

How to Write a Research Proposal

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How to write a research proposal

The following workshop is aimed at Honours students, however, students undertaking short research projects (eg Final Year Projects, Masters by Coursework Dissertations) may also find it useful. The workshop aims to:

- > Examine the role of research proposals in the research process
- Identify the key components of a UWA research proposal
- Clarify your thoughts regarding your research proposal
- Highlight the elements of an effective proposal

Following on from the last workshop ... Selecting a topic for research

Anderson and Poole (1998, p. 19) contend that the "selection of a suitable topic for a thesis or dissertation is in many ways the most difficult task".

Why do you think this may be?	

Consider these general criteria when choosing an Honours topic:

- word, time, space and cost limitations of your Honours project
- available supervision
- available resources such as equipment, sources, methodology, sites, experimental material
- your academic strengths (eg handling theory, primary resources, etc)
- familiarity with the area

Time is a critical element in choosing a suitable topic. Before making your final decision, scope the project and avoid those which cannot be realistically completed, analysed and written up well within the given timeframe. Then allow a comfortable margin for the unexpected.

Some issues to consider:

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- If your project requires fieldwork, what will it involve and how best can you fit it around your coursework? Where do you need to go, when is the best time, how long will it take, how much will it cost, what facilities do you need?
- If your project has an interview component you will need to plan ahead: who do you need to talk to, are they available to you, will you have to travel to talk to them, have you got ethics clearance? Some studies will require ethics clearance through the Research Integrity Office (http://www.research.uwa.edu.au/staff/rio) before the research proposal is submitted. Consult your supervisor to verify whether you need this clearance.
- If your work is mainly with **library and/or archival sources**, think about the availability and accessibility of the material you will require. Do you need to access archives (which, where, will you be allowed access, how do you request this)? Is the material available now or only sometime in the future? Does the material require translation?

Changing your topic later may not be possible. If working as part of a team, for example, it simply may not be feasible. Much may depend on your particular area and supervisor, the timing of your proposed change, and other factors. So think carefully before committing yourself to a particular project. Do some background reading on the topic and see what resources are available.

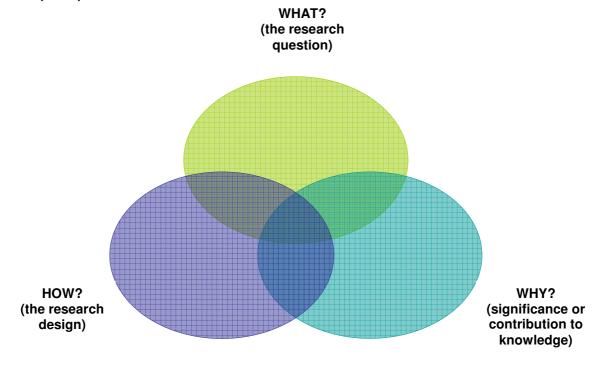
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Introduction: what is a proposal and why write one?

Some disciplines require their Honours students to produce a research proposal. A research proposal is a short document which, according to Punch 2006, p. 9), deals with:

- what the proposed research is about
- · what it is trying to find out or achieve
- how it will go about doing that
- · what we will learn from it and why that is worth learning

Research proposals have different purposes and particular disciplinary requirements. Most research proposals generally share a number of common elements including a title, aims of the research, literature review, methodology, resources, bibliography and so forth. Nevertheless, even before considering these elements (as we will do shortly) you should be aware that the research proposal is underpinned by three principal questions.



These questions *must* be addressed in your Research Proposal; they are the 'what, 'why' and 'how' of the research. The 'what' of your research refers to the particular problem which your thesis will address. The 'why' of your research sets forth the value or benefit your research will generate - this is often expressed in terms of its contribution to existing knowledge. The 'how' of your research simply refers to the methods you will use to gather, analyse and interpret your data. If you do not address these fundamental questions, then it is unlikely your Research Proposal will be approved.

Do you	ı see ar	ıy pitfalls,	•	aring a research disadvantages

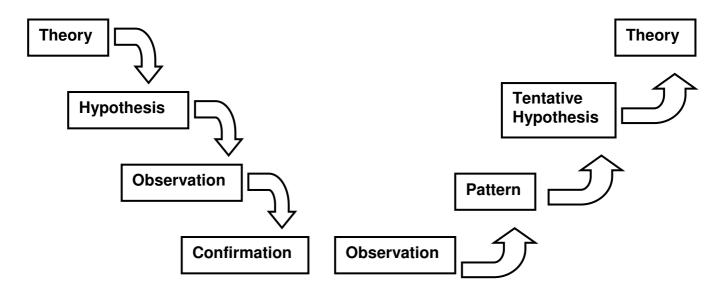
Developing your research question or hypothesis

In the early stages of research, many students find they are tempted to take too broad a view of the topic, to read too widely and to design overly ambitious experiments and surveys. Scoping your project should be an early task. You need to move from considering your Honours 'topic' to developing a 'research question' or 'hypothesis'. This involves intensive reading about the topic, considering what is already known, and what the gaps in knowledge about this issue are.

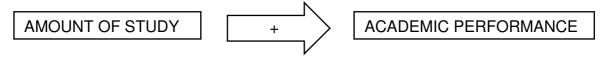
Part of the training experience of the Honours year is learning to identify a research question or hypothesis that can be handled within the time, word and energy constraints of an Honours thesis. This scoping of your project you will do, usually in consultation with your supervisor, in the early months as you gradually increase your understanding of the field you have chosen. It need not be fixed, for it will inevitably be transformed as you read and critique previous published work on your topic, and collect, analyse and interpret your own data. So it can be taken for granted that it will be constantly revised as you make new discoveries in your work.

A useful strategy for keeping your attention focused is to complete the following sentence:

The aim of my thesis is to...



An open-ended research question is different from a hypothesis. A hypothesis is a statement which asserts a causal relationship between concepts (or ideas). For instance, if we look at the example below we have identified one of the possible factors which might determine why 'some students get better marks than others'. We can diagram a simple hypothesis:



The arrow in this diagram indicates that one concept (amount of study) does something to the other concept (academic performance). The plus sign indicates that the relationship is a positive one, that is, the more of one will lead to the more of the other. The concept that does the causing is called the independent concept - it is the thing that acts upon something else. Given this, we are in a position to write a hypothesis to quide our research, for example:

The more a student studies, the better will be the student's academic performance.

On the other hand, an open-ended question is 'inductive' in the sense that it does not pre-empt a causal agent. Rather, in this sort of research (more common in the social sciences) answers to a research question emerge from the data.

Have you yet arrived at the point where you have formulated an open-ended research question or a hypothesis?

Writing a pre-proposal: getting your ideas together

Answer the following questions about your research project, and then discuss your answers with the person next to you. Seek feedback on the clarity of your ideas.

1.	What is your research topic / research question / hypothesis?
2.	What will you spend most your research doing?
3.	What is the importance or significance of the study? Why should anyone care about this?

4. 	How do you know your research project is worth doing?
5.	How do you propose to go about addressing your research question or hypothesis? What is your proposed methodology?
6.	What evidence can you provide in your research proposal that this project can be completed within the timeframe of your Honours year?

Guidelines for a UWA research proposal

At UWA, writing a research proposal for a PhD is different from writing a research proposal for a Masters, which is also different from writing a research proposal for an Honours project. As an Honours student, you may be required to produce a revised version of the Graduate Research School's *Guidelines for Preparing Research Proposals* (http://www.postgraduate.uwa.edu.au/students/policies/preparing)

Different areas also have different requirements and it is up to you to ensure that you are aware of the specific expectations in your discipline. Below are some possible headings that may be used in the outline of a research proposal. The order in which you present this information and what you choose to use/omit will be dependent on the specific nature of your study.

Using the examples provided, make notes on the type of information that may be useful for you to consider in your research proposal.

> Title

Title too ambiguous	An improved title
Organic matter in	How does the addition of organic matter alter
horticultural production	nitrogen cycling in commercial horticultural
	production in south-western Australia?
Wireless sensory networks	Formal techniques for design and analysis of
	reactive sensory networks for environmental
	monitoring
A study of cerebral palsy	A case-controlled study of cerebral palsy and
and perinatal death in	perinatal death in term and preterm infants in
Western Australia, 1980-	Western Australia, 1980 to 1995: how shared are
1995.	the causal pathways?
A performance analysis in	Quantifying the impact of the individual player
rugby union	and of team momentum in analysis of team
	performance in rugby union.

>	Introduction: area, topic and statement of purpose					

	Research questions: general to specific
> 	Conceptual framework, theory, hypotheses
> 	The literature
> 	Methodology
> 	Proposed timeline
_ ⊮ re	What other information may be useful to include in your search proposal?

NEW ONLINE RESOURCE: Honours Hub

- a message board where you can post anonymous questions/comments
- information on Honours skills workshops
- links to a variety of Honours-related resources

http://www.studentservices.uwa.edu.au/ss/learning/studying smarter/honours hub

Reference List

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Haq, K 2009, Writing Your Research Proposal (Science/Applied Science Stream), Graduate Research School, UWA, Available From: http://www.postgraduate.uwa.edu.au/students/resources/workshops/booklets [16 February 2011].

^{*} Available from the Learning Resource Area, 2nd Floor, Social Science South Building