Lab Report Processes

The Process of Technical Writing

The process of writing involves not only your ability to string a sentence together, but also how you manage the process. How do you effectively plan and organize the different stages of writing? How do you create space in your day to sit down and write, and find the time and energy to review? Get the process right, and you will feel a lot more confident.

THINK

What does your reader know and what do you want to say? Take a report you will be working on and complete the table below (or use a mind map).

- What is the purpose/scope of your report?
- Who else has done work in this area?
- How did you do it?
- Where did you do it?
- What did you find out?

These are all questions that the reader will want answered when reading your report. You may also prefer to create a mindmap at this stage. Use whatever method helps you to answer important questions about your work.

PLAN

You will need to know the structure of the report you are writing. Check with your tutor as he or she may have a particular structure for you to use. Also, if you are lucky enough to write a paper for a journal, you will need to check the structure, formatting and referencing style for each Journal.

A typical structure for a report is (bold are required):

1. Abstract
2. Title
3. Summary (abstract)
4. Keywords (optional)
5. Table of contents (advised)
6. Introduction
7. Literature review
8. Method (procedure, equipment)
9. Results & Analysis
10. Discussion
11. Conclusion and Recommendations
12. References
13. Appendices (large tables of data, illustrations etc.)
WRITE

It was suggested above, that when you plan you can use sentence outlining as a way of identifying what you want to say. It also means that you have started to write and bypassed the blank white page syndrome that many writers face. Now you have some skeleton sentences in each or most of your sections, try developing some sentences in a section you feel most comfortable with. Very often writers feel that the Methods section is the easiest place to start as it is the most concrete. Your sentences should be simple and clear. Your ideas are developed through your sentences, so make sure they are put together logically. Each paragraph then develops an idea or concept.

NOTE: When you are writing sentence outlines in the planning phase, the sentences will probably express an idea for a paragraph. If you have several sentence outlines for a section this will probably correspond with different paragraphs within a section. In the writing phase, you need to develop these ideas through supporting sentences.

REVISE

You must revise your work. You revise your work to check it is making sense, possibly adding or deleting things, and refine the way you have expressed yourself. You might want to revise your work after each section, and then finally look at all the sections when reviewing the whole work. If you leave your write up to the last minute, then you may find you have no time to do this, so make sure your time management includes revision. Most experienced writers have several revisions whereas poorer writers tend to just produce one draft. Be prepared therefore, for several revisions.

What you must do…

• Check your work covers what you have to do for your assignment.
• Read your work critically - check you have a strong message that is clearly argued and logically presented.
• Is your message coherent and logical within paragraphs and between sections?
• Check for any repetitions or things you can delete.
• Check paragraphs are in the correct order - you can re-order them.
• Think of your reader – check you haven't introduced an acronym without an explanation.
• Check that your results clearly presented and your figures support what you're saying.

EDIT

Sometimes the revision and editing activities get done together. This is not a good idea. During the revision phase you're looking at the content and how you have expressed it. During the editing phase you're looking to surface errors, e.g. typos, spelling mistakes, bad grammar, inaccurate labelling of figures and tables, and incorrect referencing. This is a much like proof reading.

WHAT YOU MUST DO….. CHECK THAT YOUR:

• Sentences are complete and make sense.
• Style of writing – check your use of the passive? Do a search for ‘I’ or ‘We’ and check if this needs to be converted from active to passive.
• Spelling is correct.
• Citations (names of authors you refer to in your text) - check they appear in your reference list.
• References are written in the correct way. You will probably need to write them using the Harvard system, but first check with your tutor.

EDITING TIPS

• Read your work aloud – or into a tape recorder. This prevents you from skimming over what you have written and missing things.
• If your tutor is happy with peer review (i.e. enlisting the services of a fellow student), this is an excellent way to check your work.
• Use the spellchecker and grammar checker in Word (with caution).
• Use of bibliographic software (Endnote or Reference Manager) that is available in all public workstations.
• If you have difficulty doing this phase of your work, it could be that you are dyslexic or have visual difficulties, then check out the technology available to help you in the Assistive Technology Service, located in the Hartley Library. Website: http://www.ats.soton.ac.uk/.

DEVELOPING YOUR MESSAGE THROUGH PARAGRAPHS

You can develop your message by:
1. Thinking about the topics you want to include (outlining).
2. Writing a thesis statement (a sentence or two focusing on the intent and scope of your work).
3. Writing topic sentences (a key sentence in each paragraph that identifies the topic of the paragraph).