By the end of this section you should be able to:

- Understand the purposes of a report
- Plan a report
- Understand the structure of a report
- Collect information for your report
- Organise your information
- Use an appropriate style of writing
- Present data effectively
- Understand how to lay out your information in an appropriate way
Writing reports

A report is a statement of the results of an investigation or of any matter on which definite information is required. (Oxford English Dictionary)

Reports are a highly structured form of writing often following conventions that have been laid down to produce a common format. Structure and convention in written reports stress the process by which the information was gathered as much as the information itself.

Different types of reports

During your time at university you may be asked to write different types of reports, depending upon the subject area which you have chosen. These could include laboratory reports, technical reports, reports of a work placement or industrial visit, reports of a field trip or field work.

Reports vary in their purpose, but all of them will require a formal structure and careful planning, presenting the material in a logical manner using clear and concise language.

The following section explores each stage in the development of your report, making recommendations for structure and technique.

Stages in report writing

The following stages are involved in writing a report:

- clarifying your terms of reference
- planning your work
- collecting your information
- organising and structuring your information
- writing the first draft
- checking and re-drafting.
The terms of reference of a report are a guiding statement used to define the scope of your investigation. You must be clear from the start what you are being asked to do. You will probably have been given an assignment from your tutor but you may need to discuss this further to find out the precise subject and purpose of the report. Why have you been asked to write it?

Knowing your purpose will help you to communicate your information more clearly and will help you to be more selective when collecting your information.

Careful planning will help you to write a clear, concise and effective report, giving adequate time to each of the developmental stages prior to submission.

- Consider the report as a whole
- Break down the task of writing the report into various parts.
- How much time do you have to write the report?
- How can this be divided up into the various planning stages?
- Set yourself deadlines for the various stages.

Draw up an outline structure for your report and set the work within a sensible time scale for completion by the given deadline.

Some of the most time-consuming parts of the process are collecting and selecting your information, and checking and revising your report.
Collecting information

There are a number of questions you need to ask yourself at this stage:

- What is the information you need?
- Where do you find it?
- How much do you need?
- How shall you collect it?
- In what order will you arrange it?

You may have much of the information you need already such as results from a laboratory experiment or descriptions of your methods of data collection. However, there may be other material which is needed such as background information on other research studies, or literature surveys. You may need to carry out some interviews or make a visit to the university library to collect all the information you need.

- Make a list of what information you need.
- Make an action plan stating how you are going to gather this.

The Information Technology Skills Guide contains much useful advice on the use of electronic information sources. This guide is available from the University’s Flexible Learning Initiative.

Organising information

One helpful way of organising your information into topics is to brainstorm your ideas into a ‘spider diagram.’

- Write the main theme in the centre of a piece of paper.
- Write down all the ideas and keywords related to your topic starting from the centre and branching out along lines of connecting ideas.
• Each idea can be circled or linked by lines as appropriate.

• When you have finished, highlight any related ideas and then sort topics.

• Some ideas will form main headings, and others will be sub-sections under these headings.

• You should then be able to see a pattern emerging and be able to arrange your main headings in a logical order (see diagram below).

Further advice concerning the organising of material can be found in another section of this Study Guide, Taking notes.

We discussed earlier that there are different types of report such as laboratory reports or reports on an industrial placement. Always check with the person commissioning the report (your tutor, your placement supervisor) to find out precisely what your report should include and how it should be presented. The following common elements can be found in many different reports:
We shall now look at each of these in turn.

**Title page**

This should include the title of the report (which should give a precise indication of the subject matter), the author’s name, module, course and the date.

**Acknowledgements**

You should acknowledge any help you have received in collecting the information for the report. This may be from librarians, technicians or computer centre staff, for example.

**Contents**

You should list all the main sections of the report in sequence with the page numbers they begin on. If there are charts, diagrams or tables included in your report, these should be listed separately under a title such as ‘List of Illustrations’ together with the page numbers on which they appear.

**Abstract or summary**

This should be a short paragraph summarising the main contents of the report. It should include a short statement of the main task, the methods used, conclusions reached and any recommendations to be made. The abstract or summary should be concise, informative and independent of the report.

Write this section after you have written the report.
Introduction

This should give the context and scope of the report and should include your terms of reference. State your objectives clearly, define the limits of the report, outline the method of enquiry, give a brief general background to the subject of the report and indicate the proposed development.

Methodology

In this section you should state how you carried out your enquiry. What form did your enquiry take? Did you carry out interviews or questionnaires, how did you collect your data? What measurements did you make? How did you choose the subjects for your interviews? Present this information logically and concisely.

Results or findings

Present your findings in as simple a way as possible. The more complicated the information looks, the more difficult it will be to interpret. There are a number of ways in which results can be presented. Here are a few:

- Tables
- Graphs
- Pie charts
- Bar charts
- Diagrams

Illustration checklist

- Are all your diagrams / illustrations clearly labelled?
- Do they all have titles?
- Is the link between the text and the diagram clear?
- Are the headings precise?
- Are the axes of graphs clearly labelled?
- Can tables be easily interpreted?
- Have you abided by any copyright laws when including illustrations/tables from published documents?
Discussion

This is the section where you can analyse and interpret your results drawing from the information which you have collected, explaining its significance. Identify important issues and suggest explanations for your findings. Outline any problems encountered and try and present a balanced view.

Conclusions and recommendations

This is the section of the report which draws together the main issues. It should be expressed clearly and should not present any new information. You may wish to list your recommendations in separate section or include them with the conclusions.

References

It is important that you give precise details of all the work by other authors which has been referred to within the report. Details should include:

- author’s name and initials
- date of publication
- title of the book, paper or journal
- publisher
- place of publication
- page numbers
- details of the journal volume in which the article has appeared.

References should be listed in alphabetical order of the authors’ names.

Make sure that your references are accurate and comprehensive.

Appendices

An appendix contains additional information related to the report but which is not essential to the main findings. This can be consulted if the reader wishes but the report should not depend on this. You could include details of interview questions, statistical data, a glossary of terms, or other information which may be useful for the reader.
There are several points that you will need to consider when you are writing your report:

### Active or passive?

Your tutor will be able to advise whether the report should be written in the ‘active’ or ‘passive’ voice.

The active voice reads as follows:

‘I recommend …’

The passive voice reads:

‘It is recommended that …’

The active voice allows you to write short, punchy sentences.

The passive appears more formal and considered.

Be aware of these differences and avoid mixing the two voices.

### Simplicity

Most written reports should avoid using overly complicated language. If a report is to persuade, brief or justify, its message must be clear. Furthermore, the factual presentation of data should not be swamped with sophisticated, lengthy sentences.

Avoid using unnecessary jargon. This confuses even the most informed reader.

Ensure that your abbreviations are standardised. All too often authors invent their own jargon to ease the pressure on writing things in full. Be cautious of confusing your reader.

### Use of language

Most reports should avoid the use of subjective language. For example, to report on a change in colouration from a "stunning green to a beautiful blue" is to project your own values onto a measurable outcome. What does the term "beautiful" mean to you? What will it mean to your reader? Such subjective, or personal language commonly has no place in the more objective field of report writing.
Layout

Most reports have a progressive numbering system. The most common system is the decimal notation system.

The main sections are given single arabic numbers - 1, 2, 3 and so on.

Sub-sections are given a decimal number - 1.1, 1.2, 1.3 and so on.

Sub-sections can be further divided into - 1.11, 1.12, 1.13 and so on.

An example structure would look as follows;

1. Introduction
   1.1
   1.11
   1.2
   1.21

2. Methodology
   2.1
   2.11
   2.12

Presentation

The following suggestions will help you to produce an easily read report:

- Leave wide margins for binding and feedback comments from your tutor.
- Paragraphs should be short and concise.
- Headings should be clear - highlighted in bold or underlined.
- All diagrams and illustrations should be labelled and numbered.
- All standard units, measurements and technical terminology should be listed in a glossary of terms at the back of your report.
Once you have written the first draft of your report you will need to check it through. It is probably sensible to leave it on your desk for a day or so if you have the time. This will make a clear break from the intensive writing period, allowing you to view your work more objectively.

Assess your work in the following areas:

- Structure
- Content
- Style

Look at the clarity and precision of your work.

Use the report writing checklist at the end of this section to check your report.

You may like to carry out a more formal evaluation. Use the section Assessing yourself to help you draft assessment criteria and evaluate your work.

The skills involved in writing a report will help you to condense and focus information, drawing objective findings from detailed data.

The ability to express yourself clearly and succinctly is an important skill and is one that can be greatly enhanced by approaching each report in a planned and focused way.
Checklist

- **Title page**
  Does this include the:
  - Title?
  - Author’s name?
  - Module/course details?

- **Acknowledgements**
  Have you acknowledged all sources of help?

- **Contents**
  Have you listed all the main sections in sequence?
  Have you included a list of illustrations?

- **Abstract or summary**
  Does this state:
  - The main task?
  - The methods used?
  - The conclusions reached?
  - The recommendations made?

- **Introduction**
  Does this include:
  - Your terms of reference?
  - The limits of the report?
  - An outline of the method?
  - A brief background to the subject matter?

- **Methodology**
  Does this include:
  - The form your enquiry took?
  - The way you collected your data?

- **Reports and findings**
  Are your diagrams clear and simple?
  Are they clearly labelled?
  Do they relate closely to the text?

- **Discussion**
  Have you identified key issues?
  Have you suggested explanations for your findings?
  Have you outlined any problems encountered?
  Have you presented a balanced view?
• **Conclusions and recommendations**
  Have you drawn together all of your main ideas?
  Have you avoided any new information?
  Are any recommendations clear and concise?

• **References**
  Have you listed all references alphabetically?
  Have you included all the necessary information?
  Are your references accurate?

• **Appendices**
  Have you only included supporting information?
  Does the reader need to read these sections?

• **Writing style**
  Have you used clear and concise language?
  Are your sentences short and jargon free?
  Are your paragraphs tightly focused?
  Have you used the active or the passive voice?

• **Layout**
  Have you clearly labelled each section?
  Is your labelling consistent throughout the report?

• **Presentation**
  Have you left sufficient margin space for binding/feedback?
  Are your headings clear?
  Have you checked your spelling?

Overall:

• **What are the main points for consideration?**

• **What have you done well?**

• **What needs fine tuning?**