**Report Writing**

* [Summary of this page](http://www.canberra.edu.au/studyskills/writing/reports#Summary)
* [Introduction](http://www.canberra.edu.au/studyskills/writing/reports#Intro)
* [Difference between essays and reports](http://www.canberra.edu.au/studyskills/writing/reports#difference)
* [Structure of a report](http://www.canberra.edu.au/studyskills/writing/reports#structure)
* [Presentation of a report](http://www.canberra.edu.au/studyskills/writing/reports#Presentation)
* [Common problems](http://www.canberra.edu.au/studyskills/writing/reports#problems)
* [Links to other sites](http://www.canberra.edu.au/studyskills/writing/reports#links)

**Summary of this page**

Report writing is an essential skill for professionals.

A report aims to inform, as clearly and succinctly as possible.

Below we give some general guidelines, but you should check with your lecturer for more detail on what is expected.

A report is similar to an essay in that both need:

* formal style
* introduction, body and conclusion
* analytical thinking
* careful proof-reading and neat presentation

A report differs from an essay in that a report:

* presents information, not an argument
* is meant to be scanned quickly by the reader
* uses numbered headings and sub-headings
* uses short, concise paragraphs and dot-points where applicable
* uses graphics wherever possible (tables, graphs, illustrations)
* may need an abstract (sometimes called an executive summary)
* does not always need references and bibliography
* is often followed by recommendations and/or appendices

A report should generally include the following sections.

(Sections marked with an asterisk (\*) are essential: others are optional depending on the type, length and purpose of the report.)

* Letter of transmittal
* Title page\*
* Table of contents
* List of abbreviations and/or glossary
* Executive summary/abstract
* Introduction\*
* Body\*
* Conclusion\*
* Recommendations
* Bibliography
* Appendices

Presentation and style are important. First impressions count, so consider these simple tips:

* use plenty of white space
* ensure the separate parts of your report stand out clearly
* use subheadings
* allow generous spacing between the elements of your report
* use dot points/ numbers/ letters to articulate these elements
* use tables and figures (graphs, illustrations, maps etc) for clarification.
* number each page
* use consistent and appropriate formatting
* use formal language

Avoid these:

* the inclusion of careless, inaccurate, or conflicting data
* the inclusion of outdated or irrelevant data
* facts and opinions that are not separated
* unsupported conclusions and recommendations
* careless presentation and proof-reading
* too much emphasis on appearance and not enough on content.

**End of Summary**

**Introduction**

Report writing is an essential skill for professionals in almost every field: accountants, teachers, graphic designers, information scientists (the list goes on). That’s one of the reasons why your lecturers will almost certainly require you to write reports during your period of study at the University of Canberra.

A report aims to inform, as clearly and succinctly as possible. It should be easy to read, and professional in its presentation.

Exactly what you include in your report and how you present it will vary according to your discipline and the specific purpose of the report. Here we give some general guidelines, but you should check with your lecturer for more detail on what is expected.

**Reports and essays—what’s the difference?**

A common problem is that students transfer what they have learned about essay writing to report writing.

Both essays and reports need:

* formal style
* careful proof-reading and neat presentation
* introduction, body and conclusion
* analytical thinking

But there are some essential differences between the two.

|  |  |
| --- | --- |
| **A Report** | **An Essay** |
| Presents information | Presents an argument |
| Is meant to be scanned quickly by the reader | Is meant to be read carefully |
| Uses numbered headings and sub-headings | Uses minimal sub-headings, if any. |
| May not need references and bibliography/reference list | Always needs references and bibliography/reference list |
| Uses short, concise paragraphs and dot-points where applicable | Links ideas into cohesive paragraphs, rather than breaking them down into a list of dot-points |
| Uses graphics wherever possible (tables, graphs, illustrations) | Rarely uses graphics |
| May need an abstract (sometimes called an executive summary) | Will only need an abstract if it is very long, or if your lecturer asks for one specifically |
| May be followed by recommendations and/or appendices | Seldom has recommendations or appendices |

**Report structure**

What follows is a generic structure for reports. Using this structure will help to give your report the correct level of formality; it will also help to ensure that you do not leave out anything important. However, the actual structure required by your discipline may not be exactly what is represented here - you should check with your lecturer.

A report should generally include the following sections.

(Sections marked with an asterisk (\*) are essential: others are optional depending on the type, length and purpose of the report.)

* [Letter of transmittal](http://www.canberra.edu.au/studyskills/writing/reports#transmittal)
* [Title page\*](http://www.canberra.edu.au/studyskills/writing/reports#Titlepage)
* [Table of contents](http://www.canberra.edu.au/studyskills/writing/reports#Contents)
* [List of abbreviations and/or glossary](http://www.canberra.edu.au/studyskills/writing/reports#Abbreviations)
* [Executive summary/abstract](http://www.canberra.edu.au/studyskills/writing/reports#Abstract)
* [Introduction\*](http://www.canberra.edu.au/studyskills/writing/reports#Introduction)
* [Body\*](http://www.canberra.edu.au/studyskills/writing/reports#Body)
* [Conclusion\*](http://www.canberra.edu.au/studyskills/writing/reports#Conclusion)
* [Recommendations](http://www.canberra.edu.au/studyskills/writing/reports#Recommendations)
* [Bibliography](http://www.canberra.edu.au/studyskills/writing/reports#Bibliography)
* [Appendices](http://www.canberra.edu.au/studyskills/writing/reports#Appendices)

**Letter of transmittal**

(only if specified by your lecturer)

This is a letter to the person who commissioned the report, in which you effectively hand over your work to that person. Include:

* a salutation (eg. Dear Ms Podolinsky)
* the purpose of the letter (eg. Here is the final version of the report on ‘Underwater Welding’ which was commissioned by your organisation.)
* the main finding of the report
* any important considerations
* an acknowledgement of any significant help
* an expression of pleasure or gratitude (eg. Thank you for giving us the opportunity to work on this report.)

**Title page**

This must contain:

* the report title which clearly states the purpose of the report
* full details of the person(s) for whom the report was prepared
* full details of the person(s) who prepared the report
* the date of the presentation of the report

**Table of Contents**

(usually only if the report is longer than, say, ten pages)

This is a list of the headings and appendices of the report. Depending on the complexity and length of the report, you could list tables, figures and appendices separately. Make sure the correct page numbers are shown opposite the contents. Up-to-date word processing packages can generate a table of contents for you.

**Abbreviations and/or glossary**

If necessary, you should provide an alphabetical list of the abbreviations you have used in the report, especially if they may not be familiar to all readers of the report.

If you have used a lot of technical terms, you should also provide a glossary (an alphabetical list of the terms, with brief explanations of their meanings).

**Acknowledgements (if appropriate)**

This is a short paragraph thanking any person or organisation which gave you help in collecting data or preparing the report.

**Abstract (Summary or Executive Summary)**

An abstract is quite different from an introduction. It is a summary of the report, in which you include one sentence (or so) for every main section of your report. For example, you can include:

* the context of the research
* the purpose of the report
* the major findings (you may need several sentences here)
* the conclusions
* the main recommendations

Write the abstract after you have written the report.

**Introduction**

* Give enough background information to provide a context for the report.
* State the purpose of the report.
* Clarify key terms and indicate the scope of the report (ie what the report will cover).

**Body**

The content of the body depends on the purpose of the report, and whether it is a report of primary or secondary research.

A report of *primary research* (based on your own observations and experiments) would include:

* Literature review (what other people have written about this topic. See our webpage for hints on writing a [literature review](http://www.canberra.edu.au/studyskills/writing/literature)). The literature review should lead towards your research question.
* Method (summarises what you did and why). Use the past tense.
* Findings or results (describes what you discovered, observed, etc, in your observations and experiements). Use the past tense.
* Discussion (discusses and explains your findings and relates them to previous research). Use the present tense to make generalisations.

A report of *secondary research* (based on reading only) would include:

* Information organised under appropriate topics with sub-headings. It is unlikely that your report will discuss each source separately. You need to synthesise material from different sources under topic headings.
* Analysis/discussion of the sources you are reporting.

**Conclusion**

Sum up the main points of the report. The conclusion should clearly relate to the objectives of your report. No surprises please! (that is, don’t include new information here.)

Recommendations (if appropriate)

These are suggestions for future action. They must be logically derived from the body of your report.

**Bibliography**

(See our page on Using References for more information).

**Appendices**

An appendix contains material which is too detailed, technical, or complex to include in the body of the report (for example, specifications, a questionnaire, or a long complex table of figures), but which is referred to in the report. Appendices are put at the very end of the report, after everything else. Each appendix should contain different material. Number each appendix clearly.

**Presentation of the report**

The content and structure of your report is important; so is the presentation and style. First impressions count, so consider these simple tips to ensure your report is reader-friendly:

* use plenty of white space
* ensure the separate parts of your report stand out clearly
* use subheadings
* allow generous spacing between the elements of your report
* use dot points/ numbers/ letters to articulate these elements
* use tables and figures (graphs, illustrations, maps etc) for clarification. Label them clearly and cite the source. These graphics should relate to the text of your report; for example, *Figure 1 shows that the population of Bandung has increased dramatically since 1890*, or *The population of Bandung has increased dramatically since 1890 (see Figure 1).*
* number each page (a neat header and/or footer makes your work look more professional)
* use consistent and appropriate formatting (you may like to follow the report format supplied with your word processing package)
* use formal language. It would be worth having a look at the language which is used in other, similar reports to check out useful expressions and terms.

**Common problems**

Some common problems with research report writing that you should take care to avoid are:

* the inclusion of careless, inaccurate, or conflicting
* the inclusion of outdated or irrelevant data
* facts and opinions that are not separated
* unsupported conclusions and recommendations
* careless presentation and proof-reading
* too much emphasis on appearance and not enough attention to solid content.

**Links to other sites**

* [Advice about writing a Report](http://www.mdx.ac.uk/www/study/reports.htm) - Middlesex University
* [Report Writing](http://startup.curtin.edu.au/study/writing/report.html) - Curtin University

# Sample Science Report

Assignment: Explain how the scientific method works.

        The scientific method is fundamental to successful experimentation. It consists of four main stages: observation, hypothesis, experimentation, and analysis. A successful scientific endeavor covers each of these stages thoroughly.

        Observation consists of noticing a phenomenon, asking questions about it, and researching what is known about the phenomenon. For example, you might notice that two objects of the same dimensions fall at the same rate. A question this might raise is whether the mass of these objects affects how quickly they fall. You can then look for information from previous experiments or equations that seek to explain the phenomenon.

        After you’re done observing, you move on to hypothesizing. A hypothesis is an educated guess about the phenomenon. After doing research on falling objects and deriving equations about them, you might hypothesize that objects of the same dimensions will fall at the same rate regardless of mass because the same forces are acting on each object.

        Once the hypothesis has been formed, you can move onto experimentation. A good experiment will have a control, or a result against which other results can be gauged. For this experiment, it could be falling objects of the same dimensions and same mass. The variable group, which is compared to the control group, could include falling objects of the same dimensions and variable masses. The results of these experiments would then be recorded accurately in pen so they cannot be changed to better suit the hypothesis.

        When the experiment is over, the data is analyzed. If the data correlates to the hypothesis, the hypothesis is considered to be supported. If it doesn’t, the hypothesis can be considered disproved. Either way, the analysis is generally published as a scientific report, which is then subject to critique by the experimenter’s peers. Ideally, the experiment is then repeated to determine if the results are the same every time.

        To be successful in science, the scientific method should be used for all experiments. The experimenter should observe, hypothesize, experiment, and analyze to retain accuracy. When the scientific method is employed, the results should speak for themselves.