

## Writing and Presentation Skills

### General Writing Skills

A research project can be presented in a written report for a number of different reasons. For example, a progress report to a funding body, sharing results with other team members or participants or for formal assessment as part of a professional qualification. A good writer will learn to define their target audience and pitch their use of language and style of writing appropriately. There are generally four stages to writing a document, these are preparation, planning, drafting and editing.

#### Preparation

When preparing your writing first define the **purpose and scope** of your report. Who will read it and what is its purpose? Start thinking about how you will find the **information to be included**, e.g. will it require a lengthy literature search or critique of previous research findings? It is essential to **consider your readers** and what they will be expecting from the report, for example, writing a paper for publication will require a very different approach than an end of study report for your study participants. Consider the **timeframe** in which to prepare your report and whether you can realistically achieve this. Working within a set timeframe is very important for student research projects which usually have a set deadline. One good idea is to prepare a writing timetable to help manage your time effectively.

#### Planning

The planning stage requires more **details** regarding what information the reader requires, how it will be **organised** and how you will gather it. It is important that you have most of the information you need available at this stage or at least have identified where you can obtain it. The **structure and organisation** of your project will depend on its purpose and the information you wish to convey. The standard organisation of a research project is an **introduction** followed by the **methods, results and discussion**. If your report does not fit into this model, try to identify a number of **themes** by which to group your information.

Whatever the structure or purpose of your report there are some writing tips that apply to all reports. Try writing important topics or themes at the beginning of **new paragraphs** or place the most **important information** at the beginning or end of your report. This is because people remember the first and last pieces of information they are presented with more easily. If you wish to persuade readers of your argument try placing the most important message at the **end of your sentences** to influence the reader's interpretation.

For example, read these two sentences and see how word order influences your interpretation.

1. Although the treatment had significant side effects it was highly effective
2. Although the treatment was highly effective it has significant side effects (taken from Writing, Speaking and Communication Skills for Health Professionals, 2001).

#### Drafting

Starting your first draft of a written report can be daunting and it is difficult for even experienced writers to summon the creativity to write. There are a number of ways of **improving your creativity** to help your writing flow. Try writing a page a day everyday for a month or keep a daily journal in which to write things other than your

report writing. Just getting started can be difficult, try **writing freestyle**, focussing on the quantity rather than quality of your writing. Then go back and edit what you have written at a later date. If you are using Microsoft Word, the outline view will help you to identify your main headings and themes, which is useful when preparing a first draft.

### Editing

When you have written your first draft it will need editing. The purpose of editing is to ensure the **information is organised and valid**. Your message should be clearly stated and the style appropriate. Your readers will find it easier to read a report written in a **clear concise manner**, one way of achieving this is to write in the active rather than passive voice as sentences will become shorter and more precise.

When editing look for the correct use of **grammar and punctuation**, as this will aid reading and understanding. **Common mistakes** include the incorrect use of semicolons, hyphens and subject-verb agreements. Why not invest in or borrow a guide to grammar and a medical dictionary. Another mistake is to use **jargon, acronyms or specialised terms** without referring to their meaning in the text. The editing and **redrafting** process usually takes some time and you may need to revise your report several times before you are completely satisfied with it. It is useful to have other people's opinions on your report before you disseminate it, as others may spot mistakes or ambiguities you are unaware of. Try asking a colleague or mentor to read through your drafts and help edit your report. If your report is aimed at lay readers then you should ensure you ask a lay person to read your report and help you edit it.

### Suggested Reading

- **Effective writing for health professionals: a practical guide**. M J Johnstone, London: Routledge, 2004
- **Writing skills in practice: a practical guide for healthcare professionals**. D Williams London: Jessica Kingsley, 2002
- **A guide to medical publishing and writing**. P Richardson, Salisbury: Quay books 2002
- **Clinical Trials: A Practical Approach**. S J Pocock, Chichester: John Wiley, 1983

### Writing for Publication

Writing a paper for publication in a scientific journal can be difficult, however, there are several **guides offering advice** to make the process easier. For instance, it helps if you write in the style of the journal you wish to publish in by following the journals guidance to authors. There may be issues around co authorship and it is useful to know how to deal with these effectively. The sources below all offer expert and more detailed advice.

### Suggested Reading

- **How to write and publish a scientific paper (3<sup>rd</sup> edition)**. R A Day, Cambridge: Cambridge University Press, 1989.
- **Winning the publications game (2<sup>nd</sup> edition)**. T Albert, Abingdon: Radcliffe Medical Press, 2000.
- **How to publish in Biomedicine**. J Fraser, Basingstoke: Radcliffe Medical Press, 1997.

## Writing a Thesis or Dissertation

Writing a thesis or dissertation is very similar to other types of writing. However, there may be restrictions on the **length, structure and style** of the thesis specified by the institution examining it. Before starting your writing it is essential you are aware of these **requirements**. Theses can be very long and it is easy to underestimate the amount of time needed, therefore **good time management** is essential. Be aware of the absolute cut off date for submission and be realistic about how much time you can spend on writing. Before starting, why not read through other theses available in a similar subject area for ideas regarding structure and style.

The quality of a thesis is also dependent upon the **information & argument** it contains. Prior to writing your first drafts ensure you have enough work to write up and that your arguments are sound. One good idea whilst completing a research degree is to **write things up as you go along**. For instance, write a literature review early on, as this can form the basis of your introduction. It is important to write the methods and results as you complete pieces of work, to prevent losing information. The discussion should be left until last when you have all your results available. Generally, each investigation or experiment will have its own chapter with an introduction, methods, results and discussion section. There should also be a general summary or abstract, an opening introduction and a final discussion linking all the chapters together. Try not to replicate information in the different chapters, but refer the reader to different sections instead.

Ask your **supervisor for comments** prior to submission and provide him/her with a final copy. At all stages of writing make sure you **make copies** of your work on both paper and disk with regular back ups, to prevent losing any work.

### Suggested Reading

- **Research in Medicine. Planning a project – writing a thesis.** M G Huang & H Ellis, Cambridge University Press, 1999
- **How to write a thesis.** R Murray, Open University Press, 2003

## Presentation Skills

Jane Schober and Andy Farrington provide a good guide on presenting and disseminating research, which is available on RDDirect's web page ([www.rddirect.org.uk](http://www.rddirect.org.uk)). It provides information on the following topics: **types of presentation, tips on presenting at a conference & guidelines on how to write an abstract**. Tim Albert in, the A to Z of Medical Writing, also provides some tips on improving your presentation skills. For example, deciding what your audience would like to know, deciding on a key message, keeping things short and simple, using graphics, being legible and limiting the data presented.

### Suggested Reading

- **Writing, Speaking and Communication Skills for Health Professionals.** The Health Care Communication Group, Yale University Press, New Haven & London, 2001
- **The A to Z of medical writing.** T Albert, London: BMJ Books