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How to Write a Thesis

at different phases of thesis writing. Use the contents page initially to get an overview of the whole process and then strategically to locate writing problems or challenges that you face at any given time.

Introduction:
How to write 1000
words an hour

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• Principles of academic writing • The literature on writing • Disciplinary
differences • Thinking about structure • Prompts • Enabling student
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The need for this book

This introduction unpacks the theories and assumptions that underpin this book. It brings together what might seem to be a disparate collection of topics, all of which can impact on your thesis writing. The aim is to help you understand the context for your writing – an important first step in any writing project – and to learn from the literature on academic writing.

Although there is abundant research on writing it has not been fully integrated into the research process:

> ... what knowledge there is concerning the actual PhD process is scant.
> (Hockey 1994: 177)

The British literature on the academic writing role is similar to that on research: patchy.

(Blaxter et al. 1998b: 290)

The terms 'scant' and 'patchy' suggest that there is work to be done on establishing how best to manage the thesis writing process. In fact, much of the literature emphasizes the importance of 'the research', with the writing process receiving less attention. However, useful lessons can be drawn from existing research, and there are established strategies that you can adapt to the writing of your thesis.

Basic premises of this book are that you have to: (1) find out what is expected of you as a thesis writer; and (2) write from the start and keep writing throughout your research. What this constant 'writing' involves will vary from one person to another, but there are core principles which – if you know what they are – help you to write regularly and effectively.

Writing a thesis is a completely new task for most postgraduate students. It brings new demands. It is a far bigger project than most students will ever have undertaken before. It requires more independent study, more self-motivation. There is much less continuous assessment. It is likely to be the longest piece of continuous writing you have ever done.

However, writing a thesis is not a completely new experience. It does build on your previous studies. Skills you developed in undergraduate years – and elsewhere – will be useful. Time management is a prime example. The subject of your thesis may build upon existing knowledge of, for example, theoretical approaches or the subject itself. The discipline of study, or regular work, is just as important as in other forms of study you have undertaken at other levels.

Early writing tasks

- Noting ideas while reading
- Documenting reading
- Writing summaries
- Critiques of other research
- Draft proposals
- Revising your thesis/research proposal
- Logging experiments/pilot/observations
- Describing experiments/procedures
- Sketching plan of work
- Explaining sequence of work (in sentences)
- Sketching structure of thesis
- Outlining your literature review
- Speculative writing: routes forward in project
- Design for first-year report

Passively accepting that a thesis is one of life's 'great unknowns' is not a sensible course of action; like any other writing task, it can – and must – be defined. One of the first – and best – books to outline the whole process for the PhD is *How to Get a PhD* by Phillips and Pugh (2000). What Phillips and Pugh did for the doctoral process, this book does for the doctoral, and masters, writing processes. The two books can be seen as complementary. This book focuses on that writing process and provides activities, prompts and hints and tips for writing at each stage in thesis writing, right from the start.

Writing a thesis should not be one long catalogue of problems; once you have a repertoire of writing strategies, you can get on with writing, recognizing that at some points in your research you have factual or descriptive writing to do, while at others you have to develop more complex and persuasive modes of writing. You can also use writing to develop your ideas, consolidate new knowledge and refine your thinking. This book gives you strategies for all of these, so that thesis writing becomes a series of challenges that you work through, gradually establishing what type of thesis it is that you are writing. Writing your thesis with these strategies to hand should maintain the intellectual stimulation and excitement that brought you to research in the first place.

Although the terms 'thesis' and 'dissertation' have different meanings in different cultures, the term 'thesis' is used in this book to refer to both undergraduate and postgraduate writing projects. Since these projects can vary in length from 8,000 words, for undergraduate projects, to 20,000 words, for masters projects, to 40,000–50,000 words for professional doctorates, to 80,000–100,000 words for PhDs, readers are prompted throughout this book to develop frameworks and timescales to suit their own projects and within their institutions' guidelines and regulations. Similarly, while the person who works with a thesis writer can have many titles – tutor, advisor, etc. – the term 'supervisor' is used in this book.

What the students say

[The researchers] found a discrepancy between graduate students . . . and faculty as to what constituted effective scholarly writing, discovering that students wanted to learn how to write more concisely, follow a prescribed format and use correct terminology. Faculty, on the other hand, felt that students needed to improve their ability to make solid arguments supported by empirical evidence and theory.

(Caffarella and Barnett 2000: 40)

This is an interesting dichotomy. Then again, why would we expect two very different groups to have formed the same expectations? Presumably research students are still learning what it is they have to learn.

Even when the subject of writing is raised in discussion between student and supervisor or among students – as it should be – there is no consensus about what they need to know. What do those who have started or completed a thesis say, looking back, that students need? The answers to these questions are multifaceted; they may even be contradictory:

Looking back

- It takes a long time to strike a balance between what you want to do and what the supervisor wants. You can waste as much as a year.
- It's difficult to get supervisors to give priority to your project. Supervisors are sometimes not that interested. This is a problem for all students.
- Isolation can be a problem . . . It can come with any of the other items on the list of problems.
- Start with a plan. Six months or a year can drift away very quickly. It's important to write as you go along.

These responses show how writing is related to, and can be influenced by, all sorts of factors:

Problems with writing

- Ownership of the project
- Managing your supervisor
- Isolation
- Planning

Students report that they look for lots of different kinds of advice and help. Many, if not all, of their concerns can be related to their writing. Some will directly affect their writing practices and output. What is provided in the way of support and development for writing seems to vary enormously, from institution to institution and even from supervisor to supervisor.

Some of these problems can be interpreted as the result of students' lack of awareness: of what's expected, of what is involved in writing and of what the educational experience involves. There is, often, the additional problem of lack of research training, although formal training is commonplace in some higher education systems and is becoming more common in others (Park 2005).

We must assume that supervisors want their students to complete their theses on time (as long as the work is up to standard). They are not out to put barriers in your way. However, their role is complex and is sometimes left

implicit for too long. Supervisors are not always aware of specific writing problems or established writing development practices. Some admit that they don't know what they don't know about writing. They have all completed a thesis themselves and therefore have knowledge of the writing process. They will have probably published papers and/or books. They may have supervised the writing of many theses. However, the amount of reading they do about academic writing is likely to be variable. Some own up to having forgotten what their own research and writing apprenticeship involved.

This book takes a holistic approach to the total process of writing a thesis. While focusing on writing, some of the related topics raised by students will be addressed. The aim is to help you complete this particular task while, in the process, developing strategies and skills that will be useful in other writing contexts. You can use these strategies at any stage in the process, not just at the start, although they have particular importance at the start, in getting you to start writing.

Students and supervisors who read drafts of these chapters said that what students look for is more direction, not just questions to 'stimulate their thinking'. They want to be directed to good writing style. They want to develop the skills of argument. Students may not be able to say this right from the start; they may not know what they need. They may only understand that this was what they needed when they get to the later stages in their projects, or right at the very end.

This book aims to help you develop your understanding of the writing process – not just the finished product – through reading, writing and discussion with your peers and supervisor(s).

A writer's 'toolbox'

> . . .there was a view among the student writers . . . that good writing came spontaneously, in an uprush of feeling that had to be caught at once . . .
>
> I want to suggest that to write to your best abilities, it behoves you to construct your own toolbox and then build up enough muscle so you can carry it with you. Then, instead of looking at a hard job and getting discouraged, you will perhaps seize the correct tool and get immediately to work.
>
> (King 2000: 62 and 125)

These two statements reveal the journey on which this book hopes to take readers. Your point of departure is the popular misconception that good writing happens when it happens, that writers should wait till they are inspired and that, if they do, the writing will 'flow'. Your destination is the development of a 'toolbox' of skills that writers can use for different writing projects and for different stages in any writing project. By the end of this journey you

should be able, using these skills, and with the confidence they bring, to 'get immediately to work' on any writing task.

Stephen King's toolbox image chimes with what writers say in writing groups, as they are developing their writing skills over a six- to twelve-month period. They find that they procrastinate less, and they certainly do not wait for any kind of 'uprush' of inspiration, but are content to get something down on paper immediately and then work on that to produce a finished piece. This represents quite a change for many writers: a change in behaviours as much as a change in conceptions of writing.

It may seem inappropriate to use creative writers throughout this book, since they are different from thesis writers in so many ways. They have always wanted to be writers. They write all the time. They have come to know what works for them. How can that help you?

However, what is helpful, particularly when their subject is the writing process, is that they have developed and refined tools and tactics that we can use and adapt. They can teach us that we can fit writing into our lives and still 'have a life'. More importantly, they can show us different ways of learning how to do this.

The material covered in this book has evolved over fifteen years of thesis writing and research supervision courses. It has been tested in writers' groups, where postgraduates and academics have commented on drafts of this book, requesting, for example, that specific topics be dealt with and that lists of cogent questions designed to prompt reflection be replaced with guidance to prompt action.

The book covers the three main stages of thesis writing: Chapters 1–4 deal with strategies for getting started, Chapters 5–7 with working towards closure, and Chapters 8–10 are the endgame, pushing the thesis towards completion. Each chapter in this book takes as its focal point a different strategy for writing.

Of course, a good thesis writing 'toolkit' is more than a source for a certain number of words, just as a thesis is more than a simple total of a number of words. Clearly, length is one – and some would argue the least important – criterion. It gives no indication of the quality of the work or of the writing.

Quality in the writing is far more important than the number of words. However, quality comes through many, many, many revisions. In the early stages of such a long writing project as a thesis, it is not appropriate to aim for that type or level of quality. Early stages, early writings and early drafts will surely lack the qualities expected in the final polished product. Writing that is sketchy, incomplete, tentative and downright wrong is an inevitable part of the research and learning processes. This is why you have supervisors.

Writing is as good a way as any of testing your ideas and assumptions. Learning strategies for and developing a facility for generating text have, in themselves, proved to be important processes, more important, some would argue, than learning the mechanics of writing (Torrance et al. 1993). Being able to

write 'on demand' is also a confidence booster for novice writers. It stops them from procrastinating and helps them get started on those early drafts that are, after all, called 'rough' for a reason.

The title of this chapter is so important because it raises one of the key issues: it is possible to become productive, lifelong writers using a variety of strategies. Adopting these strategies will be a more comfortable process for some writers than others; the strategies may initially appear useful at some stages in thesis writing and less so in others. The title of this chapter may also prompt interesting discussion among students and supervisors as to what does constitute 'good' writing practice and a 'quality' written product.

Productive writing, however, may require you to use more than one tool, perhaps several quite different tools at the same time. For example, 1000 words per hour is a feasible rate of writing when you know what the content is to be. If we have a detailed outline, we can 'write to order'. However, for thesis writers who are still learning about the subject, this may not be possible. They will have to sketch structures. They will have to make choices before or during writing in any case. They have to live and write with uncertainty. With thesis writers in mind, this book includes strategies for generating text with and without structure. It also provides prompts for additional thinking about structure, since thesis writers may not be conscious of how to use a generic framework as a starting point; generic frameworks can help you shape your unique thesis structure.

In other words, this book is based on three key principles: (1) learning comes through writing; (2) quality comes through revision; and (3) regular writing develops fluency. With these objectives in mind, it is possible to build up to writing 1000 words an hour, even though the whole thesis is not written in that way. There may be some debate about whether the 'learning' involved is about your topic or about your writing, but both apply. They are, in any case, interconnected.

Over the longer term, perhaps by the end of this book, it will be possible to write 1000 words an hour. This is not just about speed writing. With the strategies and concepts in this book, the writer will be better equipped to decide when, and what, he or she can and cannot write at this rate. Writing 100 or 1000 words in an hour or a day will be an active decision rather than a 'wait-and-see' passive process.

The 'wait-and-see' approach has another potential disadvantage: you may learn less about writing; you may not develop as a writer. There are those who think that writing ability is innate, that it is not learned. However, the fact that writing is not taught – beyond a certain level of school or undergraduate education – does not mean that it cannot be learned. The 1000-words-an-hour method may require a certain level of writing ability; but the argument of this book is that the ability can be developed. This takes time. Like the novice runner who, after a few short runs, asked, 'When does runner's high set in?' – expecting the effect to be immediate – you have to work at it to see the benefits. It might also be a good idea to improve your keyboard skills.

An analogy for word counting is taking your pulse while you are exercising or training: the number of heartbeats per minute tells you more accurately how hard you are working than does your own impression of effort. You may feel that you are really toiling up that hill or round that track, but if your heart rate is already in your training zone – say, 160 beats per minute – then you know that you do not have to increase your workload. You may be working hard enough already to achieve the desired effect. For any number of reasons, you may not be able to interpret 'effort' as actual output. Having a concrete measure can help you adjust your perspective.

With writing, counting the number of words is a way of getting a more accurate measure of output. We may feel that we are, or are not, doing enough writing, yet if we have 1000 or 100 words an hour – whatever the rate we set out to achieve, whatever we judge a realistic rate to be – then we know we are making progress. As with exercise, taking the 'heartbeat' of our writing can save us from trying to do too much and from feeling guilty about not having done 'enough'. More importantly, it can become a way of establishing momentum: we can track the regular flow of our writing. A rate of 1000 words a day produces 5000 words at the end of the week that were not there at the start. This can be a powerful motivator.

Setting a realistic pace, and calibrating it from time to time, is important, as you start to build regular writing into your life. Again, finding some way of measuring output can provide insight into the goals set: are you trying to do too much? If you want to work up to writing 1000 words an hour – having never done so before – should your goal not, initially, be much less than that? How much would be sensible?

A thesis is 'incomplete' for a number of years. It is helpful to have a sense of work that has been completed, even if not to a final stage. Since closure (discussed in Chapter 6) is deferred, again and again, it is helpful to create 'mini-closures' along the way. The writer has to find some way of marking progress.

It does not matter too much which method you choose for defining your writing targets. Do the best you can. Counting words, setting goals and acknowledging increments are ways of recognizing your progress. The beauty of counting is that it is simple and concrete.

Not everyone will be fascinated by numbers of words. There must be some writers who would find this approach too simplistic. Some will be disgusted at the apparent reduction of their highest ideals – original research, tough concepts, first-class writing skills – to a set of sums. But this is just one way of establishing a set of patterns for an extended writing process. It is not the only way. There can be more than one. For me, the fact that I just wrote 442 words of this chapter in 20 minutes, between 9.05am and 9.25am, will not grip every reader, but it does tell me what my actual pace of writing is just now and it does show me that I have achieved something, in writing. In fact, given that 1000 words an hour is a high – in my view – rate of output, I can reassure myself that I am being productive. The question of whether 'productivity' –

with its associations of other contexts – is enough, I ignore for the moment. Quality will come with revisions.

I also recognize that I am – and others may be – able to write this way with some subjects and not others. I have worked on thesis writing for fifteen years, but thesis writers may have worked on their subject for as little as fifteen weeks, fifteen days or fifteen minutes. Theoretically, most students and supervisors will probably say 'Thesis writers need more thinking time; they can't just churn out text at the rate of 1000 words an hour.' They – students and supervisors – might add, 'And it's just as well – it would all be rubbish.' It might, in one sense, be 'rubbish': students might, in the early stages, rush out writing that is tentative, full of uncertainties, rambling and wrong. But is this 'rubbish?' Another way of reading such writing is to say that the student is still learning to write and using writing to learn.

Rambling writing may indeed signal rambling thinking, but it may also be a first step, for students, in understanding their subject. I can hear supervisors and students saying things like 'But what is the point of doing bad writing?', and my response would be, 'Isn't producing writing that you're not happy with, that you know you have to redraft many times before you submit it for public scrutiny, an acceptable part of the writing process?' Does this make our writing 'bad writing'? Or is it more accurate – and helpful to the novice – to call it writing-on-the-way-to-being-good-writing, i.e. a draft? But if not this, then what?

The 'arithmetic of writing'

- How will you measure your written output?
- How will you identify the pace of writing that suits you?
- How will you establish momentum in your writing?

There are many ways of doing this, but if counting words, or pages, seems so unusual – if not wrong – to a thesis writer or supervisor, what does this say? What does it suggest about how they conceptualize writing? How will they define increments and stages? How will they break that down into actual, daily writing practices? These questions are not simply meant to be rhetorical – although they are frequently treated as such – but are meant to prompt discussion so that thesis writers develop their own answers.

Whether this point represents a real shift in thinking – even reconceptualization – about writing or whether it's just a way of renaming things, there is a point to be argued here about making explicit what are often left as assumptions about writing practices and products. Opening up the multiple draft writing process for discussion, for example, can boost students' confidence. They realize that producing 'bad writing' is sometimes part of the process and

may, at times, be such a necessary part of the process that we would do well to find another name for it.

Supervisors shape thesis writers' conceptions of writing, but students can develop a number of different tools for writing without going against what their supervisors recommend. It is not the purpose of this book to create conflict between students and supervisors. However, given the potential for debate about writing, perhaps it is understandable if writers do not agree all the time about what works best. Given the range of strategies available – though supervisors and students may not have heard of them all – it is inevitable that there will, and should, be discussion of 'what works best', what that means and how we know.

It is to be anticipated that out of any set of new strategies one, or more, will seem immediately sensible and practical to the individual writer, while another will seem pointless and inappropriate for a thesis. For example, writing on demand is a theme of this book. Helping students to find ways to force their writing, throughout the three or six years, is one of its goals. If we accept that having a range of strategies – or at least more than one – is, in principle, a good idea, then there is every chance that some of the strategies in this book will not only be new, but may also seem counter-intuitive.

We have been writing in our own particular ways for so long; presumably, something has to change if we are to write a much larger and much more complex document. However, initially that 'change' in writing approaches, that simple broadening of our options, can seem uncomfortable and just too challenging. A thesis requires the writer – or provides opportunities for writers – to experiment with new techniques. If a thesis is different from any other kind of writing, you need to consider other strategies.

When asked to try specific activities for forcing writing by writing without stopping for five minutes, writers often ask, 'What can I write in five minutes?' In fact, this question is frequently rhetorical: 'What can I *possibly* write in five minutes?' Many people report that it takes them thirty minutes to 'get into' the writing. Before we go any further, that is worth noting as a future talking point in itself: what are people doing in those thirty minutes of 'warm-up' time? Do they have routines for getting themselves started? Does that really have to take all of thirty minutes? Can that really be the only way? Aren't other options available?

The purpose of this activity is to prompt writing, even at an early stage, when the thesis writer may not have a clear idea of where his or her project is going. The temptation at this stage – for obvious reasons – is to aim for a coherent proposal statement and thereafter other formal writing. However, examining – and adapting – your writing practices and assumptions is an important part of the writing process. For this activity you can also take time to react to the propositions so far covered in this chapter and to consider how they might help you write your thesis.

Writing activity

What can I write in five minutes?

1 Write continuously, non-stop, in sentences on this question:
   What do you think of the idea of writing 1000 words in an hour?
2 Count the number of words you wrote.

You may not be able to write 1000 words an hour yet. The point is that you can write – to order – X number of words when given a prompt and a time limit. This effect can be extended. Using all the tools in this book, it is feasible to write 1000 words in an hour, even for a thesis.

Forcing writing, writing quickly without stopping, writing immediately without planning has potential benefits:

> There's plenty of opportunity for self-doubt. If I write rapidly . . . I find that I can keep up with my original enthusiasm and at the same time outrun the self-doubt that's always waiting to set in.
>
> (King 2000: 249)

The point is not just to keep up enthusiasm for writing – though that, too, is important – but to keep a focus on what you are thinking, forcing yourself to find a way to ignore – or defer – any 'self-doubt' that may occur. There is, of course, nothing inherently wrong with self-doubt, unless it constantly stops you writing. In fact, self-questioning is probably a key skill for researchers.

Principles of academic writing

There are principles of writing in each academic discipline. It is up to you to locate and learn them. Find out what they are. You can do this by reading examples – publications and theses – and discussing your developing understanding of core principles in your discipline with your supervisor and peers. As you read examples of academic writing in your discipline, it might help to ask the following questions:

- What are the conventions of writing in this discipline?
- What language – nouns, verbs, links, etc. – do writers use?
- How are debates represented?
- How is the researcher represented, if at all?

- How is structure revealed?
- What are the options in style and structure?

Just as there are dominant issues in the debate in your discipline, so there are terms that are in and out of current use. Whether you see this as a matter of intellectual 'fashion' or not, it is up to you to recognize the language in which the conversation you are entering is being conducted and to use, interrogate or challenge it as you see fit.

The literature on writing

I presume that most thesis writers do not need a detailed survey of the literature, but might query approaches that are not underpinned by research and scholarship. The relevant literature is wide-ranging in approach and outcome, and the following overview is intended to demonstrate different schools of thought.

- Boice (1990) found that a daily regimen of writing makes academics productive writers.
- Brown and Atkins (1988: 123) defined the problems thesis writers face:
  - Poor planning and management of the project
  - Methodological difficulties in the research
  - Writing up
  - Isolation
  - Personal problems outside the research
  - Inadequate or negligent supervision.
- Elbow (1973) challenged the traditional view that we must first decide what we want to write and then write about it, arguing that we can use writing to develop our thinking.
- Emig (1977) argued that writing is a mode of learning.
- Flower and Hayes (1981) argued that cognitive processes – how you think – affect composition.
- Herrington (1988) defined the functions of writing tasks in educational settings, indicating, perhaps, what we might expect to have learned from them as undergraduates:
  - Introducing academic conventions
  - Introducing professional conventions
  - Showing knowledge of relevant conventions
  - Exercising independent thinking, actively engaging with the materials of knowledge (pp. 133–66).
- Hockey (1994) explored the psycho-social processes of thesis writing and the doctoral experience.

- Lee and Street (1998) argued for an 'academic literacies' approach, suggesting we should set about systematically learning the discourse of our disciplines.
- Murray (1995, 2000) argued that many different approaches and practices, working together, are needed for the development of a productive writing process, i.e. cognitive, psycho-social, rhetorical.
- Swales (1990) made a case for learning the 'genres' of academic writing and Swales and Feak (1994) demonstrated a genre-based approach in a textbook for non-native speakers of English that has relevance for native speakers.
- Torrance et al. (1993) found that neither learning about the technical aspects of writing nor developing cognitive strategies for writing were as effective as strategies for 'generating text'.

A theme in the literature is that there are writing tasks throughout the thesis process, aimed at developing the thesis as an integral part of the research process. If this integration is successful, the student can become a 'serial writer', i.e. develops the writing habit, learns to find ways to fit writing into a busy schedule and makes writing one of the parallel tasks of professional life.

Developing fluency and confidence requires regular writing. When we write regularly, writing is still hard work, but not as intimidating. Other writing tasks become easier to do; it becomes more difficult to procrastinate. The key is learning how to focus. The end result is that you can be confident about your writing, knowing that you can meet deadlines.

Herrington's (1985, 1992) naturalistic (i.e. looking at what student writers actually do) studies show how students construct themselves in the discipline, but also show that each course represents a distinct discourse community. It could be argued that each thesis is potentially situated in the same way: the thesis sits not just within the distinct discourse community of the discipline but, in fact, within a smaller, though no less complex, sub-set of that disciplinary discourse.

Should supervisors explicitly, not just implicitly, seek to develop these different knowledges and functions in their students' writing? Herrington (1992) has provided evidence that academics do take on this role in undergraduate education, through guiding, posing questions, making suggestions for revision processes that are familiar in the traditional student–supervisor relationship.

Disciplinary differences

[On] questions of theory and method, in particular, I would remind readers that these concepts mean very different things in different disciplines ... In most subject areas, however, the synergy between hypothesis, theory and method is absolutely central to the thesis's success.

(Pearce 2005: 74)

Even the words 'theory' and 'method', so central to research, can have very different meanings in different academic disciplines. Within your discipline there may appear to be a particular meaning attached to each, and you may find writing about them straightforward. Alternatively, you may find that these words denote areas of complexity that you do not yet understand. Writing about these core terms may, therefore, depend on which discipline you are working in, the type of work you are doing and the method – if that is the word you are using – that you use in your research. Some of these issues you will work out in your discussions with your supervisor. For your thesis, the important question is not whether there are disciplinary differences – there are – but what the characteristics of writing in your discipline are:

How to analyse a thesis

- Scan the contents page.
  What type of structure is used?
  Experimental/narrative/other form of logical progression?
  What are the approximate relative lengths of chapters?
  Is this structure reflected in the abstract?
- Read the introductory paragraphs of each chapter.
  How is progression from chapter to chapter established?
- What are the main differences between chapters?
  Look at structure and style: long/short sentences and paragraphs.
  Look at the language used: what are the key words?
  Types of verbs used: definitive, past tense or propositional?

If you are coming to research and thesis writing after a gap from study, then you may benefit from a kind of 'academic writing induction'. Your supervisor may be prepared to provide you with an overview of writing in your discipline and may help you with analyses of completed theses. If so, the trick is to focus not on the content, which is tempting when the thesis is in your and your supervisor's area of study and research, but on the way in which the content is articulated. You may find that this type of discussion produces more questions

than answers. Do not be afraid to ask what you might think are fairly simplistic or superficial questions:

Ask your supervisor

- Why does the author use this term in this sentence?
- Why is that phrase repeated so often?
- Why is that section so long?
- Why is this other section so short?
- Why is that chapter divided up into so many sections?
- Will using the word 'limitations' not weaken the thesis?
- Why does the author not just say what he/she means?

Once you start to analyse thesis writing in your discipline, you will notice that there are certain ways of writing about certain subjects. You may also notice that there are differences between different sections: there may be a factual, descriptive style of writing for reports of experimental studies or individual analyses of texts or transcripts, and a more discursive style for interpretations and syntheses of results. The more factual writing can be done as you do your experiments or analyses, so that details and differences are recorded as you do the work, and, potentially, more accurately than if you let time elapse between experiments and writing.

Noticing such differences can help you see where different elements of your thesis will go and how you will write them. Of course, your thesis may be unique, unlike any other thesis, even in your discipline, yet it may share certain features that will help your reader find his or her way around it. At the end of the day, you can use existing thesis writing conventions as a framework or formula for your thesis, or you can transform existing conventions. The key is to write, in your introduction, what you do in your thesis, how it is set out and, perhaps, why you chose to do it that way. In some disciplines, such freedom is not an option, but in others you can, literally, invent your own structure.

However, there may be a set of core elements that examiners look for: some kind of forecasting statement at the start, for example, or certain kinds of linking and signposting devices between sections or, more importantly, a clear indication of your thesis's contribution and how you have laid out evidence for that claim throughout the thesis.

In the humanities and social sciences one of the challenges that thesis writers face is locating writing: where is writing? In the sciences and engineering, the structure of writing more closely mirrors the research process and writing practices may be more integrated in research. It can be easier to see that for every research task there is a writing task. However, in the humanities and social sciences students have to invent not only their own research question

and thesis structure but also find the writing practice appropriate to their work. They have to find a place for writing in their research.

In certain disciplines there are assumptions about student writing. For example, in the humanities it may be assumed that students who are about to start writing a thesis have certain writing abilities already:

Assumptions about thesis writers in the humanities

- They can already write well.
- Attempts to improve writing are remedial.
- The first writing students submit to supervisors is a draft chapter.
- Progress is indicated and assessed in terms of completed chapters.
- They are natural 'loners' and independent thinkers.
- With good students, supervisors make few comments on writing.
- Students know how to correct problems in writing when they are pointed out.
- Drafting is key (but rarely discussed).

Some of these assumptions may operate, of course, in other disciplines. Some of them may be closer to the truth than the word 'assumption' implies. With any unspoken assumption, it is difficult to know how generally accepted it is. However, because they are not all helpful to the thesis writer, it is worth discussing these assumptions with supervisors. Exploring your and your supervisors' reactions to these assumptions might be a useful way to initiate more detailed and relevant – to your thesis – discussions. You might find that you learn a lot about thesis writing, specific to your discipline, in this way.

In the visual – and other – arts, there are other forms of thesis, other definitions of what constitutes 'research' and other modes of examination. Thesis writing may involve a form of 'active documentation' (Sullivan 2005: 92). You may not have to provide as much justification of your work as is the norm in other disciplines. However, as with any discipline, it is your responsibility to check the institutional requirements and, probably, you will still have to demonstrate some knowledge of the culture of research. Beyond that, you may not simply have to give an account of the context for your work but also to define its creative component.

Defining what is required in the written form is, as for any discipline, a key initial task. The thesis writer has to find answers to

questions about how practice-based research might be conceptualized as a dissertation argument, and where this theorizing might be located: within the realm of the artwork produced, within a contextual form such as a related 'exegesis,' or in some combination of the two.

(ibid.: 92)

'Exegesis' refers to an explanatory text which some see as unnecessary, because the art work should speak for itself and stand on its own, but which others see as requiring the intellectual apparatus of any other advanced study or research:

Exegesis is the term usually used to describe the support material prepared in conjunction with an exhibition, or some other research activity that comprises a visual research project ... exegesis is not merely a form of documentation that serves preliminary purposes, records in-progress activity, or displays outcomes: *It is all of these.*

(ibid.: 211–12)

In one sense, this is quite like the research and writing produced in any discipline; in other senses, and perhaps in practice, it can be very different. Like other disciplines, the visual arts use many different forms of inquiry and frameworks for conceptualization.

Students often feel that they have to start from scratch in designing their theses, with each student inventing a new structure. However, some would argue that, in terms of structure, the differences between one thesis and another are minor, even superficial. In fact, one reader has asked, 'How are these different?'

Nevertheless, the headings on the right-hand side will look alien to some students in the humanities, social sciences and business. Yet there are similarities with the left-hand column. Some will see the two columns as completely different; others will see them as much the same.

Generic thesis structure

Humanities and Social Sciences	Science and Engineering
The subject of my research is . . . It merits study because . . .	*Introduction*
My work relates to others' in that . . . The research question is . . .	*Literature review*
I approached it from a perspective of . . .	*Methods*
When I did that I found . . .	*Results*
What I think that means is . . .	*Discussion*
There are implications for . . .	*Conclusions*

The point is that we can adapt the generic thesis structure – on the right in this box – to many different contexts. It can be used as a framework for many different types of study. Its apparent 'home' in science and engineering should

not prevent us from making use of it as a starting point, at least. Nor is this structure just for experimental research. Every study has a method. Every study produces 'results' – outcomes of analyses, of whatever kind.

Some writers, in some disciplines, may feel that 'translating' the scientific template is not a valid option; the headings do not translate into chapters, and this is unhelpful. That may well be true. You might not have such chapter headings and divisions. However, it is a starting point. It can be seen as representing the 'deep structure' of many different types of thesis. It may, therefore, help writers develop initial statements on what are key issues for any thesis.

The generic structure is a tool for writing and thinking. As a template, it can help us answer the key questions for a thesis. Whether or not this shapes chapters is another question. We may not all be drawn to it – some will be alienated by it – but even if you use it as an antagonist, it will prompt you to sketch alternative structures. If this structure and strategy seem wrong to you, that may be because you already have the germ of an idea for your thesis structure. Capture that on paper now. You then have some ideas you can discuss, and possibly develop, with your supervisor.

Thinking about structure

In order to develop further your thinking about structure, at an early stage, you could discuss the following questions with other writers and, of course, with your supervisor:

- Does your discipline have an implicit/explicit generic structure?
- Are there any books/support materials on thesis writing in your discipline?

If the idea of 'generic structure' strikes you as strange – since each thesis is different – then it might be a good idea to discuss this concept further.

- Have you discussed the overall structure of your thesis with your supervisor and/or peers?
- If you think it is too early, in your research, for this discussion, think about and discuss how the work you do in the early stages relates to the production of a thesis.

If you do want to use a 'non-generic' structure, then you should research – and discuss – that too.

- Will you be inventing a completely new structure?
- What are the precedents for this in your discipline?

Prompts

At the very start of the thesis process, most writers feel they have nothing to write about. The instruction to 'just write' seems absurd. Many will feel they have not really 'started' anything, while they are still reading and thinking about their project. The problem with this state of mind – or concept of thesis writing – is that it can continue for just a little too long. It is possible to think that you 'have nothing to write about' for many months. In fact, the more you read, the more certain you may become that you have nothing to contribute to the debate, and therefore nothing to write.

In order to combat this reluctance to write – since it cannot continue indefinitely – the chapters of this book have 'What can I write about now?' sections. These are to be used as prompts – by students and/or supervisors – for writing throughout the thesis, from start to finish. Any prompt can be used at any time. They can be adapted, or rewritten, to suit the individual. The main point is that writing occurs, text is generated.

This approach antagonizes some supervisors and students: the word 'quality' is the focus of their concern. Will the writing activities proposed here produce 'good writing'? Possibly not. But, as was proposed earlier – and it is worth repeating because the 'quality question' is paramount – we have to question the practice of applying the 'quality' criterion so early in the thesis writing process. Is quality – in structure, style and content – feasible at this stage? The quality of your writing – on all of these criteria – will be a focus for later discussions and revisions. This means that you should determine and discuss what the 'quality criteria' are at any given stage in your thesis writing process.

However, it cannot be assumed that this issue, or the proposed discussion, is straightforward. The concept of differentiating 'quality' criteria may not be central to your supervisor's practice, in providing you with feedback on your writing or, more importantly, in establishing criteria for you before you write. This means that you may come up against surprise, incredulity or open hostility to the concept. Alternatively, your supervisor may respond very positively to the news that you have been reading and thinking carefully about thesis writing. It is likely, however, that some of the concepts and practices proposed in this book will be new to some supervisors and you may find that, as with other aspects of your research, you have to participate in a debate about writing matters. Discussing the pros and cons of thesis writing strategies is no bad thing; you may in the process gain additional insights from your supervisor's experience and practice as a writer.

Naturally, your supervisor may at any time alert you to any features of your writing that need to be improved. These early writing tasks often act as a kind of diagnostic test. Your knowledge of and ability in writing will be tested at every stage. You may feel that hard criteria are unfairly applied to very early

writing; alternatively, you could be thankful that you have a supervisor who is willing and able to give you feedback on the quality of your writing.

Some writers say that they can only write when they have a clear definition of the purpose of the writing task, but you may benefit from writing about quite general questions at this stage:

What can I write about now?

1   **What I am most interested in is . . .**
    The books/papers I have enjoyed reading most are . . .
    The ideas I want to write about are . . .

2   **What I want to do with this is . . .**
    What I want to look at is . . .
    The idea I keep coming back to is . . .
    Here are my ideas . . . views . . . feelings . . . on the topic . . .

3   **The main question that interests me is . . .**
    What I really want to do is . . .
    What I really want to say is . . .
    I want to find out whether . . .

This writing activity helps thesis writers (1) find topics and (2) focus on them. Establishing a direct link to your own interests, using plain English and the first person – 'I' – and actually writing about them are the key features of this exercise.

Simply thinking about these questions, running over them again and again in your mind, will, arguably, not have the same effect. Writing will help you to develop your idea one step further. Not writing – over the longer term – may erode your confidence in your fledgling idea.

Enabling student writing

Here is a set of expectations that you might have of your supervisor, specific to your thesis writing process. It might be a good idea to articulate your expectations or, if that does not suit you, to use these statements as a trigger for your discussions:

- Supervisors should give you feedback on your writing.

Feedback will be variable. It might be helpful to discuss feedback on writing at

an early stage, even if you have not written much. The discussion will give you insights into what your supervisor is looking for and, perhaps equally importantly, it will give them insights into how you see writing.

- Supervisors should help their students set writing goals from the start of the thesis and all the way through to the end.

This will help you to see the writing process as a whole, perhaps even to see the stages ahead of you and to see how you can plan time for them. Long-term goals can help you to plan your writing, while short-term goals make it manageable. Whatever the goals, the key point is that they are discussed and agreed by you and your supervisor. Otherwise, everything remains undefined, many aspects of writing are unspoken and you may form the impression that you just don't write well.

- Supervisors should motivate students to start writing and to keep writing throughout the project.

However, your supervisor may not want to put you under too much pressure. Your supervisor may feel that you have enough to do setting up the research or reading piles of books and papers and may agree to defer writing to a later stage. This may be a mistake. If writing is part of learning, you will miss out on an opportunity to develop your understanding. If writing is a test of learning, you may have no measure of how you are building your knowledge.

This section can be summarized as a series of prompts for you to take the initiative with your supervisor so that he or she is able to 'enable your writing'.

Writing in a second language

Non-native speakers of English may require extra help with thesis writing; alternatively, you may have more knowledge of English grammar and usage than native speakers. The code of practice on *The Management of Higher Degrees Undertaken by Overseas Students* (CVCP/CDP 1992) states that overseas students may require more supervision than others, perhaps for more than just the language differences, since there are other layers of cultural difference that create specific challenges. However, is each supervisor (1) aware of this code and (2) able to give extra time to overseas students? Is it fair to expect this? How will you find out what you can expect from your supervisor?

The highest standard of clarity and correctness is required in a thesis, and this does require some knowledge of grammar and punctuation rules. While all students are admitted to a university on the basis of satisfactory perform-ance on one of a number of standard tests, the complexity of the thesis –

process and product – puts new demands on writers. You may find that you require further writing development or support.

You are unlikely to know what you need, if indeed you need any further development or support, unless you have some form of diagnostic test. This need not be a formal test, just a writing task which lets your supervisor assess the standard of your writing. If your supervisor does not provide this, or does not ask you to write in the first few weeks or months of your project, you should offer to do some writing, so that you can get such feedback early. Then, if you do need to attend a course on English for Academic Purposes, for example, you will still have time to do so. If you need some other form of additional support, you will have time to find out where you can get it. If you need individual instruction, again, you will have time to find someone to provide it.

Your spoken English may be equally important for the development of your research and in your relationship with your supervisor and peers. If you are an overseas student who is not yet entirely fluent in English, it is vital that you find out who is going to help you, particularly if you are not speaking English at home. Again, if your supervisor or department is prepared to take limited responsibility for helping you, you must check out what other sources of support your university offers. Many universities have a language support service dedicated to helping overseas students. Be persistent till you find what you need. Continuing without additional support is not a wise option.

- Does your supervisor see this as his or her role? How will you know? How can you find out?
- Will your supervisor be prepared to give you writing support in the earlier stages? He or she may do so, but may want to see that you can learn some of these things by yourself.
- Will your supervisor be prepared to give you detailed editing in later stages? Again, perhaps – but you must check. However, your supervisor will probably not be happy to continue to correct the same errors over and over again in your drafts. You have to take some action to improve your writing.

Grammatical correctness in English often seems less important to students, but it has an important effect on your argument, particularly in the later stages. Poor sentence structure, for example, will obscure your line of thought and may even make your writing appear incoherent.

Grammar, punctuation, spelling

If you do not know the difference between the passive voice and the active voice – or if you thought it was the active 'tense' – then you may need to learn some of the key terms used in defining, and useful for discussing, the qualities

of academic writing. You may need to study this area. Otherwise your discussions with your supervisor may be confusing, as they use terms that you do not really understand, although you know you should, and they may expect you to. You can always ask them to explain them to you, but Strunk and White ([1959] 1979) combine definitions with illustrations to such good effect, in such a short book, that there is no need to go into such discussions completely unprepared. There are many other texts that cover this area. Your supervisor may recommend another text and may use other definitions of grammar that you will have to connect to your reading about it.

More importantly, you might not understand what your supervisor is saying in any comments on your writing. How will you respond to this feedback if you do not fully understand it? Will you just press on with your writing and revising and hope for the best? Will you make some kind of revision without really knowing if you have responded to the feedback or not? This will breed uncertainty that you can undoubtedly live without.

There are a number of terms you should be able to define and recognize in practice – in reading and writing.

Here are ten questions that you can use to test your knowledge:

Quick quiz

1 What are the definite and indefinite articles?
2 When and how do you use a semi-colon?
3 What is a personal pronoun?
4 What is 'the antecedent'?
5 What is subject–verb agreement?
6 What are the essential elements of a sentence?
7 Give examples of sentences using the passive and active voices.
8 What is the difference in meaning between the two?
9 Define 'sentence boundaries' and say why they are important.
10 What is a topic sentence?

If you know the answers to all of these, you are probably a student of literature or foreign languages. Perhaps your first language is not English, as it often seems that 'non-native speakers' have more knowledge of grammar. However, if you can answer only five – or none at all – this suggests that you have some work to do in this area. How much work, and how you will learn about these subjects, may be worth discussing with your supervisor.

Remember that your goal is to produce excellence in your writing; it is not simply an exercise in pedantry to require that your subjects and verbs agree. Likewise, if your sentences are not well bounded your argument will appear confused. You will appear confused. If you do not know exactly what you are doing when you are revising your own writing, this could undermine your

confidence as you write the thesis. That is exactly the opposite of what the process is meant to achieve.

If you do not know the answers to the ten questions, you need to read one of the many texts or sites on grammar and punctuation or find some other mechanism for learning about these topics:

- Strunk and White (http://www.diku.dk/students/myth/EOS)
- *Fowler's Modern English Usage* (Fowler [1965] 1984)
- Websites on writing
- Online writing courses (e.g. at American universities)
- Ask for help
- Attend a course.

Goal setting

This topic takes us right back to the question of why you are writing a thesis. You choose this track. You wander into the department. Before you know it, you have a stack of books and papers to read, meetings to attend and classes to teach. Alternatively, you may have large chunks of unplanned time, which can be just as intimidating. The point is that however clear your goal was, you may have lost sight of it, not for the last time. It helps to have some way of reminding yourself of where you are going and why you chose to go there.

Goal setting is about managing the long and short term. We can use a goal-setting process to help us to focus on both the immediate goal – the writing that we are doing now – and the long-term goal – the thesis that we have to produce. Somehow, we have to develop a commitment to both goals and deal with the tension between the two:

> Having the long view is being both energized and relaxed; enthusiastic and patient. It's knowing in the marrow of your bones this one paradoxical fact: Writing's been around a long time and will probably continue at least as long, and yet it always happens in the here and now.
>
> (Palumbo 2000: 93)

What does this mean? Holding two contrary views in our minds, throughout the project, from now until it ends? What is, for each writer, the 'long view'? You have to form your own long view. Take a few minutes now to write (five minutes, in sentences) about yours.

Our goal may not be to 'become a writer', but the thesis writing process goes on for long enough that writing has to become a major part of our lives:

> Seeing things whole, having the long view, is the only way to live the writer's life. It's committing yourself to a concept of writing as an integral, ongoing part of your life, instead of just a series of external events.
>
> (Palumbo 2000: 93)

We have to see our writing process both as a long-term process and as a 'series of external events'. We have to keep one eye on 'what's in it for us' and the other on 'what they want me to do'.

In addition, there is value not only in seeing the project as a whole, but also in imagining the text of the thesis as a whole. We also need to construct an image of our life as a whole with writing in it. We then have to find a way of putting that into practice. In other words, there is more to goal setting than simply listing a sequence of actions; there is more to monitoring than ticking a box as we complete each task.

The principle at work here is bringing definition to the thesis writing process. We create stages in the writing process; these stages are a construction. We can play the numbers game, setting very specific writing goals. The student has responsibility to create a series of writing milestones.

Most people have heard of 'SMART', a snappy way of defining a good goal. In fact, there are two versions of this: one identifies external features of goals, representing goal setting as an objective process, and the second links goals to internal motivation (based on James and Woodsmall 1988).

SMART Version 1

Effective goals are

- Specific: detailed enough to be measurable and convincing
- Measurable
- Achievable
- Realistic: with no limiting factors
- Timescaled

Version 2, because it focuses less on the outputs and more on values and emotions may be more effective for creating writing goals that work:

SMART Version 2

- Simple: immediately understandable by you
- Meaningful: to you, aligned with your core values
- As if now: you can make it real to you, in all areas of your life
- Responsible: for everyone involved
- Towards what you want: not someone else's goal

Both supervisors and students may have reasons for shying away from goals: the supervisor may think this is too personal an approach, and may not want to put pressure on the student so early on; the student may be more comfortable talking about research goals than writing goals. However, there is evidence that goal setting improves performance in many different areas. Goal setting and self-efficacy beliefs can work in symbiosis (Seijts et al. 1998). It may be up to you, once you have a general goal from your supervisor, to make it more specific, more workable:

Writing goals

- Define the purpose of the writing task.
- Choose a writing verb: review/evaluate/summarize.
- Define your audience.
- Define the scale and scope of your writing.
- Decide on the number of words you will write.
- Decide how long you will take to write it.

These approaches usefully remind us to adopt behavioural approaches, since changing and monitoring our behaviours – not just our thoughts – are what make up this new writing challenge. Hence the value of 'the arithmetic of writing': it sets concrete targets and gives real measures of output. Vague writing goals can cause problems: not only is it difficult to ascertain whether or not we have achieved them, but a vague writing goal is difficult to start. If the writing task is not sufficiently defined, the writing process is itself ill-defined:

Poor writing goals

- **Do five minutes' writing practice daily.**
  Too big a change. Purpose not clear.
- **Clarify topic.**
  Scale and scope of the writing task unknown.
- **Get feedback on writing.**
  Type of feedback not defined. Recipe for misunderstanding.

Writers who have used the 'SMART' process are only too well aware, once they step back to appraise their own goals, that they have left them ill-defined. They quickly realize that there has to be much more definition:

Good writing goals

- Do five minutes' writing practice today at 9.45 am.
- Define the topic in 500 words (two pages). Give it 30 minutes.
- Ask supervisor: is the topic becoming more focused?

Not everyone works best by setting specific goals; some find approximate goals more effective. Whatever you choose to do, it is important not just to have the long-term goal in view, but the short-term too. Not just the long-term goal of 'finishing' but the short- and medium-term goals of starting, keeping going, losing the way, failing, changing direction, productive periods of writing, etc., i.e. all the unpredictable phases of a large writing project.

How does your supervisor want you to set, and monitor, your goals? He or she may think the 'SMART' stuff is too gimmicky for higher education, or find the second version too personal, but if you find it useful, there is no reason not to use it to work out what your goals are. It is your goals that you have to agree with your supervisor, not your personal processes for working them out.

Your goals provide a number of topics for discussions with your supervisor. If you are not confident enough to talk about your writing goals, you can at least discuss – and agree – your research goals, although you should define writing outputs for your plan of work.

It is important to put your goals down on paper and get focused feedback on them. Goal setting requires feedback and monitoring, otherwise you will have no real sense of whether or not you are progressing. You will have to see how your supervisor wants you to set and monitor goals, but you may also have to take the initiative, indicating that you are ready for this discussion and, above all, ready to include writing in this discussion.

A research methods group, or writers' group that includes new students and those who are further along, can help students see how goals are set, what constitutes an effective goal and what the whole thesis writing process involves.

Lifelong learning

Academics . . . should know better. Researchers have been nervous to let go to notions of 'scholarship', 'academic' or 'pure research', 'specialisms', 'expertise' and the 'scientific method'. We perpetuate the myth that education is a practice, and in so labelling it we separate it from what is everyday and for everyday.

(Elliott 1999: 29–30)

Elliott reminds us that individual learners have the responsibility to make sense of learning in their own environment.

You did not stop learning about writing when you completed your first degree. You are expected to have a high level of written and spoken English at the start of your second degree, but it is likely that you will develop these skills further in the course of the months and years to come.

Writing a thesis can be seen as a development process:

Five minutes' freewriting

How do you want to develop as a writer over the long term?

Five minutes' writing
In sentences
Private writing

It would be interesting to look back at your answer to this question at the end of your thesis.

You will continue to learn throughout the thesis writing process. Some students get frustrated that they still have not quite 'made it' in their writing, but that is a feature of the protracted learning process and the growing recognition that since we are always writing for new audiences, we are always learning about writing. Our relationship to our audience also changes, as we become more knowledgeable – and more known – in our field.

You may notice an emphasis on process in the course of your study, prompting you to think about, and perhaps document, the learning that you do in the course of writing your thesis:

An emerging theme in doctoral discourse in the UK is the switch from content to competence, driven by a shift in emphasis towards the PhD experience for the student, and away from simply the outcome (award of the degree) or the product (thesis).

(Park 2005: 199).

Whether you are doing a doctorate or a masters or undergraduate thesis, you may have to think about what 'transferable skills' you can learn in the process.

Audience and purpose

Audience and purpose are always the key in any communication act. What we write is shaped by the identity of whoever we are writing for and by our purpose in writing for them. For example, we present our research differently to departmental groups, to work-in-progress presentations and at conferences, where we create the impression of closure.

The audiences – since there are more than one – for a thesis are analysed in Chapter 2. However, it is important to consider how problematic audience can be for new thesis writers: thesis writers have to write with authority, when they may feel that they have none.

While we know that we are not expected to produce high-quality writing – and thinking – in our first, or 'rough' drafts, we have internalized the expectation of high-quality writing. This can present writers with a conflict. It can stop them writing anything. This is, therefore, an important talking point: what are the criteria for early writings, i.e. in the first few weeks and months? Is there adequate definition of the writing task: length, scale, scope, etc.?

While much of the writing that you do in this phase – and most of the activities proposed in the early chapters – is not intended to generate text to be shown to your supervisor, it is important that you address the requirements of that audience too.

Remember that when you write for your thesis you are joining a debate. Anything you write can be challenged, not because your argument is weak or your writing is poor, but because that is the nature of the context. Entering the debate tentatively is probably a sound strategy. See yourself participating in, rather than 'winning' or 'losing', the debate. See yourself making your point clearly, rather than demolishing – or impressing – the opposition. Expect some to agree and others to disagree with your points; this is inevitable in debate.

This introduction has explored the theoretical underpinnings of this book. It has demonstrated how we can become regular writers: by writing regularly. More importantly, it has begun to shift the responsibility for defining the writing process to the thesis writer. How others, including the external examiner, define writing will be covered in the next chapter. It defines the whole thesis writing process.

Timetable for writing

Phillips and Pugh (2000) provide a graphic illustration of the timescale of the PhD (p. 88), showing 'writing' as a continuous and 'iterative' element. 'Iterations' have to be designed by the individual writer. If writing is iterative then some tasks will appear more than once in your timetable:

- Revise proposal.
- Start constructing list of references.
- Summarize readings.
- Sketch background theory.
- Write research aims/questions.
- Write about two or three possible methods of inquiry.

Take time to develop your timetable:

- Writing task
- Deadline
- Writing time.

Discuss your plan of work, including writing, with your supervisor. How will you monitor your progress towards your goals?

As you gradually grasp what is required for a thesis – and how your supervisor interprets that requirement – revise your short- and long-term goals. Any – perhaps every – timetable is there to be changed.

Checklist

Defining the writing task

One student said she liked having checklists for chapters: 'You need to have checklists.' They provide a route map on a long and complex journey.

Some students say that they are so exhausted all the time that they need checklists to make it all manageable; checklists clarify what needs to be done.

- Start writing now.
- Discuss writing, explicitly, with your supervisor.
- Read one book on writing in your discipline.
- Make up a rough timetable for writing.
- Set long- and short-term writing goals (not just research goals).
- Find out about punctuation rules. And grammar.
- Define audience and purpose for your writing.
- Discuss all of these subjects with your supervisor.
- Consider taking typing lessons. If you don't already have one, consider buying/using a laptop.

1

Thinking about writing a thesis

Doctorate or masters? • What is a doctorate? • New routes to the PhD • Why are you doing a doctorate? • Internal and external drivers • PhD or professional doctorate? • Full-time or part-time? • What will you use writing for? • Regulations • How will it look on the page? • Demystification: codes and guides • How will my thesis be assessed? • What are the criteria? • Defining 'originality' • What is the reader looking for? • IT processes and needs • Reasons for not writing • Peer discussion and support • Your first meeting with your supervisor • Questions for reflection • Prompts for discussion • Writing timetable • Checklist: pre-planning

Doctorate or masters?

While several sections of this chapter focus on the doctorate, the issues and questions that are addressed are relevant to other levels of study. For example, finding out about institutional and departmental context and regulations is a crucial step in defining your task as a thesis writer. If you are intending to do a masters before your PhD, then this chapter will help you to think through your options and possible directions. The type of doctorate you intend to do in the future may influence the type of masters you do now. For example, if you want to use a particular research method, you might want to do a masters that provides the training you need, and then do a more independent form of doctorate, without research training, if you feel you are ready.

Writing a literature review

Not every thesis has a literature review, but every thesis writer has to write about the literature, showing how his or her work relates to others'. Even if you would rather write about the literature in several chapters – rather than just one – so that it is integrated in your argument, it might be helpful, for the moment, to think of it as a separate unit in your argument. This may help you to decide whose work you want to write about, whose work you probably have to write about and how you will represent the field as a whole in a general overview.

What is a literature review? There are many different definitions and purposes. Most reviews have more than one purpose. There are many definitions available, the following writers suggesting that a review is an interpretation, a synthesis, a project, a task and a new 'look' at new sources:

- An interpretation and synthesis of published research.

                                                                (Merriam 1988: 6)

- A research project in its own right.

                                                        (Bruce 1994 on Brent 1986: 137)

- A task that continues throughout the duration of the thesis . . . shows how the problem under investigation relates to previous research.

                                                        (Anderson et al. 1970: 17)

- [An opportunity to] look again at the literature . . . in . . . an area not necessarily identical with, but collateral to, your own area of study.

                                                                (Leedy 1989: 66)

Merriam's use of 'interpretation' and 'synthesis' makes clear the active role of the writer; it is the thesis writers' version of the literature, their selection and arrangement of their summaries and critiques. Brent rightly clarifies the research that is required for a review. Anderson et al. emphasize that reviewing the literature is a constant, running through the whole project. Leedy seems to suggest broadening the review's scope.

The review has a 'purpose' in two senses: on one level the purpose is for the writer to learn about the literature in the course of writing about it, and on another level the review has its own 'purpose' in that it plays a role in the thesis argument. Both purposes are captured by Bruce:

- Literature reviews in the context of postgraduate study may be defined in terms of process and product. The process involves the researcher in exploring the literature to establish the status quo, formulate a problem or research enquiry, to defend the value of pursuing the line of

enquiry established, and to compare the findings and ideas of others with his or her own. The product involves the synthesis of the work of others in a form which demonstrates the accomplishment of the exploratory process.

                                                                (Bruce 1994: 218)

Each of these could be a prompt for writing in itself: (1) 'establish the status quo'; (2) 'formulate a problem'; (3) 'defend the value of pursuing the line of enquiry'; (4) 'compare the findings and ideas of others' with your own; (5) 'synthesis of the work of others'; and (6) 'demonstrates the accomplishment of the exploratory process'. This last one is interesting, in that it reminds us to demonstrate how thoroughly we researched the literature in order to hit upon our research topic. This may, of course, not be exactly or even approximately how we found our topic, but our search through the literature will have influenced our research by helping us to focus more precisely on what we did.

A helpful distinction between the review and the rest of the thesis is provided by Cooper:

- First, a literature review uses as its database reports of primary or original scholarship, and does not report new primary scholarship itself . . . Second, a literature review seeks to summarise, evaluate, clarify and/or integrate the content of primary reports.

                                                                (Cooper 1988: 107)

While Bruce simplifies:

- Typically, the literature review forms an important chapter in the thesis, where its purpose is to provide the background to and justification for the research undertaken.

                                                                (Bruce 1994: 218)

For the writer, reviewing the literature can be a means of learning from others' thought processes, expanding their view of the field, becoming familiar with different theoretical perspectives and parallel developments. Your literature review can demonstrate your abilities as a researcher:

- Demonstrate that you [have] a professional command of the background theory.

                                                        (Phillips and Pugh 2000: 59)

- The review of literature involves locating, reading and evaluating reports of research as well as reports of casual observation and opinion

that are related to . . . the planned project. It is aimed at obtaining a detailed knowledge of the topic being studied.

(Borg and Gall 1989: 114)

This is just one of the structures you have to create in a thesis: an account of the work that has gone before. Who has worked in your area? Who thinks your subject is important? How does your work relate to theirs? The rhetorical purpose of this section is to show the 'gap', to show that there is a need for your work. Your research will take the field or topic forward in some minor or major way.

What is the purpose of your review? To give an overview of the 'big issues' in your field? To select some of these for your study? To summarize others' work? To evaluate others' work? To provide a context for your work? The last of these probably applies to most theses; everyone has to create some kind of context in their introduction. You may choose more than one of these purposes, to be written in several sections?

Many students – even in the first phase of thesis work – have more knowledge of the literature than they realize. They are so acutely aware of what they have not yet read that they tend to forget that they have read copious amounts already. Yes, there is a mountain of information out there, but you can realize your own knowledge by doing a few short bursts of writing to prompts or questions, or freewriting or generative writing.

Prompts for initial writing about the literature

- What do I know about my research topic?
- What I am looking for in the literature is . . .
- What are the schools of thought in the literature?
- The 'great debates' in my area are . . .

This activity has a number of potential benefits: it can help you recognize that you do have knowledge already, and you begin to define what that is. It can help you identify gaps in your knowledge and you can then select which ones you need to fill, and which you do not. The writing also makes you connect your work with that of other researchers.

The specific prompts used also keep the focus at the general level, particularly if the writing activity is continuous and short (15 minutes maximum). If these prompts do not seem appropriate – if they do not work to prompt you to write – then you can change them to suit. Some writers find questions much more effective for prompting their writing than the half-formed sentence; for others the reverse is true.

Who is this writing for? It is not designed to be read by anyone else. If the

purpose of the activity was to get your initial reactions down on paper, then you could be putting yourself under pressure by showing them to someone else right away. However, with a few revisions you might have some writing that you could show to your supervisor, share with peers or include in a draft of your literature review.

At the very least, this activity constitutes writing practice; you have done some writing today. This will help you to maintain the skill. You may find it easier to get started on more structured, high stakes writing. In fact, this short burst of writing may prove to be a sketch or draft for something else. You may feel that the quality of the writing is low, but achieving quality was not really the aim of the exercise.

Repeating this exercise would be useful for integrating new reading into your 'big picture', or overview, of your field. As you read new material in bulk it can become difficult to see how it all hangs together. You can begin to compare and contrast. Use writing to keep a focus on your study and to develop your understanding of the literature. These short bursts can generate a few notes for your record of your reading, but it may be even more important that you have had to articulate your response in writing.

The language used in these prompts can be quite informal, general, designed to keep it simple. You can, of course, make it more academic or formal. As your understanding grows, and as a picture of the literature begins to emerge, you may want to revert to more specialized language. However, such a change might complicate things, as you realize that you have to define your terms much more carefully and have to defend what you write. This is no bad thing, as long as you know that you can return to less formal writing for new subjects, for example, whenever it seems right. In other words, you can begin to write formally and informally about the literature at the same time, in parallel. The informal writing would be useful for developing and testing your understanding and the formal writing would be for the supervisor to read – for feedback – and, perhaps, for drafts of chapters or sections.

Why do we critique the literature? What are our objectives?

- To learn about it
- To reveal areas that are ripe for development
- To work out where our ideas come from

A key point about these processes is that they are all constructions; i.e. in writing about 'areas that are ripe for development' we are stating our view, giving an interpretation of the field.

The third of these may seem absurd: surely we know where our ideas come

from, and if we have not read this literature before, how can it be said that our ideas come from the literature? Yet, the question 'Where do my ideas come from anyway?' does helpfully remind us that we are unlikely to have come up with something that is completely new. It is just that we have not yet discovered who is already working on our topic. We have not yet established a relationship between our work and theirs. Moreover, this question can be incredibly useful as a focusing device at those moments when we are swamped by other people's work: instead of trying to create tenuous links that we half-understand to people's work that we, likewise, half-understand, as if we were trying to represent the whole 'big picture' of all the work that is out there, the question forces us to start with ourselves, our ideas. It can help us to filter out all but two or three, maybe five or six at most, of the researchers who have had most direct influence on our work and our thinking.   ◀

The task of writing a literature review therefore is a means of learning about the literature; we write to learn about what we read. Initially, we write about material that we do not know or understand very well. As our understanding develops we fill in gaps and take out errors. One of the key processes is identifying different methodologies and theoretical approaches. Understanding such complex material takes time, but we have to understand it if we are to make an appropriate choice of method, approach or critical stance in our own research.

By writing regularly we can gradually become more comfortable writing about new knowledge in a knowledgeable way. However, we can continue to use the range of prompts, tentative and knowledgeable, personal and academic, inquiring and authoritative:

- What is the story of the 'literature' about?
- Where do my ideas come from anyway?
- What are the main ideas and who is responsible for them?

(Orna and Stevens 1995: 175)

Each of these is a legitimate prompt for writing the literature review. The trick is not just to let it become a summary of other people's work.

It is also important to realize that critiquing does not mean demolishing the opposition. Many students write as if they feel they have to rubbish the rest in order to justify their own study. Does the literature review bring context or conflict? The literature is a context for your work; it is not necessary to be in conflict with it. In fact, you have to create links, perhaps links that you do not currently see, between your work and others'. The writers who do that have more impact. Show what is contested in your field; you do not have to contest it all yourself. You do not have to see it all as contesting your study.

At the same time, fear of giving offence stops some students writing

anything that might be termed a 'critique', with its associations of being critical, while they themselves are novices in the field.

The purpose of the literature review

- To give an overview of the 'big issues'
- To select some of these for your study
- To summarize other people's work
- To evaluate other people's work
- To provide a context for your work
- To identify gaps
- To develop an understanding of theory and method

Here are four students' comments and questions after an induction on literature reviews and their role within the broader argument that is a thesis. The comments show what they took to be the main points and the questions show areas where they need more information:

Students' thoughts and questions

1 The main point is to steer students through the mass of available literature in order to home in as effectively as possible on pertinent information. Also how best to present the information.
   Question: Can other lecturers assist at a later stage with this process?

2 The main point is to understand what is meant by a literature review and how it should tie in with your own research and ideas on your project.
   Question: How academic do your readings have to be – do all your readings have to be academic?

3 Main points:
   Pay attention to structure
   Keep it simple and explicit
   Be concise
   Question: Should all reports conform to the same model?

4 The main points for me were going through the generic structure, the need to argue/discuss points with others.

One of the issues that arises from working with students on literature reviews is the complex relationship between thinking, knowledge production

and the writing process. Some commentators (Hart 1998) point out that students can expect to see their understanding outstripping their writing: their thinking, knowledge and abilities will be moving on, even if the writing has not. If this is so, it is worth considering the implications for the writing process. It may mean that we ought to be developing writing activities – not abilities – in order to help students to keep up with their growing understanding and knowledge.

Or do we have to wait until we fully understand before we can write? Is writing something we do at the end of a process? What would such non-writing involve? What would that lead to? Are there writing skills appropriate in form to phases in the research, e.g. freewriting for sorting out ideas? Freewriting is a key strategy at this point: it helps students to sort through their own ideas when they are most at risk of being swamped by other people's. ◀

Alternating freewriting and note taking is an effective way of ensuring that understanding develops and that writing continues. Note taking is a mechanism for active engagement with your reading. Freewriting is a springboard for your own ideas. What will you write about? Writing for ten or fifteen minutes on a paper could capture the key elements:

Questions the literature review should ask

- What were the research aims and objectives?
- What were the outcomes of the research?
- What approaches/methods/strategy were used?
- In what context was the research conducted?
- What was its contribution to the field?
- Does it have any connection to my research question?

Remember that a key failing, according to the guidelines for external examiners, would be simply to write 'Here is all I know about my subject.' The literature review is not just a synthesis of other people's work; it also synthesizes your work with theirs. This is not an easy task, since your work is ongoing as you are writing about the literature. This is why it is important to do more than one form of writing as you go along, not just drafts of formal writing that you give to your supervisor, but also the writing to prompts and questions, freewriting and generative writing activities, illustrated in this section, or versions of them you write yourself to suit your study. Remember what Torrance et al. (1993) said about the importance of 'producing text'.

If your literature review should not just answer the question 'What do you know about your subject?', what will you write about?

Questions a literature review should answer

- Why is this subject important?
- Who else thinks it's important?
- Who has worked on this subject before?
- Who has done something similar to what I will be doing?
- What can be adapted to my own study?
- What are the gaps in the research?
- Who is going to use my material?
- What use will my project be?
- What will my contribution be?
- What specific questions will I answer?

The different purposes of the literature review can be illustrated in examples drawn from completed theses. The following examples show the writers' concerns to do the following:

1 Define their terms
2 Justify their selection of the literature
3 Justify omissions
4 Forecast sections of review
5 Signal structure
6 Link their work to the literature
7 Critique the literature
8 Define the gap
9 Use name + date + verb sentence structure to focus their overview.

1 Define terms

CHAPTER 2

LITERATURE REVIEW

A formation at a submerged orifice grows into the liquid by accelerating the surroundings away from the interface. Initially, the formation is rather like an expanding sphere, and as formation proceeds, it is elongated and its lower part constricts steadily forming a neck. The formation detaches from the orifice when its neck is severed. The detached formation rises and the portion of its volume remaining at the orifice becomes the nucleus for the next to form.

In the literature, the process of formation is consistently divided into a bubble régime and a jet régime. The bubble régime is described in terms of the periodic formation of single bubbles or of double bubbles . . .

Which of the purposes listed above has this writer chosen to shape the literature review? This writer chose to begin the review with definitions. Definitions of key terms are important, since they dictate how the reader will interpret everything you say. Even very familiar specialist terms may require definition, since even they can be used in different ways.

What would make this opening much clearer would be to switch the two paragraphs: the second paragraph is beginning to give the overview of the field, classifying the subjects into two groups. It mentions 'the literature' explicitly, so the reader knows that summary is taking place.

What would strengthen the writing even further would be to add a statement of purpose and an outline of contents: a preview of the review.

These suggested revisions are not intended to imply that this is a poor piece of writing; instead, they are designed to show how the review can take shape over a number of drafts, although time could be saved by making the purpose of the piece explicit in the first draft: 'The purpose of this chapter is to . . .'

When students and supervisors read this example they often ask, with some impatience, 'What is this person talking about?' They want to see headings and sub-headings to guide their reading, a menu telling them what to expect in this chapter. They demand more signalling. They want to know why 'formations' are important. Who says so? They look for some kind of link with the previous chapter. All of these responses are pertinent. They can be translated into guidance for further writing and revision:

- Link this chapter with the previous one.
- Say why your topic is important.
- Situate it in a broader context.
- Tell us what you are going to say in the chapter.

Review writers also have to make clear that they are selecting certain material, and give reasons for their selection. You also have to say what you are not going to write about, and why. It is well known that the doctorate requires 'comprehensive coverage' of the field; what is less well known is that this is bound to require a selection, a well-informed selection of all the material available. For some writers, the pressure of trying to do justice to everyone is hard to balance with the necessity of leaving some work out:

2 Justify selection of literature

CHAPTER 2

REVIEW OF RESEARCH ON SECTIONS

Introduction
A review of the whole field of the development of strength testing would be a formidable task. The subject has been active in a research sense for about a hundred years.

This review will therefore mainly highlight experimental research done. Due to the large amount of studies done over the years, the author has inevitably missed some important works. The author apologizes in advance for seeming to ignore the work of some people while mentioning other contributions which, it may be felt, are of lesser importance.

This is *not* a very convincing account of selection; rather it seems more like an excuse for poor research. However, what I think has happened here is that the writer, being only too well aware of the need to select – and the need for humility – has taken the blame rather than the credit for his or her own selection of the literature. In other words, this text is, again, not held up as an example of poor thesis writing. Instead, it reveals one of the difficult balancing acts of writing this part of the thesis: how to do justice to the whole field while justifying your exclusion of certain key people because they are less than directly relevant to your research.

A better way of dealing with this stage in the literature review would be to state explicitly what type of selection had been made and why, including related literature that has been omitted, and why:

3 Justify omissions

It is important to clarify what is meant by cardiac rehabilitation, as the term encompasses many concepts. A recent report in the *British Medical Journal* (Bloomberg 2001) suggested that rehabilitation can take the form of drug therapy, surgical intervention, psychological rehabilitation and physiological rehabilitation. The literature on drugs and surgery will not be reviewed but is available from the following references: BBH Trial Group (2000), a major European trial on drug therapy; European Coronary Surgery Group (2000); Bounder (1999); and King (1998). This review will cover physiological and psychological aspects of cardiac rehabilitation, as these are the main areas of interest to this study.

The important skill here is to set boundaries – explicitly – to your literature review. This example also shows the writer working his or her way through several areas in a piece of multidisciplinary research. The boundaries that you set to your review have to be explicitly defined and perhaps defended. If readers are to follow your logical path – even if they do not agree with you – you have to provide an explicit forecast of the elements you will cover:

4 Forecast sections of review

LITERATURE REVIEW

As there is a vast amount of research and writing which is relevant to children's reading, this chapter concentrates on: 1 Selective review of research relevant to this study. This I will outline and then examine critically. 2 Comment on current views as expressed in recent government reports.

1. (a)
In 1995 Hummel et al. (1) studied the television viewing of 10–13 year olds. Reading was studied as an aspect of children's lives which might be influenced by television. At the time of this survey one in five homes had television – a different situation from today where most homes have at least one set and many children also have access to a video or DVD. Because of this, aspects of Hummel's work are probably of limited value, but her longitudinal study of viewers, non-viewers and new viewers in Nottingham is useful as she offers data on viewers and the control group and makes suggestions about the reading habits of children in homes with newly acquired sets. She makes interesting speculations about the possible long-term effects.

Similarly, if your literature review is structured chronologically, giving your version of the history of your field, the development of a philosophy or approach, signal this in your headings and sentences:

5 Signal structure

HISTORICAL CONNECTION OF HEALTH AND PHYSICAL EDUCATION

Traditionally physical educators were concerned with the maintenance and promotion of health of school children and the historical connection between physical education and health education is well documented in the literature (Muir 1968; Smart 1974; McNab 1985).

At the start of the twentieth century, concern regarding school children's health began to be expressed in education policy. In 1903 the Royal Commission on Physical Training proposed physical training as a subject in the primary school curriculum with the purpose of improving the medical, physical and hygiene conditions of children in schools.

The first syllabus to appear following the commission's report, suggested that:

The primary objective of any course of physical exercises in schools is to maintain and, if possible, improve the health and physique of children.
(Board of Education 1905: 9)

Literature reviews, therefore, include definition, background and chronology, not just a simple summary of other people's work. The main point is to link the literature to your own work, both in general terms and later in detail, but certainly explicitly.

6 Link your work to the literature

Background

Beginning in the late 1950s and throughout the following two decades, the debate on mixed-ability teaching was given a high priority. Among the more influential writers on the subject were Rudd (1), Willig (2), Jackson (3), Yates (4), Barker-Lunn (5) and Kelly (6). However, in the late 1980s there was a general view that 'The Mixed-Ability Debate' was no longer relevant; the argument was won and mixed-ability organization was accepted as normal practice, especially in the pre-certificate stages of education. Certainly there is a dearth of recent publications on the matter, and it has been ousted from staffroom discussion by other more pressing initiatives. So perhaps the stance has some validity. **The aim of this study is not to** contest this view. **Rather it is the intention to** maintain that if justification does exist it is limited to secondary and not the primary sector.

Sooner or later, you have to critique the literature:

7 Critique the literature

Review of Literature

. . . **A better design was used in** a British trial (Carson et al. 1992) in which three hundred men who had suffered a Myocardial Infarction (MI) and been admitted to hospital were randomly allocated to an exercise group or a control group. The patients were assessed at their first clinical visit, six weeks post-MI and again after five weeks, at one year and at three years. The dependent variables assessed were mortality, physical fitness, angina, return to work, heart size and smoking habits. Physical fitness was assessed on a bicycle ergometer and expressed as total cycling time. **The results showed** a highly significant (p < 0.001) difference in physical fitness between control and exercise groups as assessed by mean cycling time, the exercise group being the higher of the two. The exercise group returned to work no earlier than the control group. There was no significant difference in the smoking habits between the groups. Although the improvement in morale was not measured, it was stated to be obvious in the control group. **This trial would have been more interesting** if psychological parameters had been objectively measured, especially as the return to work rate was the same for both groups.

Once you have pointed out the limitations in existing work – limitations by design, in many, if not all, cases – without demolishing that work, then you can begin to define the gap that you are going to fill with your research. This is about constructing a logical link between the deficiencies in the research and the aims of your project:

8 Define the gap

To date no research on an exercise-based cardiac rehabilitation programme **appears to have been done** in Scotland, although it has the worst death rate from coronary heart disease in the world. **This study is an attempt to fill that gap.** The study only involves acute patients who have had recent Myocardial Infarction. Men and women will both be involved, as the study will investigate the first forty consecutive patients. It has also been shown (Sugar and Newt 1999) that provided women are selected onto a cardiac rehabilitation programme using the same criteria as for men, they derive the same benefits.

Use the name + date + verb structure – identify who (when) said what about your subject – to force yourself to write a quick sketch of the field, bringing a

range of people together. What have they all said about your theme? For example, having chosen the theme of 'partnership', we can then be highly selective in what we choose to review: we can summarize, in one sentence or less, what researchers have said about our theme:

9 Name + date + verb

Dawn (1999) argues for a partnership approach in promoting reflection in the professional development of teachers, and earlier indicated the need for inter-dependent roles for researchers and teachers through 'collaboration, consult-ation, and negotiation' (Dawn 1999: 133). **Blue (1999),** in a study of the roles of mentors and mentees, **identifies** this developmental partnership as a way of changing lecturers' behaviour. **Elliott (1991) proposes** a 'model of professional-ism' for teachers, with early involvement in a partnership to provide a gradual integration into the cultural ethos of the organization: here, too, the emphasis is on 'a process of collaborative problem solving' (p. 312).

The steps listed in this section do not have to be written in this order. Start anywhere. However, they do identify the main elements of a literature review and thus constitute your agenda for writing. Once you have read a few theses in your area you will have a better idea of exactly how this process is currently conducted in your discipline.

Your discipline will also be associated with one or other of several styles of referencing, such as Harvard, Chicago, Modern Languages Association, and so on. Each has its own style manual, telling you how to reference every conceiv-able type of source. Some style manuals appear in abbreviated form, shorter and in paperback, telling you how to reference everything in a thesis. Consider buying the relevant style manual, once you have confirmed with your super-visor which one you should use for your thesis. It may be the same one that you use for journal articles and could, therefore, be a worthwhile investment.

Plagiarism

When you are writing about other people's ideas it is easy, some argue, to confuse your ideas and theirs. However, this is not acceptable. Whenever you refer to someone else's ideas or writing you have to credit them by referencing their work. This seems quite clear, but many students say that they are unclear about what does and does not constitute plagiarism.

The first principle is that your record keeping should be as excellent as your writing will finally be. Apply the same high professional standards in recording references and labelling your notes.

The second principle is that there is no grey area: if you use someone else's writing, word-for-word in your own text, then that is plagiarism, whether you reference the writer or not.

In the interests of clarity, since students do appear to be genuinely confused, the following examples illustrate (1) summary (plus reference), (2) paraphrase (with reference), (3) quotation (with reference) and (4) plagiarism. The text used in this example is a paragraph from the introduction to this chapter.

The source text

Paradoxically, as we move towards constructing and rehearsing outlines and arguments, freewriting and generative writing can still prove useful, as we explore options. They can help us to move beyond the fragments of a thesis by having several attempts at pulling them together. They allow us to write – briefly – about the whole thesis. They can help us to find the type of story that our thesis will tell.

1 Summary (whole paragraph in one sentence, in my words)
Murray (2002) argues that we can use free and generative writing to develop a thesis.
2 Paraphrase (translating three source sentences into my own words)
It seems contradictory, but it is possible to develop a thesis using free and generative writing. These strategies allow us to synthesize our ideas. We can write our way towards a story for our thesis Murray (2002).
3 Quotation
Although free and generative writing are perceived to be strategies that belong at the start of a writing process, they can 'help us to move beyond the fragments of a thesis by having several attempts at pulling them together' (Murray 2002: 27).
4 Plagiarism
It is possible to move towards constructing and rehearsing outlines and arguments using freewriting and generative writing. We can move beyond the fragments of a thesis by having several attempts at pulling them together.

For the final example, even if the reference (Murray 2002) appears in that sentence, it is still plagiarism because it uses the source text word-for-word. Even though there are slight changes from the source text, there are strings of word-for-word sentences lifted from it. Example 4 is therefore a quotation and should be represented as a quotation. This is the simplest, clearest definition of plagiarism I know: when you use a source *word-for-word* you are plagiarizing. You should be quoting it.

Be aware that plagiarizing can get you thrown out of your university or your job. It is not just cheating; it is stealing.

Designing a thesis

The process of developing a thesis – of starting with a problem or issue, or resisting the first idea that comes along, and of changing your tentative thesis until it fits your purpose and your evidence – means you spend a little more time planning and less time throwing away text that didn't work.

(Flower 1989: 150)

A thesis focuses on a central question and is unified by that focus. In this section the word 'thesis' is used to refer to the whole text that represents a particular type of report on the research you (will have) undertaken for your programme of study; i.e. the text.

Another way of developing your thesis is to understand the place of its central argument in the context of a generic structure. A generic structure can be used as a starting point in the design of your thesis.

Generic thesis structure

- **Introduction/Background/Review of literature**
  Summarize and evaluate books, articles, theses, etc.
  Define the gap in the literature
  Define and justify your project
- **Theory/Approach/Method/Materials/Subjects**
  Define method, theoretical approach, instrument
  Method of inquiry
  Show links between your method and others
  Justify your method
- **Analysis/Results**
  Report what you did, list steps followed
  Document the analysis, showing how you carried it out
  Report what you found
  Prioritize sections for the thesis or for an appendix
- **Interpretation/Discussion**
  Interpret what you found
  Justify your interpretation
  Synthesize results in illustrations, tables, graphs, etc.
- **Conclusions/Implications/Recommendations**
  For future research
  For future practice
  Report issues which were beyond the scope of this study