



Introductions, conclusions, abstracts

Workshop materials

Materials available online at

<http://crawfordphd.wikispaces.com/Writing+your+thesis+introduction%2C+conclusion%2C+and+abstract>

The introduction

Source: Murison, Elizabeth and Carolyn Webb. 1991. "Writing a research paper". Writing Practice for University Students. Learning Assistance Centre: University of Sydney.

Content

The introduction typically answers the following questions:

1. What is the subject of the paper?
2. What is the area of interest and what have other researchers found?
3. How does the current research relate to previous research?
4. What is the research objective and what hypothesis or research question is being tested?

Staging

Introductions and conclusions are key points in a paper because first and last impressions matter. In terms of the introduction, remember that it is introducing your paper.

It should:

- establish/define any necessary terms/concepts/events/methods etc.
- establish your point of view i.e. your main points (what you are going to argue).
- orient your reader to what follows i.e. your main points, how you establish your response, the ideas and arguments to be developed.
- have a clear and comprehensive statement of your argument in relation to the set topic.

It should not:

- merely repeat the terms of the topic
- give too much general background – just enough to introduce the general area and the issue/problem/question etc.
- announce your intention to write a paper ('this paper will answer the question posed...').
- talk about your difficulty in coming to terms with the topic (unless there are legitimate academic reasons for doing so).

You may find it useful to think of an introduction as being constructed according to '4 moves':

Move	Notes	Sub-move
<p>Move 1: Introduce the field/context</p> <p>First you need to establish the area of research in which your work belongs, and to provide a context for the research problem. This has two main elements.</p>	<p>What is the field/context in which you are writing? Why is the topic important or interesting? You can introduce the field by:</p> <ul style="list-style-type: none"> • claiming centrality (why this field of study is important) <p>and/or</p> <ul style="list-style-type: none"> • moving from general to specific 	<p>Centrality. Claiming that the area of research is an important one, and therefore implying that the research done is also crucial.</p> <p>General to specific. Most writing starts with general information and then moves to specific information. This is true of introductions too. Think of "general" in terms of information which will help your reader understand the context of your research problem (rather than a complete history of your whole field of study!).</p>
<p>Move 2: Summarise previous research/what is currently understood</p> <p>Often the introduction will refer to work already done in the research area in order to provide background (and often also to help define the research problem).</p>	<p>Who has written on this topic? What have they found or argued? What is the current understanding of the topic?</p>	
<p>Move 3: Define a research problem</p>	<p>What is the issue/problem/controversy needing resolution? You can define a research problem by:</p>	<p>Indicating a gap. A research gap is an area where no or little research has been carried out. This is shown by outlining the work already done to show where there is</p>

<p>Your research must be new in some way.</p> <p>It must add knowledge to your field so you need to show in what way your work explores an area/issue/question that has previously not been explored, or not been explored in detail, in not explored in the way that you are going to use.</p> <p>In other words, you need to give a rationale for your work (i.e. show the reasons for doing it).</p> <p>There are four ways to demonstrate that you are adding to the knowledge in your field</p>	<ul style="list-style-type: none"> • indicating a gap • raising a question • continuing a previously developed line of inquiry • counter-claiming (disagreeing with an existing/accepted approach) <p>This move is often introduced by using a negative term such as "However", "Nevertheless", "Despite this" etc.</p>	<p>a gap in the research (which you will then fill with your research). Woodward claims his work acts as a "corrective" to the current research and debate.</p> <p>Raising a question. The research problem is defined by asking a question to which the answer is unknown, and which you will explore in your research.</p> <p>Continuing previous line of inquiry. Building on work already done, but taking it further (by using a new sample, extending the area studied, taking more factors into consideration, taking fewer factors into consideration, etc.).</p> <p>Counter-claiming: A conflicting claim, theory or method is put forward. Here, for example, the Woodward argues that studies in other branches of have not impacted greatly upon consumption studies, and that previous models are undeveloped.</p>
<p>Move 4: Introduce the present research</p> <p>Once the field and problem have been defined, it is time to introduce the present research.</p> <p>In other words, how will the research gap be filled? How will the question that was raised be answered?</p> <p>This last part of the introduction can also be used to show the benefits, to explain the objectives, to clarify the scope of the research, to announce what was found from doing the research and how it can be used.</p> <p>Notice that an introduction will discuss a number of the following points but is unlikely to cover them all.</p> <p>Hint: always give an overall objective before giving</p>	<p>What is your approach and line of argument with respect to the topic? Introduce the present research by:</p> <ul style="list-style-type: none"> • outlining purpose/setting objectives • and/or • announcing your methodology • and • announcing principal findings (results) • and • indicating the structure of the research • indicating the benefits of the current research. 	<p>Methodology. Important points about the methodology used are outlined, perhaps including the scope of the study. However, the methodology is not given in detail (since details are given in the methodology section).</p> <p>Principal findings (results). Researchers may indicate the kind of results they obtained, or an overall summary of their findings.</p> <p>Structure of the research. It is useful to outline the organization of the written up research that follows so that the reader has a clear idea of what is going to follow, and in what order.</p> <p>Indicating directions for further research. Research often opens up other areas where research could or should be done, so it is common for these areas to be defined in the introduction. It is also a way of indicating that the current study is not designed to be comprehensive.</p> <p>Indicating benefits of current research. Indicating the benefits of the research helps to justify why it was carried out and emphasizes the value of the study.</p>

specific objectives. This will help you explain much more clearly to your reader what your work aimed to accomplish		
---	--	--

The introduction of a thesis usually has additional components. As well as the 'four moves', the thesis introduction might also cover the following areas:

(Source: AIT Extension - Language Center, Asian Institute of Technology. 2003. Writing up research: introductions. <<http://www.languages.ait.ac.th/EL21INT.HTM#top>>. Accessed: 19 June 2003.)

Item	Questions raised
Background	What is the context of this problem? In what situation or environment can this problem be observed?
Rationale	Why is this research important? Who will benefit? Why do we need to know this? Why does this situation, method, model or piece of equipment need to be improved?
Problem statement	What is it we don't know? What is the gap in our knowledge this research will fill? What needs to be improved?
Objectives	What steps will the researcher take to try to fill this gap or improve the situation?
Scope	Is there any aspect of the problem the researcher will not discuss? Is the study limited to a specific geographical area or to only certain aspects of the situation?
Limitations	Is there any factor, condition or circumstance that prevents the researcher from achieving all her/his objectives?
Assumptions	In considering his/her method, model, formulation or approach, does the researcher take certain conditions, states, requirements for granted? Are there certain fundamental conditions or states the researcher takes to be true?

Assumptions In considering his/her method, model, formulation or approach, does the researcher take certain conditions, states, requirements for granted? Are there certain fundamental conditions or states the researcher takes to be true?

Notice that the introduction includes information that is presented in other parts of the thesis. Does this mean that if you indicate your results in your introduction, that you will have nothing left to present in your Results or Discussion section? No! Introductions literally "introduce" information to give an overview, often offering only a short summary because full details are given in later sections.

IN GENERAL

- No one length or format of introduction suits all projects.
- A key quotation may be used, but immediately draw out its significance in terms of your argument i.e. the reader must understand how/why you are using it.
- Most writers feel that they need to revise their introduction several times until it exactly reflects their argument and what they have discussed. Some write it first, others wait to see what they have written. Either way, it is probably not possible to have a really finished version until after the piece is written; after all, it is introducing the research and so you need to know what it is introducing.

Common problems

Source: AIT Extension - Language Center, Asian Institute of Technology. 2003. Writing up research: introductions. <<http://www.languages.ait.ac.th/EL21INT.HTM#top>>. Accessed: 19 June 2003.

- **Too much detail, and hence too long.** Remember, this is the introduction, a kind of overview. Although you will cover important points, detailed descriptions of method, study site and results will be in later sections. Look at the proportion of a research paper an introduction takes up. Notice it is comparatively short because it serves as a summary of what follows.
- **Repetition of words, phrases or ideas.** You will have keywords that are crucial to your study. However, your reader doesn't want to read them over and over! A high level of repetition makes your writing look careless. To reduce it, highlight repeated words or phrases - then you can easily judge if you are overusing them and find synonyms or pronouns to replace them.
- **Unclear problem definition.** Without a clear definition of your research problem, your reader is left with no clear idea of what you were studying. This means that they cannot judge your work's relevance to their own work, or its usefulness, quality, etc. As an exercise, you should be able to complete a sentence that starts, "The purpose of this study is . . ." that encapsulates the problem you are investigating. Of course you will not include this exact sentence in your thesis, but it serves as an easy way to check that you have a clearly defined problem. In your thesis you should be able to write your research problem in one sentence - you can add details in the sentences that follow. You should also ensure that your research problem matches the title of your thesis (you'd be surprised how many don't !) as well as its methodology and objectives.
- **Poor organization.** Writing an introduction that effectively introduces your research problem and encapsulates your study is not an easy task. Often when we write we discover gradually what we want to say and how we want to say it. Writing is often a process of discovery. Bear this in mind when you write your introduction, and be prepared to go back and make big changes to what you have written, and the order in which you have presented your ideas and information. Your introduction must have a logical sequence that your reader can follow easily. Some suggestions for how to organize your introduction are given below.

Common problems checklist

- Too long, too much detail

- Repetition of words, phrases or ideas
- Unclear problem definition
- Failure to reveal the complexities of a conclusion or situation

The conclusion

Source: AIT Extension - Language Center, Asian Institute of Technology. 2003. Writing up research: conclusions. <<http://www.languages.ait.ac.th/EL21CONC.HTM>>. Accessed: 5 August 2003.

The conclusion typically covers the following:

- What was learned (this usually comes first)
- What remains to be learned (directions for future research)
- The shortcomings of what was done (evaluation)
- The benefits, advantages, applications, etc. of the research (evaluation)
- Recommendations

Staging

Sources: Academic Skills and Learning Centre, Australian National University. n.d. How to write an essay. <<http://www.anu.edu.au/academicsskills/>>. Accessed: 29 April 2003; Murison, Elizabeth and Carolyn Webb. 1991. "Writing a research paper". Writing Practice for University Students. Learning Assistance Centre: University of Sydney.

Your conclusion should reflect on what you have established in your discussion without simply repeating your point of view. It should give the paper a sense of completeness by bringing the discussion to some resolution, reacquainting your reader with the central themes and referring back to your overall point of view on the topic.

The conclusion is your last word on the topic, and potentially it has great impact. You should:

- finish off in your own words rather than with a long quotation (do you really want your response to be ended by someone else's words?).
- sum up the entire paper (don't limit your conclusion to one or two points and not the whole paper).
- think about what you have found/concluded and relate it back to the field in which you are writing.

Remember you are writing something to conclude your paper. What might you do?

- reacquaint your reader with your response, perhaps remind them of your main points (in some sense summarising, but being selective).
- draw out the implications or significance or relevance or interest etc. of your response in relation to the field. Read your response and ask 'So what?'. Whatever you reply might be useful in your conclusion. This does not mean adding something new to your argument, but using your argument to say something (maybe tentatively) about the wider context (field) of the topic.

You may find it useful to think of a conclusion as being constructed according to '3 moves':

Move	Notes
Move 1: Making a generalisation	<ul style="list-style-type: none"> • by reviewing the argument and presenting the findings of the paper; • by coming to a firm judgement about the findings.
Move 2: Drawing Implications	<ul style="list-style-type: none"> • pointing out the implications – consequences, effects – of the findings;
Move 3: Looking to the future	<ul style="list-style-type: none"> • by making a prediction about what will happen in the future as a result of the findings (if they are true); or • by recommending directions for future research; or • recommending future action.

The conclusion of a thesis usually has additional components. As well as the 'three moves', the thesis conclusion might also cover the following areas:

- Shortcomings
- Benefits, advantages, applications etc of the current research
- Recommendations

Common problems

Source: AIT Extension - Language Center, Asian Institute of Technology. 2003. Writing up research: conclusions. <<http://www.languages.ait.ac.th/EL21CONC.HTM>>. Accessed: 5 August 2003.

- **Too long.** The conclusion section should be short. Often the conclusion section is as little as 2.5% of an entire piece of published research.
- **Too much detail.** Conclusions that are too long often have unnecessary detail. The conclusion section is not the place for details about your methodology or results. Although you should give a summary of what was learnt from your research, this summary should be short, since the emphasis in the conclusions section is on the implications, evaluations, etc. that you make.
- **Failure to comment on larger, more significant issues.** Whereas in the introduction your task was to move from general (your field) to specific (your research), in the concluding section your task is to move from specific (your research) back to general (your field, how your research will affect the world). In other words, in the conclusion you should put your research in context.
- **Failure to reveal the complexities of a conclusion or situation.** Negative aspects of your research should not be ignored. Problems, drawbacks etc. can be included in summary in your conclusion section as a way of qualifying your conclusions (i.e. pointing out the negative aspects, even if they are outweighed by the positive aspects).

- **Lack of a concise summary of what was learned.** In order to be able to discuss how your research fits back into your field of study (and the world at large) you need to summarize it very briefly. Often the summary is only a few sentences.
- **Failure to match the objectives of the research.** Often research objectives change while the research is being carried out. This is not a problem unless you forget to go back and rewrite your original objectives in your introduction so that they accurately reflect what you were trying to accomplish in your research (not what you thought you might accomplish when you began). Here is an example of an objective and conclusion that do not match:
 - Objective: The main objective of this study was to assess the impact of roadbuilding on villages on rural communities.
 - Conclusion: The model produced in this study can accurately predict the social and economic impact of road-building on villages in northern Laos.
If we rewrite the objective to match what we actually did (we developed a model), it will fit the conclusion:
Rewritten objective: The main objective of this study was to develop a model to predict the social and economic impact of road-building on rural communities.

Common problems checklist

- Too long
- Too much detail
- Failure to comment on larger, more significant issues
- Failure to reveal the complexities of a conclusion or situation
- Lack of a concise summary of what was learned
- Failure to match the objectives of the research

The abstract

Source: <http://www.uq.edu.au/student-services/phdwriting/phlink08.html>

Here we talk about the abstract as a finished product, a necessary part of your final submission, but we also talk about it as a useful working tool.

Most students regard the abstract as one of the last things - along with acknowledgements, title page and the like - that they are going to write. Indeed, the final version of the abstract will need to be written after you have finished reading your thesis for the last time.

However, if you think about what it has to contain, you realise that the abstract is really a mini thesis. Both have to answer the following specific questions:

- What was done?
- Why was it done?
- How was it done?
- What was found?
- What is the significance of the findings?

Therefore, an abstract written at different stages of your work will help you to carry a short version of your thesis in your head. This will focus your thinking on what it is you are really doing, help you to see the relevance of what you are currently working on within the bigger picture, and help to keep the links which will eventually unify your thesis.

Process

The actual process of writing an abstract will force you to justify and clearly state your aims, to show how your methodology fits the aims, to highlight the major findings and to determine the significance of what you have done. The beauty of it is that you can talk about this in very short paragraphs and see if the whole works. But when you do all of these things in separate chapters you can easily lose the thread or not make it explicit enough.

If you have trouble writing an abstract at these different stages, then this could show that the parts with which you are having a problem are not well conceptualised yet.

We often hear that writing an abstract can't be done until the results are known and analysed. But the point we are stressing is that it is a working tool that will help to get you there.

Before you know what you've found, you have to have some expectation of what you are going to find as this expectation is part of what is leading you to investigate the problem. In writing your abstract at different stages, any part you haven't done you could word as a prediction. For example, at one stage you could write, "The analysis is expected to show that ...". Then, at the next stage, you would be able to write "The analysis showed that" or "Contrary to expectation, the analysis showed that".

The final, finished abstract has to be as good as you can make it. It is the first thing your reader will turn to and therefore controls what the first impression of your work will be. The abstract has

- to be short-no more than about 700 words;
- to say what was done and why, how it was done, the major things that were found, and what is the significance of the findings (remembering that the thesis could have contributed to methodology and theory as well).

In short, the abstract has to be able to stand alone and be understood separately from the thesis itself.