

Basic Communication skills



Summary of topics to be covered

- Communication skills for a professional engineer
 - Technical report writing
 - Presentation skills
- Reference texts:
 - *Communication skills for engineers and scientists*. IChemE. 4th Edition. 2007.
 - *Communication Skills Handbook*. J Summers & B Smith. 2nd Ed. Wiley. 2006.
 - *A guide to writing as an engineer*. D Beer. Wiley. 1997.
 - *Writing a report*. J Bowden. 2008.
 - *Oxford A-Z of grammar & punctuation*. J Seely. Oxford. 2007
 - *Eats, shoots and leaves*. Lynne Truss.

Technical report writing

- Some common types of report to be written by an engineer:
 - Specifications.
 - Progress report.
 - Accident report.
 - Annual report.
 - Feasibility report.
 - Research report.
 - Minutes of meetings.
 - Scientific report.
 - Audit report.
 - Environmental Impact Assessment.

Practical issues with report writing

- Preparation and planning
 - Set objective
 - Who will be the reader?
 - Deciding on information
 - Prepare skeletal framework
- Data collection and evaluation
 - Sources
 - Sorting information
 - Evaluating data
- Writing report
 - Initial drafts and reviews
 - Revisions
 - Conclusions and recommendations

Typical Engineering Report Structure

- Beginning
 - Title page
 - Acknowledgements
 - Executive summary
 - Table of Contents
 - Introduction
- Middle
 - Main body of the report
- End
 - Conclusions
 - Recommendations
 - Appendices
 - References
 - Bibliography

Creative issues of report writing

- Style guide (readability)
 - Grammar – get a reference book (Oxford A-Z of grammar & punctuation)
 - Choose your words
 - Document appearance
 - Clear style – keep it simple
 - Short sentences
 - Avoid slang and conversational English
 - Short, familiar words
 - Keep report concise
 - Factually accurate

Proof-reading

- Essential that reports are proof-read before they are submitted.
- Documents must be free from spelling, grammatical and punctuation errors.
- This should be done by someone who has not worked on the report.
- Proof-reading your own work can lead to errors – you know what is in the report, so you will skip through it too quickly.
- Proof-reading tips:
 - Print out a copy to read.
 - Spell checkers do not find all mistakes.
 - Slow down your reading.
 - Avoid interruptions.
 - Allocate adequate time – aim to have your report completed at least a day in advance of the deadline.

Paris
in the
the spring

A
bird
in the
the hand

**THIS SENTENCE CONTAINES
FOUR MISSTAKES**

Grammar tips

Common errors

- Avoid slang e.g. “State of the art”.
- Punctuation.
 - Apostrophe can be
 - possessive e.g. “John’s leg”
 - or in place of a missing letter e.g. “It’s a nice day”.
 - Use of commas and full stops.
- Grammar style.
 - All report should be written in the “third person” plural.
 - Work should be perceived as impersonal and objective.
- Correct use of capital letters.
 - Beginning of sentences.
 - In abbreviations e.g RTE, EPA
- Spelling errors not picked up by spell-checker e.g. “their” or “there”.