

Writing assignments and theses

It has been said that beauty is in the eye of the beholder. It might also be argued that meaning is in the mind of the reader. For someone writing a university assignment or thesis this is an important truth. Markers and examiners can't directly assess how much understanding you have. They assess how much understanding you *convey*.

Empathic writing — writing with the reader in mind — has advantages for writer as well as for reader.

In this section of the document I offer some practical ways of writing empathically. The document contains two major sections. The first of them suggests some of the key principles. The second describes a specific and step-by-step approach for making assignments, dissertations and theses more easily readable.

Principles ...

An assignment or thesis is a way of letting other people know what you know. It's useful to think of it like this: what you write means whatever the *reader* thinks it means. You may understand a lot. You get credit for what the other person gets out of it.

It makes sense to write with empathy for the reader. It makes sense to do what you can to make her job easier: you are more likely to communicate what you wish to communicate. She is more *likely* to read with empathy.

There are a number of issues to keep in mind. One is the limits to what the reader can process. A second is that you probably know the material better than the reader does. A third is that language is linear — what you wish to say very often isn't linear. Another is the benefit of talking the reader's dialect rather than your own, as

far as possible. Finally, it is worth bearing in mind just how difficult many people find the written word. These issues are addressed in turn.

Seven plus or minus two

If you ask people to memorise more than about seven objects or ideas in a single glance, they fail. They have similar trouble juggling more than seven ideas at one time. If you want the reader to understand, remember the "magical number 7 ± 2 ", as George Miller described it many years ago.

You can make use of this idea in several ways. For example if you introduce a number of new terms you can define them before using them. But it may be a mistake to assume, then, that the reader will remember the definition. Terms that explain themselves are better than more obscure terms. If it is a while since you used a term, it doesn't hurt to redefine it. If there are many new terms, perhaps a glossary will be a useful aid.

Packaging information in bite-sized pieces also helps. You can take a little more time planning the ideas you wish to communicate. This is likely to result in greater ease of understanding for the reader.

Different people best understand in different ways. For some, it may be true that a diagram is worth a thousand words. But not everybody prefers graphics. A little careful repetition — saying the same thing in different ways — *may* help if used cautiously. Specific *examples* can often provide the common denominator that most people will understand.

Remember the psychology of remembering. People remember those things they hear first and last: primacy and recency. The first and last section in the assignment, the first and last paragraph in a section, the first and last sentence in a paragraph — these are privileged positions, to be used for the more important information. The details that do not have to be remembered can be placed elsewhere.

Most important, though, is the structure of your assignment. This deserves a separate section.

First you tell them ...

You can lighten the load on the reader dramatically if you tell them the conclusions first, then the evidence.

It's more natural first to marshal the evidence and then draw the conclusion. But this breaches the 7 ± 2 rule. If you want people to follow your argument, give them some idea where you are headed: conclusions before evidence. Then, for good

measure, conclusions last. As an army instructor told me during an unfondly-remembered training camp, "First you tell them what you want to tell them. Then you tell them what you told them."

PREVIEW → TEXT → SUMMARY:

First you tell them what you want to tell them; and then you tell them; and then you tell them.

Sometimes this will spoil the story. If you have some particular reason for keeping the reader in suspense there is another way. Identify the issue without indicating what conclusion you will later reach.

Language is linear

Transforming ideas into language is not easy. An argument is usually a cluster of ideas. Ideas usually are not linear. An assignment, dissertation or thesis, on the other hand, is a single linear sequence of words. Somehow or other the non-linear ideas must be translated into linear language.

Think about it from the reader's point of view. There is a linear sequence of words. Behind it somewhere is a complex and interwoven set of ideas. The reader has to recover the ideas and their relationships from the words. Somehow or other you must help the reader to uncover the original ideas from the linear sequence.

The "first you tell them ..." approach is a start. It becomes more valuable if you extend it to allow for the hierarchical nature of many assignments. Large ideas are constructed out of smaller ideas, which are constructed in turn out of still smaller ones.

For example, the document most probably has some theme. (Otherwise, why would you write it?) Identify it within the first paragraph. Then summarise it in the last paragraph. Think of the previews as signposts: "This is where we are going, and how we are going to get there". The final conclusion serves as a reminder to the reader about where you have been.

Themes have sub-themes. You can signpost the start of each major section of your document. You can end each section with a partial summary. In a lengthy document like a thesis you can signpost and summarise each chapter. In addition you can then use very brief signposts and summaries for each subsection. This does

introduce a little redundancy; it also increases the probability that the reader will extract from your assignment whatever you intended to say.

Think of it in this way. An assignment is two documents in one. The first document conveys the ideas that you wish to convey. The other is a road map that allows the reader to reconstruct your ideas from the words and sentences you use.

When in Rome ...

Speaking perfect English is of little use if you are trying to talk to someone who doesn't understand it. Speaking perfect action research language may not get you far with someone who understands only English and (say) experimental method. One of the most important characteristics of clear writing is that the writer tries to enter the world of the reader.

I am not urging you to write only simple English. Sometimes technical journals, for example, expect you to write in a special dialect. Sometimes you have to abandon your good habits to fit in with the habits of those you are writing for. Mostly, though, action research is written for a multidisciplinary audience. Language that is too specialised may interfere with understanding.

Some years ago I circulated some material around a psychology department for comment. One of my colleagues did not comment at all on the content, but criticised the short paragraphs. Editors of psychological journals favour long paragraphs. Most other people prefer short paragraphs. All else being equal, people find short paragraphs easier to read. To write well, you have to make some educated guesses about your audience.

People are only partially literate

You may have read the *Readers Digest* or some other popular magazine at some time or other. I imagine you found it clear and simple, perhaps a little too simple. Yet one adult in five has some difficulty understanding *Readers Digest* prose.

Fortunately there is research that reveals what makes writing easy to understand — short words in short sentences. Some of the researchers (like Rudolf Flesch or Robert Gunning) have provided formulas that predict readability. Here is a much simpler formula that will serve for a rough check. I call it the 20/20 check. Try this ... Use fewer than 20 per cent of long words. Keep average sentence length under 20 words. Then only about one adult in five will have difficulty reading what you write. A long word, for present purposes, is one with three or more syllables.

By way of illustration, Box 5 presents an example of two passages. One of them fails the 20/20 test; the other example passes it.

Box 5: A comparison of writing styles

Which of these two sentences do you think is most stylish?

"Although it has been argued that interpersonal conflict is sometimes beneficial, few suggestions have been offered for differentiating between constructive and unconstructive conflict, despite the enormous quantity of books and articles in the literature and the continuing spate of empirical studies which are undertaken."

44 words/sentence 27% long words

"Many people have argued that conflict between people can be useful; they have said little about telling good conflict from bad. This remains true despite the many books and articles written and the many research studies done."

12 words/sentence 3% long words

You may like to do your own research on different writing. The *Readers Digest* passes the 20/20 check with a little to spare. So do "popular" newspapers like the *Sun* and the *Courier Mail* (or your local popular newspaper). The *Sun* fares a little better than the *Courier* in this respect.

You may now be tempted to equate clear writing with puerile writing. Perhaps another couple of examples will demonstrate that clear writing can have a grace and style of its own. The King James version of the *Holy Bible* passes the 20/20 test easily. For something a little different, so do the books of Ernest Hemingway.

In my opinion (and the opinion of some others too) both the *Bible* and Hemingway's books have power and impact and style. I believe that they owe a lot of this to the use of simple English in short sentences. You can write simply and clearly without writing homogeneous mush.

You don't have to throw away any pretensions at style to write simply. Ernest Hemingway and the writers of your local newspaper clearly have rather different writing styles — and rather different reputations.

In short ...

In short, writing well is partly a matter of sparing a thought for the reader. Remember how little she can process mentally at any one time. Reveal the structure of the ideas behind the linear sequence of words. Guide her through the assignment with signposts and summaries. Speak her own dialect of English, probably in simple words and short sentences.

That still leaves you with the problem of *doing* it. Most of the remainder of this document gives you a process for that.

... and practice

The principles for clear writing are simple. So is the practice. For convenience I deal with it in two main sections. One deals with the structure of the assignment. The other suggests some strategies for improving the sentence-by-sentence expression.

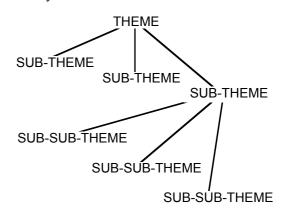
In both sections I assume that you know what you wish to say. (If *you* don't, what chance does a reader have?) Using this as a starting point, the section on *structure* helps you to identify the structure of your argument. It then suggests some ways of making the structure apparent to the reader. The section on *expression* then offers a method for checking and improving the clarity of your assignment.

Structure

As already mentioned, the central idea is that an assignment (or dissertation or thesis) is two documents in one. One contains the ideas you wish to express. The other document shows the reader how to reconstruct the argument from the words.

I assume that assignments and theses have a hierarchical arrangement. There are some central ideas which can be broken down into less central ideas. These can be broken down further still. The intention is to find a way of arranging this material so that the reader knows where she is in the hierarchy.

The first step is to be very clear about what you want to express. Next, identify the subthemes that make up that theme. The subthemes can then be broken up into sub-subthemes. You can continue the dissection until the detailed evidence for your argument is reached. Some people find it useful to diagram this on a large sheet of paper.



You can then develop the text for each of the boxes in your diagram. (That is, unless you've already written it. Some people prefer to develop the structure first. Others start writing, and develop the structure afterwards. I recommend the first of these.)

Now start at the top. The starting point is an introduction to the whole assignment.

"In this assignment I demonstrate X. I do so by looking at three lines of evidence, A, B and C ..."

Now comes the preview for *A*. This also overviews the elements that go to make up *A*. In this manner you work down to the detailed evidence for *A*. To link to *B* you now need a summary for *A* and a preview for *B*.

"It can be seen that on balance the evidence for A suggests ... I now turn to the evidence for B. Logically, two different views on this can be argued. I will canvass them in turn, relating each to the relevant literature."

In other words, the structure of *theme - sub-themes - sub-sub-themes* is translated into a sequence which now goes like this —

Preview theme \rightarrow preview first sub-theme \rightarrow preview first sub-sub-theme \rightarrow present detailed argument and evidence \rightarrow summarise first sub-sub-theme and preview second sub-sub-theme \rightarrow ... (etc.) \rightarrow summarise first sub-theme \rightarrow preview second sub-theme \rightarrow ... (etc.) \rightarrow review sub-themes \rightarrow draw overall conclusion.

You can do this in a variety of ways. Before I had a word processor I used to do drafts on small pieces of paper or cards. I'd move them around on the floor until the structure worked for me. Or I would start anywhere that seemed promising. I would get down as much as I could on paper, no matter how roughly. With scissors and stapler or tape I would then rearrange the document until it made sense.

On a word processor I sometimes start with the headings and then fill in the text. On other occasions I write the text as separate files and combine them later. Sometimes I use a combination of these methods (many word processors have a built-in outliner, which lets you switch between text and outline.) More frequently I try to get down an overview of the argument in one sitting. After leaving this alone for a couple of days I then revise, rearrange and expand it. This document is an umpteenth draft: it has been rewritten and rearranged each time I've reprinted it.

(Incidentally, even simple word processors are a substantial improvement over writing and typing. For me writing has always been a painful and difficult exercise; a word processor has taken away some of the agony. And the more powerful ones are even better. If you don't have a good word processor, think seriously about buying one.)

Think hierarchically. Each time you go down a level, provide a preview of the lower level. Each time you go up a level, give a summary of the lower level and a preview of the upper level. Each time you transfer to another item on the same level, summarise the item you are leaving and preview the item you are going to. These

previews ("signposts") and summaries are a roadmap that reveals the structure of your ideas.

You are now ready to convert the words and sentences into clear and simple English. Here is how you might do so ...

Expression

This section draws on two ideas. One is taken from John Holt, who uses it to teach people who have difficulty writing. To this I have added some ideas gleaned from the literature on readability.

Holt recommends writing your first draft with generous spacing between lines. If you write in longhand this is probably worthwhile. If you are working at a word processor you may not find this necessary except for very complex passages.

Now, readability: identify the individual clauses in each of your sentences. You can mark them off with a diagonal slash. A clause is a verb (an action word or something like that), together with the subject (usually the doer) and object (usually the done-to or the done-with). The verbs are underlined.

"Although it <u>has been argued</u> / that interpersonal conflict <u>is</u> sometimes beneficial / few suggestions <u>have been offered</u> / for <u>differentiating</u> between constructive and unconstructive conflict / despite the enormous quantity of books and articles in the literature and the continuing spate of empirical studies which are <u>undertaken</u>."

The next step is to convert each of the marked segments into a short active sentence. Try to use the order *subject-verb-object* or *doer-action-receiver* or *agent*. Sometimes you will find it simpler to combine two of the segments into a single sentence.

"Many people have argued that conflict between people can be useful; they have said little about telling good conflict from bad. This remains true despite the many books and articles written and the many research studies done."

Now polish the links between the sentences until they say what you want them to say. You may wish to rearrange the sentences.

After this, check the paragraphing. Is each idea given a paragraph? Can a reader get the gist of what you are saying by reading the first sentence in each paragraph?

Now we return to John Holt. Read the draft *aloud* to yourself. Any sentence that is hard to read aloud is probably also hard to read silently. Experiment with it until it is easy to read. Substitute simple for complex words when you can. Avoid unnecessary adjectives and adverbs. Save unusual sentence constructions for the few occasions where you want more impact.

Finally, run the 20/20 check on it. You are likely to find that most of your writing passes it easily. If it doesn't, focus on two things — word length and sentence length. Simple words are preferred. Your goal is to have fewer than 20 per cent of words containing more than two syllables. Short sentences are favoured. Try for an average sentence length of less than 20 words.

The basic idea is to have a logical flow of simple words in simple sentences, suitably arranged in paragraphs.

In summary, the underlying principle is to be empathic to the needs of the reader. This can most easily be done by being clear about what you wish to communicate, making the structure explicit, and keeping the words and language simple.