



COMPLETING A PhD

Use this sheet to help you:

- gain greater understanding of what's involved in undertaking a PhD
- learn tips for approaching the various stages of a PhD
- develop a better sense of whether or not undertaking a PhD is a good idea for you

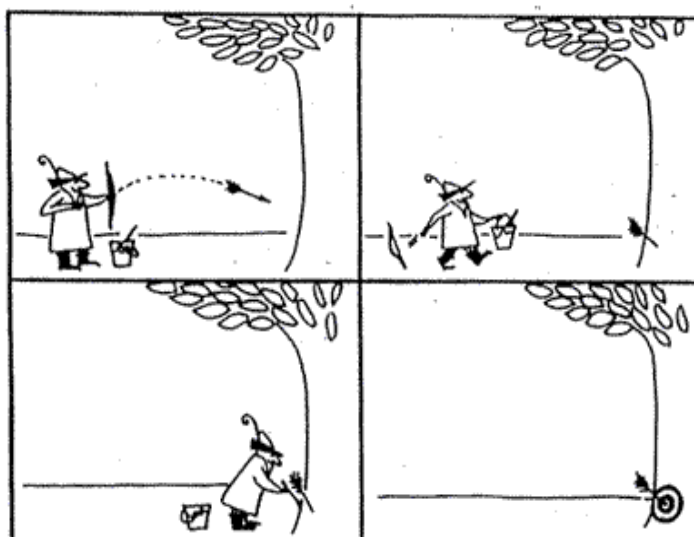
5 minute self test

Read the list of adjectives below. Think about how they relate. What other words come into your mind when you consider undertaking a PhD? Why?

- liberating
- stimulating
- rewarding
- life-changing
- fascinating
- nerve-racking
- tedious
- tiring
- lonely
- isolating
- frustrating
- hard

Introduction

The purpose of this Helpsheet is to give an honest appraisal of the value of doing a PhD. However, the document also looks at the sometimes harsh realities involved. The aim is not to market or “sell” PhD candidature. The aim is to help you consider whether you have sufficient commitment to undertake a PhD.



Ph.D. research and analysis

1. What is a PhD and why do one?

The PhD, or “Doctor of Philosophy”, is not the highest level of academic achievement in Australia. There are “higher doctorates” which are awarded as “honorary” degrees for a substantial body of published work. However, completion of a PhD is the ultimate achievement for most students. Indeed, it counts as admission to a fairly select “club”. Having a PhD is a necessary qualification for becoming an academic in universities—though it is not a sufficient condition (you need publications too).

Despite its importance, the completion of a PhD is only the beginning of one’s academic career. Even if the student does not pursue an academic career, the PhD is a valuable experience for many reasons:

- It demonstrates a very high level of academic scholarship
- It demonstrates that a student has the skills to produce a major piece of written work by themselves
- It demonstrates a very high level of information literacy skills

A PhD normally takes between three and four years' full-time study. It is not uncommon to spend five years on a PhD, and some people take longer than this (though the university deadline is three years with a possible extension to a fourth year). Some students never finish and abandon the project. A PhD is, above all else, a test of dedication.

A doctoral degree is usually done entirely by research, with a supervisor (or supervisors) as the main supervisors for the project. (see **Study and Research Helpsheet: Working with Supervisors**). Some PhDs involve additional coursework subjects concluding with a smaller research project. In some cases such as Management, only two coursework subjects are required and the length of the thesis is not reduced. In the case of Economics, a year of coursework is required, and again, the thesis is just as substantial as it would be without coursework.

In both cases, research alone or coursework and research, the supervisor(s) may help direct the student to literature in the area, but the student mainly works alone with occasional meetings with their supervisor(s). These meetings can be weekly, monthly or irregularly (at the discretion of the supervisor). The supervisor's role is, of course, critical. (See **Study and Research Helpsheet: Working with Supervisors**).

2. Positives and negatives

On the positive side, doing a PhD can be a liberating, rewarding and life-changing experience. The process of completing one can teach you advanced skills that are intrinsically valuable—research, writing and critical thinking—and being a PhD student means that you are engaged in “real” often cutting-edge research which can be exciting and stimulating. As the culmination of a university career, it has no equal.

Nevertheless, there are negative points to take into account, and you should consider your options carefully before starting one. A PhD is not for everyone. Nor is it necessarily a guarantee of getting a good job. (See: 10. Starting a PhD: is it for you? below). Doing a PhD can be a lonely and isolating experience. A measure of your ability to complete one is if you have completed a previous piece of research (for example, an honours thesis or a masters by research) or if you are very confident in your ability to see the project through to completion. There are no prizes for unfinished PhDs.

An important point is this: if you are fascinated by your proposed topic, it is likely that you will be able to complete it. Above all, the PhD is a test of **dedication**.

3. What does a PhD involve?

A normal research PhD typically requires you to:

- work largely alone on the PhD project for three or more years full time (seldom less than three years, often much longer). A supervisor provides guidance in the early stages
- make a substantial original contribution to the literature in this area (the “thesis”)
- argue convincingly for this thesis with normal conventions of academic scholarship
- prepare the thesis for formal submission as a doctoral degree
- attend and contribute to departmental seminars and present one or more seminars yourself
- perhaps present a paper at an academic conference, and/or to publish papers from your research in international journals

At the end of your candidature, you will need to produce a sizable document (resembling a bound book) of between 80,000 and 100,000 words; 80,000 being usual and 100,000 being the maximum (PhD Handbook, 2005). This document has to be carefully argued, researched and documented. It must contain evidence of careful scholarship. The thesis is then examined independently by professionals in the field (usually highly-published academics) that are normally external to the university. These professionals prepare written reports on the thesis. They either:

- reject the thesis
- accept it subject to major revisions (requiring re-writing and re-submission)
- accept it subject to minor revisions (requiring sign-off by internal examiners)
- accept the thesis without changes

From the PhD Handbook:

The University expects its doctoral graduates to have the following qualities and skills:

- an advanced ability to initiate research and to formulate viable research questions;
- a demonstrated capacity to design, conduct and report sustained and original research;
- the capacity to contextualise research within an international corpus of specialist knowledge;
- an advanced ability to evaluate and synthesize research-based and scholarly literature;
- an advanced understanding of key disciplinary and multi-disciplinary norms and perspectives relevant to the field;
- highly developed problem-solving abilities and flexibility of approach;
- the ability to analyse critically within and across a changing disciplinary environment;
- the capacity to disseminate the results of research and scholarship by oral and written communication to a variety of audiences;
- a capacity to cooperate with and respect the contributions of fellow researchers and scholars;
- a profound respect for truth and intellectual integrity, and for the ethics of research and scholarship;
- an advanced facility in the management of information, including the application of computer systems and software where appropriate to the student's field of study;
- an understanding of the relevance and value of their research to national and international communities of scholars and collaborators;
- an awareness where appropriate of issues related to intellectual property management and the commercialisation of innovation; and
- an ability to formulate applications to relevant agencies, such as funding bodies and ethics committees.

(PhD Handbook, 2005)

See also: 'Questions to Consider when Writing a PhD thesis' (2005)

4. The process of completing a thesis

The process of completing a PhD has several stages. The main ones are:

- a. the proposal stage,
- b. the confirmation stage,
- c. the thesis writing stage.

There is often a data collection stage (depending on the thesis area). If you have to collect data, this occurs after the proposal has been accepted and after confirmation has been granted, but before you write the thesis.

a. The proposal stage

During the proposal stage, you have to:

- write an initial research proposal to demonstrate that the project is worth doing (see: **Study and Research Helpsheet: Research Proposals**)
- have the proposal examined by several academics within the your department
- and, sometimes, prepare a verbal “defence”—sometimes called a *viva*—of the project in front of an audience of peers (if this is not done at this stage, it is certainly done at the confirmation stage).

If the proposal is accepted, you have to write a document that satisfies the requirements of confirmation.

b. The confirmation stage

The confirmation stage must occur within twelve months of enrolment. It requires you to complete a sizable document (the exact size varies but usually around 20 or more pages). In this document, you must expand on the initial proposal by:

- reviewing much of the previous literature in the general area of your proposed topic
- finding a sub-topic in this general area
- finding a “gap” in the research area that needs further investigation
- proposing a plausible “thesis” that explains or accounts for this gap

The thesis must be advanced in enough detail for the reader to gain an appreciation that you have a clear grasp of their topic area and a potentially unique approach to the topic (see **Study and Research Helpsheet: Literature Reviews**).

You must submit the confirmation document to a panel of lecturers in the department. It is then reviewed and detailed comments are given to you by the supervisor(s).

You must also prepare a formal presentation (complete with slides) to an audience of peers in a departmental seminar. (See **Study and Research Helpsheet: Giving Presentations**).

It is easy to underestimate the importance of the seminar. In fact, it is crucial. The academics attending the seminar will have read the confirmation document and prepared questions that you will have to answer on the spot. If the confirmation document is considered poor or inadequately argued, these shortcomings will be exposed publicly in an audience of peers. (Staff are generally pleasant in doing this, though it can be very hard from the candidate’s point of view).

While the aim of the seminar is to be encouraging, its purpose is also to expose weaknesses in the proposed thesis. This process can be nerve-racking. Practising and preparing the seminar well before the due day is crucial. It is important to know the subject area well, prepare answers to expected questions and be clear about what your proposed thesis will do (that has not been done in the existing literature).

Confirmation of the admission to the PhD is granted after one year providing satisfactory progress is maintained, and all requirements have been met.

c. The data collection stage

This stage can be long, tedious and tiring. It might involve frequent trips overseas collecting data, doing endless interviews, or collecting data from surveys. It might also involve doing empirical or statistical tests, “crunching numbers”, and drawing lots of diagrams, graphs and tables (although not all theses involve this; some are more “theoretical” in nature). This data will be under close scrutiny from your supervisor throughout the process. He/she will make suggestions for ways to improve your data collection and evaluation.

If the thesis is a theoretical piece of research, the data collection stage will involve endless hours of reading academic papers and books, and trying to find a “gap” in the research literature.

Regardless of whether the thesis is qualitative or quantitative, pure or applied, theoretical or empirical (see **Study and Research Helpsheet: What is Research?**), the data collection stage must always be done in conjunction with wide-ranging reading of relevant journal articles that cover related theoretical and empirical advances. Data alone is never enough; it must be supplemented by a good grounding in theory.

d. The writing-up stage

For some kinds of theses, namely analytical projects, the writing-up stage takes the entire duration of the thesis. For others, it consists of a shorter period of time after finalising data collection and analysis. In both cases, the process is often fraught with difficulties for reasons such as those listed below:

- Things often take longer than you expect (getting responses to surveys; finding resources from overseas libraries; analysing the data and drawing reliable and valid conclusions, etc).
- Shaping and refining one's thesis or argument is rarely easy and takes many attempts
- Sorting out the various chapters and sections is time-consuming
- Integrating and responding to comments from supervisors and colleagues takes lots of thinking and writing time
- Editing and proofreading the final document is very hard to do as you are too close to your own work. However, there are some tips that can help (see **Study and Research Helpsheet: Editing and Proofreading**).

These difficulties are to be expected. After all, you are, in effect, writing your first book! A key thing to remember is to allow more than enough time. For all postgraduate study, planning and organisational skills are critical (see **Study and Research Helpsheet: Planning and Organisation**). Good organisational skills are especially important when writing a PhD.

5. 12 tips for the writing-up stage

The following tips come from personal experience and are noted in similar documents about writing a PhD:

- 1.** Never read something without writing a summary of the ideas and what you think about them. Doing this in the form of a Critical Review helps. (See Study and Research Helpsheet: **Critical Reviews**).
- 2.** Make sure you also keep a citation record and a search log as references are easy to forget, and you may need to find a reference years later (see Study and Research Helpsheet: **Information Literacy**).
- 3.** Write a Table of Contents with headings and sub-headings of how your proposed thesis will look. This will take several iterations as things change and take shape (but the process of doing it helps you enormously).
- 4.** Write one-page summaries of the various sections and pass them around to colleagues for feedback (they are more likely to read a short summary than an entire chapter).
- 5.** Start anywhere on your thesis. You don't have to write the Introduction first. Often the Methodology section is the best place to start because it is easier to write. (Always write the Abstract last as it can be the hardest section to write: see **Study and Research Helpsheet: Abstracts**).

6. Don't stop writing something until you have reached a "pick up" point. You can commence something new when you start again. It's easy to forget what you were trying to say or argue if you stop mid-stream (even if it is only to make a cup of coffee).

7. Set attainable sub-goals rather than writing a whole chapter/section in one hit (i.e., 'I will write section 3.2 today').

8. When trying to organise your chapters and sections, put all your tables and diagrams in a logical order. Pretend you are explaining the ideas to a friend who is uninformed about your area of research. What order would be best? Then, design section headings and chapter headings based on the order of the material.

9. Work on a draft of one chapter while editing another and doing preliminary research for another. In other words, keep the project moving along by spreading your efforts on different tasks.

10. Form a work group of other PhD students to work on drafts. You don't have to be working in the same fields or discipline areas (in fact, it is often better if you are in different areas).

11. Commit yourself to a writing routine in same place. (If you constantly change study location you will be distracted).

12. Write something on a daily basis.

The last tip—write something on a daily basis—is the most important. There are several good reasons to do this:

- You can always fix, change, improve, or reject something later on. Regular writing ensures you have something to improve on and/or reject.
- The process of writing helps your thinking. It helps you get a sense of what you want to do. (A philosopher once said: 'There is no such thing as an unexpressed thought'). Getting something on paper is a critical part of getting clear about an issue or problem. Many students make the mistake of viewing the writing-up as not part of the research, but rather as something done after the research is complete. This is especially the case when they've done some comprehensive empirical work. Yet research is only of value when it is communicated, and if you can't communicate your ideas and findings effectively, then you don't really know what you are talking about. In short, the write-up is the research!
- Regular writing helps you to feel that the project is progressing, and lets your supervisor know you are moving forward (the psychology of this for you is important—even if what you actually produce is not used in the final thesis).
- You can't produce something good in a hurry no matter how clever you are.
- You can't make something better that has not yet been written. You can, by contrast, always improve on something that is ill-formed, disorganised or unclear.

- Think of the task in manageable terms:
200 QUALITY WORDS A DAY
1,400 words a week (no free weekends for you!)
5,600 words a month
50,000 in 9 months!

At this rate, the process of meeting word length requirements seems quite achievable. However, if you leave your writing-up until the last few months, it is definitely unachievable.

6. The 'originality' requirement

One thing PhD students are often worried about is the requirement to be "original". When the word "original" is made clear, this seems less daunting. The following different ways of being original have been identified:

- setting down a major piece of new information in writing for the first time
- continuing a previously original piece of work
- providing a single original technique, observation or result in an otherwise unoriginal but competent piece of research
- presenting many original ideas, methods and interpretations all performed by others but under your direction
- showing originality in testing someone else's idea
- carrying out empirical work that has not been done before
- making a synthesis that has not been made before (putting ideas together that don't normally belong together)
- using already known material but with a new interpretation
- trying out something in your country that has previously only been done in other countries
- taking a particular technique and applying it in a new area
- bringing new evidence to bear on an old issue
- being cross-disciplinary and using different methodologies
- looking at areas that people in the discipline have not looked at before
- **adding to knowledge in a way that has not previously been done before**

Phillips and Pugh (1994, pp. 61-62)

We usually think of the last (in bold) when we think of "originality". Certainly if you can be original in this sense it is good, but this is not the only way one can be original. In short, don't agonise over the originality requirement.

If you keep working on finding a research gap in the literature, and you maintain your data collection procedures and continue to analyse the results, the thesis, your original contribution to the literature, will emerge naturally. But don't expect it to come early. It is often said that you don't really know the contribution of your PhD until the final months of work. However, you can assist in letting the thesis emerge.

7. Having a “thesis” for the thesis

A thesis should have a “thesis”; in other words, it should communicate a clear argument. Candidates should ‘communicate one big idea; ... there should be a “thesis” or centre to which everything in the document contributes’ (Perry, 1994).

Getting a thesis for the thesis is the hardest thing to do. Before you can argue for something convincing that contributes to the literature, you need to have read most of the key literature and thought about it.

One way to help in this process is to think of it in terms of the “single statement test” (sometimes called the “cocktail party” response). Can you explain to someone from a totally different discipline (even someone outside the university sector) what you are trying to do? Use the following phrase:

“I am going to argue that...”

Once you can complete this single sentence, you have something that could be considered your thesis. The thesis is rarely adequate on the first few tries. It often takes many attempts and is an iterative process. The more you analyse and critique literature, the more you take on the ideas/evidence of others and change your mind about your thesis. This process is normal and a sign of progress in the PhD. (Note: The phrase following: “I am arguing that...” should become more and more narrowly focussed and precise).

If you can fill in the research gap using simple and clear language in a reasonably short, intelligible sentence, you are well on the way!

Of course, in writing a PhD, you are doing more than making statements. You are also asking – and trying to answer – research question(s). But it is helpful to think about your thesis in terms of a well-argued claim or thesis statement that you are defending.

The thesis will be unclear at the beginning—even to you! Here are some suggestions:

- Keep revising the thesis from the beginning of your research until the final hours
- Writing multiple ‘Tables of Contents’ drafts can be helpful in focussing on the big picture argument you are making
- Use the ‘single statement’ test to an unfamiliar audience: can you say what you are trying to do and how it differs from other work in the area clearly in one sentence? Work at it until you can!
- Swap preliminary work and/or form a work group: ask each other about the theses of their theses. Be ruthless with each other!

8. How and why research fails

Usually PhDs that are not adequate are not submitted for examination. One of the most common reason for lack of success in completing a PhD is lack of dedication. However, additional reasons include the following:

- Lack of planning and organisation
- Failure to address the question
- Inability to convince the reader (bad arguments/evidence)
- Inability to integrate information and supporting evidence
- Invalid or unreliable data
- Lack of knowledge (not “up to date”)
- Superficial or shallow treatment of range of issues
- Thin literature review (not enough material covered)
- Overly selective literature review
- Inability to identify a gap in research

There are also minimum standards of acceptable theses (without which the thesis will definitely fail):

- Correct format, style, references and language
- Presentation
- Correct use of referenced materials
- A degree of originality

9. Starting a PhD: is it for you?

Sometimes students ask themselves if they are “ready” for the PhD. This is impossible to answer in such a document as this. The articles: “Do You Have What it Takes?” and “A Few Warnings” from Purdue University in America offer important advice. The documents are not intended to be discouraging, but to suggest how you might satisfy yourself that you are ready for the challenge that a PhD brings. See: Notes on the PhD Degree (2005).

As a postgraduate learning supervisor, I often see students who see a PhD in terms of a career stepping stone. This is unfortunate. The PhD is not necessarily a good way to get a job or to make money. It is, however, a good way of joining the company of other academics, and it is a necessary condition of an academic career.

10. The highs and lows

Nothing tests one's patience, dedication and planning skills more than the PhD. Furthermore, nothing tests family relationships more than completing a doctorate. There are emotional highs and lows. It is very common to:

- feel lonely, isolated and frustrated
- feel that your work is "not good enough"
- get lost in your project and not be able to see a way out
- have periods of severe self-doubt about your proposed thesis

In these times, it is good to talk to someone who has been through the process. There is no shortage of people to assist you in the Faculty. Start by making an appointment with supervisors or PhD coordinators. Reading the list of documents below is also a good idea. You will realise that you are in good company.*

* This document was produced with the assistance of Professors Colin Ferguson and John Creedy and Associate Professors Michael Davern, Anne-Wil Harzing and Carol Johnston. Dr Trevor Waechter also provided useful comments. I thank them all for their assistance.

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