Sections of a Technical Report

**Title Page:** The following is an example template of a title page:

(Arial 16 point bold)

La Trobe University  
Department of.....

(Ariel 20 point bold)

Title of  
Your Report

Arial 16 point bold)

Your name(s)

Student ID number(s)

Lecturer: XXX XXXXX

(Arial 12 point)

A report submitted in partial  
fulfilment of the requirements  
of the unit XXX1XX  
in the Bachelor of XXX  
La Trobe University, Campus  
Month, year
Summary (also known as the ‘abstract’)

This section contains the following elements:

- **background and purpose** – what the report is about in 1-2 sentences
- a **summary** of the main information contained in the report (this will vary depending on the nature and purpose of the report)
- the **main conclusions** (e.g. recommendations, outcomes of a project).

In your summary, you should not refer to specific figures or include references. The length of the summary will vary depending on the total number of words required in the report. For a first year report, the summary would usually be approximately 100 - 300 words, but you should check the requirements for particular subjects.

**Example**

<table>
<thead>
<tr>
<th>Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>This report compares two different methods of microprocessor cooling that are not yet available on the market. The constant increase in the need for faster processors has resulted in processors with much higher power consumption and higher consequent heat outputs. Reducing the heat outputs will increase the reliability and optimal performance of microprocessors. The two methods which will be reviewed in this report are the use of a sintered copper porous insert in a water block and the use of nanofluids as cooling liquids. The results of the comparison indicated that using the copper insert greatly increased the thermal resistance and the nanofluids cooling liquid increased the heat transfer coefficient by as much as 40%.</td>
</tr>
</tbody>
</table>

| Background & purpose |
| Summary of main info |
| Main conclusions |

**Acknowledgements**

This is the section where you can acknowledge anyone who helped with a project or a report. It may not be necessary to include this section in a first year technical report. Check the requirements for specific tasks.

**Table of Contents**

The table of contents (TOC) lists all of the sections in your report and includes the section numbers and the page numbers. It is written on a separate page. It is important that your TOC is formatted correctly. Using the automatic TOC function in Microsoft Word will assist you with correct formatting. The following example of a TOC should give you an idea.
Glossary of terms

It may be useful to include a glossary of terms if you have a large number of technical terms in your report.

Example

### Glossary of terms

**Amplitude** – in an oscillating system, the amplitude is a measure of the maximum extent of oscillation

**Diffraction** – the spreading of a beam of light or other wave system as a result of passage through a narrow aperture

**Hologram** – a three dimensional image produced by illumination of a photographic interference pattern

**Optical paths** – the path taken by light in an optical system

**Uniform planes** – multiple planes which have no variation in form
**Introduction**

The Introduction of a technical report usually includes the following:

- The background or context for the task. This often includes an outline of the problem being investigated. You **must include in-text references** in this section.
- A statement of the purpose of your report. For example,
  - to evaluate several approaches to...
  - to examine the use of ... for the purpose of ...
  - to present the design of a ... that can...
- An outline of what is in the report and what is not (the scope of the report)
- The methods used and/or sources used to compile the report (this may not be necessary for all technical reports)

The introduction should start with more general information and gradually become more specific. This can be represented as a funnel shape.

**Example 1** (when you have not designed/created something new)

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1.0 Introduction

Since they were first used in the 1930s, particle accelerators have grown in size, capability and function (Freudenrich, 2009). While some of the larger accelerators are used to delve more deeply into the origins of the universe, the majority are used in industry for more practical purposes (Wilson, 2001). These smaller accelerators can be found in a range of industries, including health science, where they are used for diagnosis, and materials science, where they are used in the analysis of the structure and properties of materials (Hellborg, 2005). This report starts with a brief history of particle accelerators. It then examines the range of uses of particle accelerators and their benefits to the scientific and wider community. It does not aim to give the reader a complete understanding of the complex physical and mathematical concepts that underpin the design and operation of particle accelerators. Rather, it is intended to present the reader with a basic conceptual overview of particle accelerators and their benefits to society. Information for the report was sourced from journal articles, books and technical reports published online.
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Example 2 (when you have designed/created something new)

1.0 Introduction

Maintaining sterility and effectively decontaminating food and packaging is a very important aspect of the food processing industry. Research in different institutions around the world has led to the finding that cold plasma can be used as an agent for decontamination. Because the plasma is ‘cold’ (around 40°C) the food and packaging are not in danger of being destroyed by heat (Hazeltine, 2004). Since the plasma can be composed of inert gases, it is safer than the chemicals currently used for decontamination (Sturrock, 2004).

Whilst equipment for generating cold plasma already exists, it appears that tools for performing real time diagnostics of cold plasma are not readily available. Real time diagnostics are essential both as a control measure in the food processing industry and to further research into the behaviour of cold plasma. Thus, the aim of this project is to prototype a real time diagnostic tool for cold plasma which samples voltage fluctuations in the plasma. The first section of this report will provide a detailed practical and theoretical basis for the project. The design of a system to meet the project requirements will then be presented in detail. Following this, the implementation and verification of both software and hardware aspects of the system will be described along with a discussion of problems, solutions and suggestions for further improvement. An analysis of data collected using the system and a comparison with data collected using other equipment will provide part of the basis for determining the usefulness of the prototype. Finally, a system level evaluation will provide insight into the strengths and weaknesses of the project as a whole along with suggestions for future development.

Body

The body of the report contains logically ordered sections with appropriate headings and sub-headings. In larger sections, you will need to organise your ideas into paragraphs. All ideas that you have taken from sources such as books, journal articles or websites must be paraphrased and referenced (see section 3 of this guide). Lists with dot points may be used within the body of the text if it makes the information easier to understand. Most of the information, however, will be in paragraphs. Tables and figures, such as diagrams, photographs and graphs can be used to present information clearly (make sure they are formatted correctly). If your report is based on a project which resulted in some original work, the body of the report would outline the research methodology, present the findings, and analyse and discuss these findings.
Conclusion

The first sentence should answer the purpose which was stated in the introduction and then present a summary of the main findings. It may also be appropriate to include suggestions or recommendations based on these findings. This is particularly relevant if the report involves a project where something new was designed or created.

Example

4.0 Conclusion

This report has evaluated the effectiveness of the use of a porous sintered copper insert and nanofluid cooling liquid for cooling microprocessors. It was found that both methods of cooling increase the heat transfer from the heat sink to similar degrees. It is likely that both of these products will be available on the market in the near future due to their high effectiveness and low production cost.

Reference List

At the end of your report, you need to list the references that you cited throughout the text of your report. This also includes references for figures and tables. If you are required to use a different referencing style from APA (as described in this guide in Chapter 5), you will need to ask your lecturer, tutor or demonstrator for the referencing guidelines for that style.

Example

5.0 References


Appendix (‘Appendices’ if you have more than one)

The appendix is where you put information that is too detailed to go in the main body of the report. The types of material that go in the appendix include raw (uncollated) data, calculations and detailed drawings.