Getting Started with Report Writing

# Introduction

Reports come in many forms and formats; the ability to write clear and well-structured reports is often a requirement at university and throughout our careers.

This resource will give you a brief introduction to producing a written report; exploring typical conventions and considerations that you must bear in mind.

# What is a report?

The most important thing to remember when producing a report is: a report is not an essay.

Reports and essays share some similarities, but they have many differences.

* Before you begin considering your report, ensure you are clear about what you are being asked to do.
* Before you begin writing, you should have identified the task being asked of you and the type of report required.

## Reports vs Essays: Similarities

* Essays and reports both have core points that need to be explored and explained.
* Both should include an introduction and a conclusion.
* Both should have a considered, well organised structure.
* Language used in both should be tailored to the desired/target audience.

## Reports vs Essays – Differences

* Reports are broken up into sections. Usually each section will have its own sub-headings, and may include diagrams, graphics and tables. Essays are traditionally long flowing text without any subheadings.
* Reports have stated aims that the report will fulfil. A report will say something new and worthwhile and will demonstrate the significance of the findings. An essay can often allow the author more opportunity to develop and expand on ideas and concepts.
* Reports can in some instance be presented orally; you usually would be expected to submit a written report as well.
* Reports are based on events and facts; essays allow the exploration of hypothetical scenarios.
* Essays only tend to include graphics and diagrams in appendices, reports can include relevant diagrams throughout.

# Report writing – Typical conventions

Reports have several conventions which make them different from other pieces of academic work.

A report will:

* have aims which are clearly highlighted.
* fulfil its aims.
* say something worthwhile; highlighting something new and hopefully interesting.
* detail the significance of its findings; analysing how they relate to the aims.

# Purpose

When writing any report, you need to consider the reasons you are writing it and the audience you are writing it for. Technical reports are a means of communicating technical information to a particular audience – perhaps describing a process to project team members, or to make technical recommendations to team managers.

Technical report assignments are often used to assess a student’s ability to clearly communicate information in their subject in a format used in real world situations.

Technical reports use a number of different ways to present information. The best format to use will depend on the information you are trying to communicate and the audience you are trying to communicate to.

Text will likely make up most of your report, including the discussion and analysis you provide, but might not be the best way to communicate information.

Figures (tables, charts or graps, and images or diagrams) can be used to present certain types of information more effectively. When using figures in your report, you should ask yourself why you are doing so – it shouldn’t be to make the report look nicer/longer!

Any figure should have a **clear purpose** and help you to **communicate your ideas** to your reader. You should also use text to explain the importance of the information included in any figures.

This might be an **analysis of the data** contained in a table or the importance of the differences shown on a graph.

## Tables

Tables will allow you to present large amounts of information more clearly than in the main body of text. This might be in the form of your own research or drawing together information from a number of sources for comparison.

To make the table most effective, you should carefully consider the information you include.

When presenting your own data, you may wish to only include a section, presenting the full ‘raw data’ as an appendix.

## Charts and graphs

Charts are used to present a graphical presentation of the data. There are many types of chart or graph and you should consider which type is best to use to present your data.

You should also think about whether the data would be better presented in a table or as more than one graph. For example, if you are showing a comparison of a set of variables, the data may be better presented as a table.

## Images and diagrams

When explaining a complex idea, you may find it useful to include an image or diagram.

This could be a photograph presented with labels to show key features, or a process diagram to illustrate the stages in a workflow.

# Structuring your report

Reports are well structures, making use of section titles and subheadings.

This section will explore a typical report structure detailing what each section is.

## Choosing your headings and structure

When you begin to plan the structure of your report it is important that you consider your headings carefully, this will ensure your report flows and makes sense.

Don’t just copy the example headings you can see in this resource; they are a suggestion to get you started. Look at your course or assessment handbook (to see if a structure is prescribed) or look at existing reports in your field and see what headings they use.

Ensure you choose the headings which fit the form of your project the best.

## A typical report structure

A report contains numbered headings and sections which help the reader to find the information they require.

Each of these sections serves a particular purpose. Although the structure may differ slightly depending on the brief you have been given, a report will usually contain some or all of the following sections.

### Title page:

This section contains the title of the report and the author’s name, along with any other required details such as ID number, course name, and date of submission. The title should make clear what the report is about and the title page is an opportunity to demonstrate professionalism.

### Summary:

This section gives an overview of the whole report and is not an introduction. It should be possible for a reader to understand the key information contained within the report from reading the summary. It is worth spending time getting your summary right. It is the first impression the reader gets of your project and gives an indication of quality of the whole project.

### Contents:

To assist the reader in finding information quickly, the table of contents should show the numbered section headings and subheadings, and the page number on which they can be found.

### Introduction:

The introduction provides an outline of the reason for writing the report and an overview of the information required to understand it. This might be the particular problem the report is addressing or a background of the general topic. The introduction may also include the aims and scope of the report. Note any technical background (if any) to understand the report.

### Body:

This is the main part of the report and would be split into multiple sections. It may contain the methods you used in carrying out your research, the results you found, and an analysis or discussion of these findings. Ensure that your sections flow effectively allowing the reader to follow the development of your work, and that the section headings you choose are informative.

### Conclusion:

This section presents the end of the piece of work or research and should summarise your key findings and their significance. Your concluding comments should directly relate to the aims you set out in your introduction and whether you have met them. It may also inform the reader of future research which could be carried out in this area.

### Recommendations:

Your recommendations are distinct from your conclusions in that they suggest a definite course of action to be taken. The recommendations should provide suitable solutions to the problems in the report addressed.

### References:

This allows the reader to follow up and find information from the sources you have used in your report. This section contains the full references for any sources you have cited within the report, including tables and figures. If you need help with referencing, take a look at the [Referencing subject guide](https://subjects.library.manchester.ac.uk/referencing-new), our online resource “[Referring to Other People’s Ideas in Your Work](https://www.education.library.manchester.ac.uk/mle/referring-to-other-peoples-ideas-in-your-work/#/),” or book onto one of our [Referencing workshops](https://www.library.manchester.ac.uk/training/my-learning-essentials/workshops/?tags%5b%5d=Referencing).

### Appendices:

This section contains any further information which was too detailed to be contained in the body of the report and to which you may have made reference, such as raw data.

# Writing the introduction

After you have considered and planned the structure of your report it is time to begin writing. When you are writing you need to ensure that you are being clear and concise.

This section will give you tips on report writing and give guidance on the use of visual aids.

# Considerations when writing…

Each report is unique and may contain different elements. Read the tips below to get more advice on report writing.

## Sections

A report must be structured using sections. Each section should be focused and structured in a logical way.

## Factual

A report should be a factual description of research or events accompanied by analysis.

## Account

Reports should make an account of the results, outcomes, significance or implications of your research.

## Past tense

Reports are almost exclusively written in the past tense.

## Audience

When writing, you should always consider your target audience and tailor your writing accordingly.

## Discourse level

Does the level of writing make sense and follow logically?

## Grammar and spelling

Like any piece of work, you must ensure your spelling and grammar are correct.

## Plagiarism

You should ensure your work is not plagiarised and that you have a complete reference list.

## Facts

Reports are designed to give facts and grounded opinions, ensure your work is objective.

# Using visual aids

Graphs, charts, illustrations and other visual aids can make your information easier to understand and can aid the analysis of data.

Visual aids must only be used if they add to analysis or understanding, if they serve no purpose they should be removed.

Visual aids should not detract from your written work and should not replicate text.

# Language

In all of our writing, in order to **communicate our ideas** clearly to our audience we use appropriate language. This is especially important when **writing technical reports**.

The subject of a technical report might be complicated; we use **appropriate language** to explain these ideas clearly.

## What is the ‘active voice’?

The active voice emphasises the person or thing performing an act, rather than the person or thing receiving it.

So…

“The active voice is preferred by readers of technical reports”

Becomes…

“Readers of technical reports prefer the active voice”

By using the active voice, we identify the performer of an act, making this clear to our reader. In the next activity you can practice changing a sentence to the active voice.

You can try rewriting these sentences in the active voice. Our suggested re-writes are below.

1. “The tensile strength of the material was measured by engineers.”
2. “Open protocol is used by closed systems to communicate between controllers.”
3. “The tensile strength of the material was measured by engineers.”

Becomes: “Engineers measured the tensile strength of the material.”

Remember the ‘Engineer’ is the performer and the ‘materials’ is the ‘receiver’.

1. “Open protocol is used by closed systems to communicate between controllers.”

Becomes: “Closed systems use open protocol to communicate between controllers.”

Remember the ‘Closed system’ is the performer and the ‘open protocol’ is the ‘receiver’.

## What’s a colloquialism?

A colloquialism is a word or phrase which is not formal language.

This includes the informal language we may use when speaking with friends, as well as phrases that express something other than their literal meaning.

### For example:

“It’s raining cats and dogs” means something like “It is raining heavily”.

You can try rewriting sentences removing any colloquialisms. Our suggested re-writes are below.

1. “The fund holders have been penny pinching with their release of capital.”
2. “That ain’t gonna happen.”
3. “The fund holders have been penny pinching with their release of capital.”

Becomes: “The fund holders have been reluctant with their release of capital”

1. “That ain’t gonna happen.”

Becomes: “That is not going to happen.”

## What is technical language?

Technical language is the **words and phrases** connected with a **specific field.**

These words and phrases are known and understood by **experts and practitioners** in that field but not by the wider population.

When writing a technical report we cannot avoid the use of technical language but **by thinking carefully about our audience** we can ensure that our ideas are understood.

There are a number of things that we can do to help our readers with technical language.

### Abbreviations

We use abbreviations to save time, space, and effort. Our audience may instinctively understand a concept from its abbreviation. To ensure that we are being understood it is good practice to write out the abbreviated term in full on the first instance of its use, with its abbreviation in brackets:

“Cold rolled steel (CRS) is frequently used in the construction industry.”:

### Jargon

The difference between ‘jargon’ and ‘technical language’ can be difficult to determine. To avoid our use of technical terms being seen as ‘jargon’ we need to understand our audience. If we are writing for a general audience we should explain the meaning of technical terms to avoid confusion.

We can also avoid the use of ‘jargon’ by using plain English to explain a concept when possible, rather than using the technical term.

# Referencing

As with any other form of academic writing, it is important to acknowledge the sources referred to in your writing.

In this section we will look at referencing some source types you may not have seen before, and how to properly label and reference figures.

For more on referencing please see our [‘Citing it right: introducing referencing’](https://www.escholar.manchester.ac.uk/learning-objects/mle/referring-to-other-peoples-ideas-in-your-work/#/) resource and [referencing guide](https://subjects.library.manchester.ac.uk/referencing).

## Referencing styles

There are many different referencing styles and you must ensure that you are following the appropriate style when submitting your work. Commonly used styles at the university of Manchester include: Harvard, APA and Vancouver. You should always check with your tutor to be sure that you are using the correct guidelines as expected by your school.

## What is referencing?

There are two parts to a reference: a citation within your writing, and an entry in your reference list with the full details of the source.

### Citation

A citation should appear in your text whenever you refer to the ideas or work of another author. Exactly how this looks will depend on the referencing style that you use, but it often will be the author’s name and year of publication in brackets at the end of a sentence, e.g.:

“The Cynefin framework allows leaders to see things from new viewpoints (Snowden and Boone, 2007)”

### Reference list

A reference list is a complete listing of all the books, journal articles, websites and other sources that you have referred to in a piece of work. As with a citation, exactly how each entry in a reference list is formatted will depened on the style you are using, but they tend to include the same information, e.g.

“Snowden, D.J. & Boone, M. E. (2007). ‘A Leader’s Framework for Decision Making’, *Harvard Business Review,* 85 (11), pp. 68-76.

## Referencing and figures

In the ‘Purpose’ section, we looked at how we should **only include figures where they help us to communicate our ideas** more clearly.

Now we will look at how these **figures should be referenced** and labelled to help our readers get the most out of them.

Figures that we have taken from other sources must be referenced. All figures, whether our own or taken from other sources, should be labelled.

### Figures created by author

If you create a figure by yourself, such as a graph showing your data, you do not need to reference it. You should still label the figure.

### Figures taken from another source

If you are taking a figure from another source, such as a diagram from a textbook, you need to reference and label it.

**Note**: If you create a figure with information from multiple sources, such as a table collating the data from multiple studies, you need to reference all sources.

# Summary

Reports are a factual record of your own research and work. All reports are different but will follow the key conventions which we have explored in this resource.

Treat a report like any other piece of academic work and maintain the same high standards of writing, referencing and academic practice.

Remember some reports such as lab reports or technical reports are more specialised and have their own subset of conventions which you should be aware of.