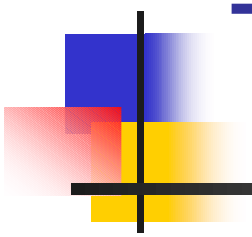

An Introduction to Technical Report Writing

By Benjamin Coulson, TA

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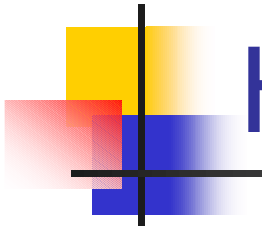
ENG 1000 – Fall 2001



Honesty & Plagiarism

- York's Policy on Academic Honesty
  - http://www.yorku.ca/secretariat/legislation/senate/acadhone.htm
- Department of Computer Science's Policy
  - http://www.cs.yorku.ca/admin/coscOnAcadHonesty.html

Excerpt from York University's Policy on Academic Honesty:

- Plagiarism is *the representation of another person's ideas or writing as one's own*.
- The most obvious form … is the presentation of all or part of another person's published work as something one has written.
- Paraphrasing another's writing without proper acknowledgement may also be considered plagiarism.
- It is also a violation of academic honesty to represent another's artistic or technical work or creation as one's own.
- (i.e., these standards also apply to the creation and presentation of music, drawings, designs, dance, photography and other artistic and technical works)
- This is not to say that students should not use the work of others with the proper acknowledgement.

The Long and Short of this Dilemma…

- Don't plagiarize under ANY circumstances. (no copying from other sources)
- If you decide to paraphrase another author, even a little, REFERENCE the WORK!! (use footnotes, subscripts or numbers attached to References Section)
- Plagiarism could END your academic or professional career in some circumstances.
- As ENGINEERS, you must maintain the highest moral and ethical standards – breach of this trust may place public lives in jeopardy, hence there is NO LENIANCY.

In Sum = Use your common sense.

The Technical Report

- Intent of a technical report is to communicate an idea/problem to a reader effectively
- The "Essay" of the scientific world
  - State the idea/problem
  - Frame your response
  - Respond with support for your argument
  - Conclude

Why is a Good Report Important?

- **Need to communicate ideas to an audience**

- Knowledge and skills are useless if you cannot communicate your ideas
- Collect information, organize it, and present it in a logical and concise form
- Report must convey the exact meaning you intend

- ***Well written reports will help your career***
- ***Poorly written reports undermine your credibility and frustrate your reader*** (i.e., ME!!!)

Report Presentation

- Binding
  - Permanency (staple, duotang, cerulux, 3-ring
  - Do not submit "loose-leaf" or in folders
  - Allow for binding on left margin ("gutter")
  - Keep about 1" (2.5 cm) of white space around page edges
- Headings
  - K.I.S.S. principle (avoid boxes and wild fonts)
  - Want report to be easy to follow for reader

Technical Report Content

PRELIMINARY PAGES

- (Cover Letter)
- Title Page
- (Letter of Submittal)
- Abstract/Summary
- Table of Contents
  - List of Figures
  - List of Tables

MAIN TEXT

- Introduction
- Background
  - (history, location, methodology, etc.)
- Results
- Discussion of Results
- Conclusions (& Recommendations)
- (Figures & Tables)
- References

Letter

- Cover letter is not bound within report
  - Inserted within package, or within front cover
- Letter of submittal immediately follows Title Page
- Both follow standard business format
- Introduce your report and reason for it
- Remember to sign your letter

UNIVERSITY OF WATERLOO
Faculty of Engineering

THE IMPORTANCE OF FINANCIAL PLANNING FOR ENGINEERS

The Financial Planning Group
Edmonton, Alberta

Prepared by
R. A. Band
ID 00122456
1A Chemical Engineering
May 1, 2001

Source: University of Waterloo Co-op Student Reference Manual, http://www.adm.uwaterloo.ca/infocecs/manual/index.htm

Table of Contents

- Goes on its own page
- Include page number that references the section
  - Don’t give range of pages
  - Include section heading (exactly as in report)
- List of Figures/Tables follows contents (usually on their own page)
  - Figures and tables are embedded within the report body, or placed at the end of the report in their own section (not the same as an Appendix)

Table of Contents

Source: University of Waterloo Co-op Student Reference Manual, http://www.adm.uwaterloo.ca/infocecs/manual/index.htm

List of Figures

Source: University of Waterloo Co-op Student Reference Manual, http://www.adm.uwaterloo.ca/infocecs/manual/index.htm

Abstract vs. Summary?

- Technical report = Summary
  - What does the report contain?
    - Purpose
    - Scope
    - Major issues
    - Main conclusions
  - 1 page (or less)
  - Concise, does not refer to specific parts of report
- Scientific report = Abstract
  - Synopsis of information in report
    - Problem
    - Main results
    - Main conclusions
  - 200 words or less (1 paragraph)
  - Strictly concise and condensed

General Content Comments

- Include section headings from Table of Contents in main text for reader reference
- No table or figure should be included if it is not specifically referenced in the text (i.e., at least "Figure 1 shows that…" or "Table 1 summarises…", etc.)
- When referring to a table or figure, introduce it first
- Figure captions usually go below the figure (not the MS XL default), and table titles go above
- SPELL CHECK!! PROOF READ FOR GRAMMAR!! If english is not your best subject or first language, have a friend read it too to help readability – if reader gets distracted or confused by poor grammar/spelling, report is very difficult to follow and intent is wasted
- 1.5 or double spacing is good >> easier to read

- Use of “This” – grammatically refers to everything preceding unless attached to a specific item (e.g., “This concept…”, “This fact…”, etc.)
- Capitals – use when starting a new line or sentence, not within a sentence unless a proper name (e.g., “Engineering” is not a proper name when referring to the profession (no capitals), but is when referring to, say, a department (capitalise))
- Don’t ask questions of reader in a technical report >> want to summarise design info and report results to reader, not write an entertaining magazine article
- Use colons to introduce a list, semi-colons to separate list items, and a period at the end – unless points are stand-alone sentences in which case all end with periods
- No paragraph indentation used in technical reports – blank line separating paragraphs, full justify
- Excessive data/info should be placed in an Appendix so that the reader is not overwhelmed with useless info
- Write in third person (no I, We, You, etc.), use formal language (no contractions, slang, etc.)

References

- REFERENCE YOUR PATENT!! Include correct patent number (and indicate US patent – there are many countries)
- technical reports do not use a bibliography (list of sources used to draw info, items not necessarily specifically referenced), rather they have a references section where the summarise the references cited in the main text (specific references)
- references uncited in the text should not be included as sources! If a source is used, reference it properly
- Internet references should cite the page title, HTML ref., page author (or company), date visited, etc.

More info...

- University of Waterloo Co-op Student Reference Manual, http://www.adm.uwaterloo.ca/infocecs/manual/index.htm
- University of Waterloo, Department of Electrical and Computer Engineering, http://www.ece.uwaterloo.ca/~wtrc/WrkTrmRpt.html