader where in the data he or she is being led. Linking figures and tables to text and selecting which data to highlight then becomes very important as the 'argument' is built up.

In the Results component of the dissertation, writers typically use language for the rhetorical (persuasive) purposes. In Move01, the information provided is both metatextual – referring to the overall structure of the thesis or chapter itself – and preparatory, in that it sets the scene for the presentation of the results to follow. Sentences that point to the location of tables, figures and graphs also form part of Move 1 as they comment on other parts of the text. Move 2 contains the actual reporting of the results. Move 3 then begins to provide a commentary on or an interpretation of the results. These moves or stages tend to occur in the sequence 1–2–3 but may be recycled a number of times as the results are presented, in particular, the

presentation of results move (Move 2) and the commenting on results move (Move 3). Move 2 is virtually always present in some form, while Moves 1 and 3 are less predictable.

## Writing the Discussion

Rudestam and Newton (2001) and Evans and Gruba (2002) provide helpful advice on writing Discussion chapters. The Discussion chapter, Rudestam and Newton point out, is where the student should move beyond their data and integrate the results of their study with existing theory and research. A good Discussion chapter, they advise, typically contains the following:

- An overview of the significant findings of the study
- A consideration of the findings in the light of existing research studies
- Implications of the study for current theory (except in purely applied studies)
- A careful examination of findings that fail to support or only partly support the hypotheses outlined in the study
- Limitations of the study that may affect the validity or the generalis- ability of the results
- Recommendations for further research
- Implications of the study for professional practice or applied settings (optional)
- (Rudestam and Newton 2001: 121)

### Strategies for writing the Discussion section

Also, they suggest strategies for writing the Discussion section. The first thing they suggest students do is to write down all the things they know now that they didn't know when they started the research, a single sentence for each item. The next step is to sort these sentences into some sort of grouping. Now the student should give headings to each of these groups of sentences. These will form the basis for the section headings of the Discussion chapter. Finally the sentences in each group should be given headings which will form the basis for sub-headings for each of the sections of the chapter. All of this can then be used to provide a tentative framework for the writing of this chapter.

### The typical shape of the Discussion section

Research in the area of academic writing has shown that there are a number of ways in which Discussion sections are typically written. The Discussion chapter is often in a kind of 'reverse' form from the Introduction section. That is, in the Introduction the prime focus is on previous research on the topic, with the student's research, at this stage, taking a secondary focus. In the Discussion chapter, the student's study is the primary focus and previous research the secondary focus. It is important to point out, as well, that Discussion sections, further, vary from discipline to discipline so it is important for students to examine what actually happens in their own field of study.

### Making claims and hedging in the Discussion section

Just as students need to show their position in relation to previous knowledge when they review and critique previous research (see Chapter 8), they also need to show their position in relation to the outcomes of their own research. That is, they need to show both their stance and engagement (Hyland 2005b) with their findings and the work of other researchers on their topic. Hyland describes stance as the ways in

which writers present themselves and convey their judgments, opinions and commitments to their own, and other people's, research. A writer may either: 'intrude to stamp their personal authority onto their arguments, or step back and disguise their involvement' (Hyland 2005b: 176). Engagement is the strategies writers use to acknowledge and recognize the presence of their readers: 'pulling them along with their argument, focusing their attention, acknowledging their uncertainties, including them as discourse participants and guiding them to interpretations' (Hyland 2005b: 176).

### **Writing Conclusions**

The Conclusions section is where students both summarize and 'wrap up' their work. Evans and Gruba (2002) list the following features of Conclusions:

- • The Conclusions are what the Discussion chapter has been arguing for.
- The Conclusions may be a separate chapter or they may be combined with the Discussion chapter, labelled 'Discussion and Conclusions'.
- • The Conclusions reached in this chapter should be drawn from the Discussion chapter.
- • There should be no further discussion in the Conclusions chapter.
- • The Conclusions should respond to the aims that were stated in the first chapter.

A summary of findings, they point out, is not the same as conclusions. Summaries are a statement of what the student found out; conclusions are a statement of the significance of what they found out. Often a Conclusions chapter is only a few pages long, as opposed to the Discussion chapter which should be much longer and much more extensive in its elaboration and reference to prior research.

### The typical shape of Conclusions

Thompson (2005: 317–318) lists the following conventional sections of a Conclusions chapter:

- • introductory restatement of aims, research questions;
- consolidation of present research (e.g. findings, limitations);
- practical applications/implications;
- recommendations for further research.

In general, it is the area and the field of the study that decide on the focus and the shape and even the organization of the conclusions. For instance, written in the humanities and social sciences tend to be longer and have more sections than science and technology Conclusions. Students need to look at previous theses and dissertations in their area of study to see which of these patterns is more typical.

### The language of Conclusions

Hewings (1993) discusses typical language features of Conclusions. In particular, he describes how writers report, comment and speculate on their findings. He found, in his research, that writers typically refer to one of three things when they do this: the world, other research, and either the methodology or findings of the thesis or dissertation itself.