

Mathematics and Computing: Level 2 M253 Team working in distributed environments



M253 Resource Sheet

Writing a report

1 Overview

Most of us will need to write a report at some time in our lives, and good report writing is a skill that is highly valued in many organisations. Writing a report requires a different approach from other forms of writing (such as writing a letter). This *Resource Sheet* explains what a report is, and how to approach writing one.

2 Introduction

So, what *is* a report? A report is a factual account of something that has been seen, done or investigated. It is a formal, structured piece of work that often sets out to answer a question or set of questions. This is especially true if a report is compiled in an educational setting (e.g. as part of course work): an assignment will often ask one or more questions, to which the report is a response. Similarly, in the working environment most reports can be viewed as answers to real or implied questions, such as, 'What have you been doing on this project?' or 'What can your company do for my company?'

A report is above all a form of *communication*, and communication involves three major aspects:

- telling, or writing (which involves the author see Subsection 3.1);
- listening to, or reading (which involves the audience see Subsection 3.2);
- understanding (which involves the author and the audience).

The important point to make here about the understanding aspect of communication is that, for the communication to be effective, the author should be aware of the audience's knowledge and perspective. If the audience is unable to appreciate, or understand, the report the time invested in producing and attempting to follow it will have been a waste on both sides.

For an author, then, compiling a successful report normally means writing one, two or even more drafts – Section 4 of this *Resource Sheet* suggests ways of approaching the drafting process. In the next section, we consider why a report is written and what purposes it serves – for the author who writes the report and the audience who read it.

3 The purpose of a report

The interests of a writer and the interests of his readers are never the same and if, on occasion, they happen to coincide, this is a lucky accident.

W.H. Auden

As the above quotation suggests, the perspectives of the author and of the audience on a report are almost certain to be different. Therefore, one of the key tasks facing the author is to bridge that gap and to imagine themselves in the audience's shoes. In order to accomplish that successfully, the author needs to be aware of their own interests in writing a report, and that of their audience in reading it.

3.1 The purpose of a report for the author

As an author, you write a report to communicate information – potentially, to explain or describe an idea to your audience, or to persuade them of something. The priorities in considering this aspect of your writing are that you have a good understanding yourself of the topic, that you know the purpose(s) of a report, and that you know who the audience of a report will be. It is important to bear these points in mind when you think about how to explain the key ideas and facts in a report, or how to put forward an argument.

A further consideration is that a report will be judged by its readers as a professional document, meaning that the *way* in which it is written is important. A report therefore has an additional aspect – it is, in effect, the public face of private work. It is, or should be, a document that communicates authoritatively to, and establishes credibility with, its audience.

So, how you write is a chance for you to underline your professional identity amongst, for example, tutors, your manager at work, colleagues, or clients. Write a report well and you are adding weight to your words and demanding to be taken seriously by your peers. Do it badly, and the readers' confidence may be undermined not only in the report's content, but also in you as a professional person. The characteristics of your writing that can impact upon how an audience might receive a report are matters such as presentation, structure, attention to detail and writing style. We will discuss these issues in more detail in Section 5.

3.2 The purpose of a report for the audience

The readers of a report will want to become more informed on the subject matter, so that they can make constructive and informed decisions on the basis of what has been written. However, the exact purpose of an audience in reading a report will vary, depending upon who they are and why they are reading it.

While there are many potential audiences, the three that you are most likely to write for are:

- Tutors. Your tutors will be assessing your work and providing feedback on how you can improve your report-writing skills. They will be looking at criteria such as whether the report covers the technical material at an appropriate level of detail, whether the report is adequately supported by evidence, if the conclusions follow from the evidence and technical background material presented, and whether the report is well written.
- Managers. You may be reporting on work you have done in which case your managers will want to know that the work has been carried out to a good standard. Or, you may be proposing a new product or process, in which case company management will want to have sufficient confidence in you – based upon the quality of the report, and the strength of the argument you put forward – to enable them to make a sound business decision.

• Clients (or potential clients) of your business. For them, does the report inspire confidence in the authors of the report? Can the client take forward the recommendations of the report unreservedly? Can the client feel sure that you understand their situation?

In addition to having different reasons for commissioning and reading a report, or expecting different outcomes from a report, audiences may have different levels of background knowledge in, and experience of, the subject matter of the report. This is important to consider because it affects not only the terminology that it might be appropriate to use – for instance, a line manager might be familiar with technical jargon in a way that a client might not be (or indeed vice versa), but also the structure of the report.

An introduction intended for a line manager, for example, might provide them with just enough appropriate background information and context about a particular project. If the report was written for a client, however, the introduction might need to clarify that the work was grounded in, and focused upon, addressing their requirements. The point to be stressed here, again, is that you as an author can only write an effective report if you are aware of the perspective of your audience.

4 Drafting a report

4.1 The structure of a report

Reports should follow the conventions (use of terminology and structure) that the audience might expect, so that the readers can focus in on relevant information quickly and easily. For example, lawyers and scientists are both used to receiving information in specific, but different, formats. This, of course, is more widely applicable: a website designer may use a more technical style if they are writing a progress report for their manager than if the report is being written for a client.

Remember that there are two different aspects to the style (or *formalism*) of a report:

- the overall structure of the report;
- the kind of language that may be used.

We will address the second point – the style of writing – in Section 5.

A common basic structure for reports is shown in Figure 1, although, of course, others are possible.

- 1 Introduction
- 2 Purpose of report
- 3 Background information about topic
- 4 Body of report (detailed discussion)
- 5 Conclusion or summary

Figure 1 Common outline for a report

4.2 The process of drafting a report

When writing a report, you have to work within the overall constraints of the structure and length of the report. To an extent you will need to set aside your own writing style in the interests of preparing a report that, above all, *communicates* within its intended context. The following points are suggestions aimed at less practised writers, or writers writing within an unfamiliar context.

1 Some writers prefer to write a rough draft and then refine it; others prefer to keep working on a draft until they have achieved something that approximates to the desired finished product. This partly depends upon the time available, and partly on one's normal way of working.

A rough draft contains only headings and brief notes. It is not necessary to be grammatical at this stage. Basically, a rough draft is simply an outline of headings with notes or bullet points of items to be included. The advantage of preparing a rough draft is that this represents a good stage at which to determine *how the report might read before you invest a lot of time in perfecting it*, and to decide whether you have achieved a good basic structure and ordering of items.

It is particularly useful to be able to take a step back at this point and consider whether or not a draft is going in the right direction as regards engaging with its intended audience. If necessary – to give a couple of other possible examples, because you are unhappy with the structure or with the placement of the individual items you wish to report on – you can rewrite the rough draft, without having lost a lot of time.

- 2 Once you are happy with the rough draft, it remains to put everything into 'plain English' so that you can produce the first complete draft. Write items in complete sentences and structure those into paragraphs, or use lists if they are particularly appropriate to the style of report that you are drafting.
- 3 Now the process of writing becomes one of 'polishing'. Check that the language is appropriate for the intended audience. Many professional, scientific and technical fields, in common with most organisations, have evolved their own terminology and it is easy to forget that others may not understand it.
 - Have you used any jargon or technical terms that need to be explained?
 - Have you spelled out abbreviations or symbols (e.g. and for &)?
 - Check for ambiguity. (For example: 'Wanted: a table for lady with wooden legs.' the book 'Eats, Shoots & Leaves' (Truss, 2003), elaborates on this topic in more detail.)
 - Can what you have written be read in two (or more) different ways? When you refer to 'it', 'these', 'those', or 'they' is it clear what 'it' is, what is meant by 'these' or 'those', or who 'they' are?
 - Are your sentences grammatical? (Most word processing software now includes a grammar checker.)
 - Are your sentences grouped sensibly into paragraphs? (See Section 7 for Further Resources that will help with structuring text.)

The above list ties in with the point made in Subsection 3.1 – sloppiness, lack of clarity and inappropriate use of language in reports will impact negatively upon how both you, individually, and your work as a professional, are regarded by your audience. For example, if you write a report for a client outlining your progress on a project and it is shoddy in its use of English and presentation, or it demonstrates little attempt to engage with their needs and circumstances, this will almost certainly result in the client having less confidence in the information that you are attempting to communicate.

- 4 You will need to check that you have the right level of detail in the report. Some details may be important enough to be included in the body of the report, but other material may make the report too long or discursive. Such material belongs in appendices to the report. By putting detail in an appendix, the writer leaves the reader the choice of whether to look at it or not, depending upon the reader's interest or need.
- 5 Rewrite your draft as needed.

- 6 Final check, final draft! By this stage, the draft report should be well structured and well-polished. If the report requires a section or subsection with a title like 'introduction', 'summary', 'executive summary', 'conclusion' or 'recommendation' and you have not already written it, this is the stage to write the section. (Often such sections are best left until this stage, because it is difficult to know how to summarise something yet to be written, or to write an introduction that covers everything important that the report is likely to say.)
- 7 At this stage you should also see how the report 'looks'.
 - Is it legible, neat and uncluttered?
 - If it is a longer report or the structure requires it, the report should include a title page with title, date and the name(s) of the authors.
 - Are there adequate margins? A side and bottom margin of 2.5 cm is standard. The top margin of the first page (or first page of each major section) should be 4 to 5 cm, the rest of the pages to have a top margin of 2.5 cm.
 - Is 'white space' used effectively? White space between paragraphs aids readability, as does white space before and after headings.
 - Would the report benefit from differentiating headings from text? (This aids readability.) Differentiation can be done by increasing (or decreasing) the point size of the font, choosing a different font, or by using <u>underlining</u>, **emboldening** or *italicising*. Some styles of report use numbered headings, sub-headings and sub-sub-headings to indicate levels of heading.
 - If a report is more than two pages long, paginate it. If reports are not bound, it may help (if the report should ever be dropped) if you use the form 'page *x* of *y*' where *y* is the total number of pages.

5 Style and related issues

In this section are some suggestions which may help you to write a report in an appropriate style. Additional sources of information on report writing are listed in Section 7 of this *Resource Sheet*. You are especially advised to investigate the Open University's 'Skills for OU Study' website on other aspects of writing such as breaking text into paragraphs, using supporting evidence, and writing introductions and conclusions.

5.1 Report length

Clear guidance is often given on how long (in either words or pages) a report should be. Such a constraint indicates that whoever is asking for the report believes that it should be possible for the required information to be communicated appropriately, within the specified limit. So, if a report exceeds this limit, you need to pare it down.

First, look to see if there is detailed material in the body of the report that can be moved to an appendix. Since appendices are usually considered to be 'optional reading', it is rarely included within word count or page limits.

In spite of this, you may still exceed the limit and may think that you have to leave out items you consider important. However, it is a rare report in which some words cannot be eliminated without damaging its sense. Read each sentence to see whether it can be said in fewer words. For example, 'I believe it to be the case that ...' or 'It is this writer's opinion that ...' can be cut down to 'I believe ...'. Even practised writers can save up to 30% of their word count using this sentence-by-sentence editing method.

If, on the other hand, a report seems too short, think about why the word count was set at that level: have you really said everything that audience is looking for? First, check that you have made all the points which you feel are important. Next, check that there is sufficient explanation and that your intended audience will understand what you have written. (You may need to define terms, for instance, or give more detail.) If everything seems to be in order, then it is worth remembering that word or page limits almost always set *upper* limits, and are not goals to be met in all cases!

5.2 Grammar and spelling

Most word processors include grammar and spelling checkers, and email programs can generally be set to check spelling before messages are sent. Use these facilities, but be aware that it is still extremely important to go through your text yourself, and look specifically for grammatical errors that you know you are prone to make.

5.3 Abbreviations

Reports, being technical documents, may contain many technical terms, symbols and acronyms. If it is common practice, or there are conventions that are widely followed, to abbreviate terms you want to use then you should follow these conventions. It is usual practice to spell out an abbreviation or acronym in full the first time you use it. If you are using a lot of abbreviations then it is helpful to include a list of abbreviations and acronyms as one of the appendices to the report.

5.4 Technical terms and specialised vocabulary

Reports can be technical documents written for a specialist audience. As such, technical terms are sometimes unavoidable, although you shouldn't overuse them. As has already been stressed in this *Resource Sheet*, an author must be aware of the audience for a report. An audience of experts will be more receptive to a report that is full of technical terms than a non-expert audience.

If you find yourself having to use a technical term, think, 'Do I need to use this word or phrase?' and if so, 'Do I need to define the word?' As with a list of abbreviations and acronyms, it can be very helpful to include a glossary of terms used as one of the appendices to a report.

5.5 Slang, 'text speak' and jargon

Would you go to an interview for an office job wearing sports clothes? Likewise, slang expressions, colloquial words and 'text speak' should *never* be used in a report. None of these add credibility to a report as a formal document, or you as its author.

5.6 Figures and tables

A picture is worth a thousand words *provided* it is clear *why* it is included and *what* it should tell the reader. Since a picture must communicate information, it should only be included if those features that are of importance can be clearly seen. A figure, graph, drawing, or photograph should *never* be used in a report without an *explanatory* caption, and any part of the body of the report that relates to the illustration should include at least the words '... as shown in Figure x'.

Some material is better shown in tabular form, particularly where most of the information is quantitative, or where comparisons are made. Tables should also use good explanatory headings, be captioned, and mentioned or referred to in the body of the text.

5.7 Lists

It is permissible to use lists in a report, although the report should not consist solely of lists unless this is the preferred style. Lists can be numbered (this is important if items in the list are referred to elsewhere in the body of the report), or shown with starting dashes, asterisks, 'bullets' or indentation. Note that listing items gives them greater prominence than they would have if they appear in normal text. If items in a list have a great deal of text associated with them, then they probably should be paragraphs instead. It is reasonable to number such paragraphs if they are to be cross-referenced at a later point.

6 Summary

A report is a structured document, consisting of a factual description of something observed, undertaken or investigated. A report often aims to describe, explain, or persuade, and to provide an answer to a given or implied question. As an author, there are two key aspects to writing a report: *what* you say and *how* you say it. What you say depends upon your understanding of the subject matter of the report. How you say it affects the way in which readers regard what you say. For an author to compile a successful report, they should consider the viewpoint of the document's audience.

7 Further resources

The Open University [online] http://www.open.ac.uk/skillsforstudy/assignments.php

A particularly relevant website to help students with the kinds of issues that are raised in this *Resource Sheet*:

University of Loughborough *Writing Reports* [online] <u>http://www.lboro.ac.uk/service/fli/campus/reportwr.pdf</u> (Accessed 30 October 2007).

Writing Reports is a document much like this *Resource Sheet*.

Institute of Education, University of London [online] <u>http://www.ioe.ac.uk/caplits/writingcentre/reports.ini.htm</u> (Accessed 30 October 2007).

Another website with a comprehensive description of report writing.

8 References

Truss, L. (2003) Eats, Shoots & Leaves, Profile Books Ltd.