

# Planning your research

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Many students find that it helps to break their thesis into smaller tasks, and to plan when and how each task will be completed. Primary tasks of a thesis include -

- Selecting a research topic
- Reviewing literature on the topic
- Writing and gaining approval for a thesis proposal, including selecting specific research questions and developing research methodology
- Writing the first draft of the Method chapter
- Preparing for data collection
- Collecting data
- Analysing data
- Revising the Introduction and Method chapters and writing the remainder of your thesis, including the Results and Discussion

It is recommended that data collection begin only after you have undertaken a comprehensive literature review, since reading will often suggest more effective means of collecting data. In order to complete a masters thesis on time, you may find it helpful to use the following timetable as a guideline.

<b>Task</b>	<b>Time Completed</b>
Choose a research topic	During previous year
Develop your thesis proposal	December to March
Present proposal	March - April
Write the literature review and method chapters	February - April
Collect data	May - July
Analyse data	July - August
Complete thesis writing	August - November

When selecting research questions and methodology, estimate the resources (time, money, sample size) you will need to carry out the study. Many thesis students have found that obtaining an appropriate sample usually takes some effort as only a small percentage of individuals contacted for interviews or mailed questionnaires agree to participate. You will need to consider very carefully the nature of the sample, its availability and the practicality of obtaining data from your sample. Read studies which have used similar designs. If you are considering a design that involves collecting data within an organisation, approval will need to be obtained from various members of the organisation. The approval process often takes time and you may have to contact several organisations to arrange your sample. It is important to begin doing this early, while you are developing your research methodology. You may also require approval from the University's Human Ethics Committee.

## The Research Proposal

It is crucial that the research proposal is clear and well-planned if effort is not to be misdirected. A great deal of planning must go into your research project; possibly as much as 50 percent of the total time you spend on your thesis will be taken up by planning. The research proposal is designed to enhance your skills in the following areas:

1. Formulation of a research question.

2. Identification of a “gap” in the research literature.
3. Formulation of a set of hypotheses.
4. Preparation of a literature review pertinent to the hypotheses.
5. Choice of a methodology that is appropriate to an examination of the hypotheses.
6. Choice of techniques that are appropriate to an examination of the hypotheses.
7. Description and justification of the chosen methodology and analyses.
8. Organisation and presentation of material into a logical, clear, convincing statement of the proposed research.

The process of preparation of your research proposal should be iterative. Your proposal should be subjected to constant revision as a result of constructive comment and criticism. You should actively seek out expert opinion on your proposal; it is far better to develop a viable research project at the outset than commence with a research project that proves to be unrealistic after a great deal of time and effort has been put into it. You should continue with your literature study, discussions with experts and/or exploratory work until you are absolutely sure about your research problem and have a proposal which constitutes a clear, crisp definition of the research project.

The research proposal should contain a brief but clear statement of exactly what you want to do and how you propose to do it. Do not expect your supervisor and other advisers to consult any other document to obtain a clear idea of your research project. The research proposal should basically consist of the following areas:

#### I Summary

This summarises what the research project is to do and how it is to do it.

#### II Introduction

A brief introduction to the research project is provided leading up to a brief statement of the problem, hypothesis or question.

#### III Significant prior research

A comprehensive summary of all major sources of information leads to an expanded statement of current problem, hypothesis or question. This summary should be pertinent to the current problem, hypothesis or question and not merely an undirected literature summary. What is known about the research question from the prior literature? What is not known and why?

IV Research objective, stated clearly, preferably in the form of a question.

#### V Research approach or methodology

Your research approach should be as explicit as possible. Major questions yet to be decided should be listed. Your proposal should include:

- \* Theoretical framework: What theory is driving your research?
- \* Research Design: What type of approach do you propose and why is it appropriate?
- \* Sample: What population (of persons, departments, organisations, economies, societies) do you intend to study? Why? What type of sampling procedure do you propose? Why?
- \* Procedure: How will data be collected?
- \* Measurement of Variables: How will you measure each variable in the study, and why did you choose to use that measurement procedure? What evidence can you provide regarding the validity and the reliability of all measures?
- \* Data Analysis: What analysis will you use to examine each hypothesis? Why?  
(Include shells of Tables and Figures (no data) where appropriate.)

## VI Importance of the research

Addresses the question of whether or not the research is important or significant enough to justify doing.

## VII Limitation and key assumptions

Defines the limits of the thesis work. It is common for students to try to do too much: this section is thus useful for defining how much you will undertake and the key assumptions you will make.

## VIII Contribution to knowledge

State the way(s) in which your work will make a contribution to knowledge. How is the proposed study unique? In what way will it go beyond existing research? How will it advance knowledge and contribute to the literature?

## IX Proposed thesis chapters

Describe each chapter in terms of its major headings or by a short paragraph describing what will be covered in that chapter. For example:

Summary

Introduction

Prior Research - leading up to statement of research problem

Research methodology

Research results

Conclusions

References

## X Research plan

Prepare a chart that shows when you plan to complete key components. (See Planning your research).

## XI References

Provide a full set of supporting, references.

## Research Proposals: A Check-list

Ask yourself about your own proposal:

1. Does it show imagination and intellectual craftsmanship?
2. Is the problem clearly stated?
3. Are hypotheses clear, unambiguous and testable?
4. If no hypotheses, are objectives clearly stated; can they be accomplished?
5. Is the problem too large in scope?
6. Is the methodology feasible?
7. Can the data be collected?
8. How will the data be analysed?
9. Will the analysis allow the acceptance or rejection of the hypotheses?
10. Is the population from which the sample is to be drawn receptive to the research?
11. What might the results of the analysis look like?
12. What would be the consequences of the following:

- Experiment fails?
- Data (for each major item) not available?
- Analysis inconclusive?
- 13. Can major research activities be listed?
- 14. Can a time estimate be attached to each major activity?
- 15. Is the thesis trying to do too much?
- 16. If yes to 15: What would make the project more manageable?

## **M COM THESIS GUIDELINES**

### **Introduction**

Completing a thesis is a stimulating and demanding process. These pages hope to get you started, as well as indicating University and Departmental policy that you should observe.

### **Objectives of thesis research**

One of the important purposes of thesis research is to introduce students to original research under the supervision of a staff member. The primary value of a thesis is that instead of studying by way of a series of minor and highly-specified topics, the student is obligated to examine a sizeable topic for a much longer period of time and to learn to clearly define both the very question and the research findings. By the time a thesis is completed the student can often claim to have mastered some aspect of knowledge and is much more aware of the processes of research.

In particular, you will gain experience with:

- formulating a research question.
- making critical use of published work.
- selecting and using appropriate research methods.
- organising and presenting material in a clear, logical, convincing way.

### **Selecting a thesis topic**

Each year, staff identify suitable topics. See [Thesis Topics](#) for the latest list.

Students may select their own thesis topic after consultation with academic staff who are willing to act as supervisors.

You should discuss topics that interest you with the staff involved. A [topic approval form](#) should be submitted by 30 November. For further guidance on selecting a topic, see [characteristics of a good thesis topic](#).

### **The role of the supervisors**

Your supervisors are there to offer guidance on methodological and theoretical issues as well as to provide encouragement and support. It is important that the supervisor/student team works well. Regular contact is important and should be at least one hour per month. At times, contact will be daily. You are therefore recommended to discuss numerous issues with your supervisors, and create a written agreement. See [thesis regulations](#) or Ph.D thesis regulations for further comments on this important relationship.

## **Presenting your research proposal**

Preparing a [research proposal](#) is a very important part of the research process. The proposal outlines your research objectives and methods. You are required to defend this proposal at a departmental research seminar - refer to [departmental policy](#). Your proposal may also require approval from the University's Human Ethics Committee.

Typically, a research proposal will be between 10 and 20 pages in length. For guidance on contents see the [research proposal](#), also see [planning your research](#) and [organising your thesis](#). To help keep you on track, the department also requires regular [progress reports](#).

## **Financial assistance**

Students may make an application to the department's research committee for research costs. The allowance is reviewed periodically but currently is up to \$500 for an M.Com thesis. Retain your receipts for expenses if you plan to apply to the Department for reimbursement.

The scholarships section of the Registry has information about many scholarships and grants which are available to students. For information about sources for research grants talk to the Registry's Research section. Also, check noticeboards for notification of scholarships etc. The department also offers some paid tutoring opportunities.

## **Presenting your thesis**

The regulations governing the presentation of a thesis are printed in the University Calendar. Also, the Library has a useful guide "A Guide to the Presentation of Theses". This includes guidance on referencing styles. You should employ a standard referencing system. Use of the American Psychological Association style is suggested and the use of footnotes discouraged. It is your responsibility, and not that of your supervisor, to ensure that the language used in the thesis is consistently of a high standard. Do not underestimate the importance of language and presentation. Although no thesis with inadequate content will be accepted (however good the presentation), a thesis with adequate content but poor presentation will often be marked down. Presentation can be improved by the careful selection and organisation of the most important material, by the extraction of unnecessary material and replication, by a logical structure, and by clear and concise writing. Write, edit and re-write. See [references/other source of guidance](#).

## **Publications**

Much valuable information is collected by students carrying out their thesis research. Frequently this may have both practical implications and be of theoretical and empirical interest. We strongly encourage students to consider publication of their research findings in academic and/or professional journals. Normally this would be done once you have completed writing up your thesis and have submitted it for examination, although in some cases, particularly for a Ph.D, a student may work concurrently on the thesis and a journal paper.

There are three major reasons for publishing thesis research. First, writing research for publication requires different (although complementary) skills to those involved in thesis-writing. Experience in writing for publication will be very valuable in most careers and can help to develop important writing skills. Secondly, the empirical data you collect can make a significant contribution to the development of your subject, but only if this information is disseminated! Finally, publication enhances your career prospects and the public image of the research programmes at the University of Canterbury.

We encourage students to conduct research which is potentially publishable and to regard the publication of their research findings as a natural sequel to writing up the thesis. Normally journal

publication would be done in collaboration with your thesis supervisor, whose input should have contributed to the quality of the research as well as the published paper, and this should be recognised as a co-author. Such collaboration should be discussed and agreed early in the thesis process

## **Characteristics of a good thesis topic**

### **Need for research**

A significant need for the research should exist. The results need not have immediate application but the topic should not be trivial. The candidate should that his/her research is important and worthwhile. This will help to retain motivation in periods of routine work on the thesis. The need to understand the nature of some specific phenomenon is the motivation for much research that has no immediate practical relevance, but there should, at the same time, be some need, importance or significance in knowing the results.

### **Amenable to research methods**

Your topic needs to be feasible both as to the availability of data and the availability of tools for analysis. Some research projects and research methods are beyond the capabilities of students because of technical, cost of time requirements.

### **Achievable in a reasonable time**

Typically, a Masters thesis should be capable of being completed in a one year and a Ph.D thesis within three years. A Masters thesis should normally be in the range of 20,000 - 40,000 words, or between 80 and 120 double spaced pages. A Ph.D thesis should normally be in the range of 50,000 - 100, 000 words. The nature of the subject may require you to exceed these typical ranges. Your supervisor will guide you on this.

### **Symmetry of potential outcomes**

A research project will typically have more than one potential outcome: a hypothesis may be proved, disproved or inconclusive. Any of the potential outcomes should be satisfactory in terms of the acceptability of the thesis topic. Avoid topics which are dependent for their success on a particular outcome.

### **Match with student's capabilities and interests**

The research topic should match both your interests and capabilities. This will sustain you in times of frustration and offset the possibility of entering areas in which you are less competent.

### **Attractive for funding**

The topic should be attractive for funding - if relevant. When acquiring funding for research, extreme care should be given to ensure total independence to pursue the research: in other words, to ensure that the funding in no way affects or biases the research design, methodology and conclusions.

### **Area for professional development**

Your thesis may often be only the beginning of research on a topic. Candidates can make their thesis a stepping-stone in their careers by selecting a topic that provides development in areas in which they hope to work.

## **Contribution of knowledge**

The definition of this concept is difficult. A Masters thesis does not have to make a significant contribution to knowledge. Thus it does not have to be entirely original, yet it should be based on a significant problem, research question or hypothesis. For example, you may replicate a study in a new geographical area, or with improved data and/or techniques. Your work should relate to, explain, solve or add proof to the question, problem or hypothesis. The results of your research should increase knowledge of that particular field of enquiry. Knowledge can be increased by: -

- New or improved evidence
- New or improved methodology
- New or improved analysis
- New or improved concepts of theories
- or any combination of the above

The Ph.D is recognition of successful research experience. The student must make a distinct contribution to knowledge, of fact and/or theory. Thus, for a doctorate, considerably more original work is required than for a Masters thesis.

## **Organising your thesis**

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Organise your material in a logical way. No set structure exists but the following arrangement will fit most studies except those using the interpretative paradigm.

### **1 Abstract**

Summarises what you have done and how you have done it as well as the main conclusions you have drawn.

### **2 Chapter 1: Introduction**

Lead the reader to a clear understanding of the broad objectives of your study. Be brief but interesting. Include a brief statement of your problem, question or hypotheses, your methodology, the importance of the research, the limitations and key assumptions and the contribution to knowledge. Briefly describe the lay-out of your thesis by mentioning what you will do in subsequent chapters.

### **3 Chapter 2: Significant Prior Research**

Present the theoretical foundations of your study, including a statement of your research paradigm. Critically review the literature that has a bearing on your problem and lead logically towards a statement of your research question. This part of your thesis need not be limited to one chapter and you can also separate purely theoretical issues from empirical research relating to the problem area. Move logically in the direction of a statement of your research question.

### **4 Chapter 3: The Research Question**

Give a comprehensive account of your research problem or question. Present your research model, and testable hypotheses or objectives. These hypotheses should be grounded in your literature study

and a brief rationale for each should be provided. This chapter may not be necessary if you have given a comprehensive account of your research problem at the end of chapter 2.

### **5 Chapter 4: Research Methods**

Provide a comprehensive account of your research methods and techniques you will employ. Give special attention (where appropriate) to your sample, measuring instruments and any statistical analyses that you will undertake.

### **6 Chapter 5: Research Results**

Describe your results and interpret them. Do not refer to other studies at this stage.

### **7 Chapter 6: Discussion of Results**

Discuss the outcomes of your study with reference to other relevant research and the underlying theoretical framework.

### **8 Chapter 7: Conclusions and Discussion**

Summarise your investigation and critically discuss your main findings, including limitations. Make recommendations and suggest areas for further research (if appropriate).

### **9 References**

### **10 Appendices**

## **Thesis Progress Report**

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**Name:** .....

**Supervisor:**.....

**Thesis title:**.....

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List major research activities since last progress report

Student's comments on progress and plans

signed ..... date .....

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**For Supervisor to complete**

Has the student made satisfactory progress since their last report? Yes/No

Is the student likely to complete by 30 November this year? Yes/No

Comments

signed ..... date .....

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**For Graduate Studies Committee to complete**

Is the committee satisfied with progress to date? Yes/No

If not, what action is recommended?

signed ..... date .....

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