

Technical Communications

- Engineers need to have
 - a knowledge of what they are talking or writing about, and
 - the ability to communicate their knowledge in straightforward reports
- Know your reader or audience (communicate so they can understand, but are not bored) [target your communication to the level of the reader or audience]
- Write or talk with a purpose in mind- what do you want the outcome of report or talk to be?
- Avoid the use of excessive technical jargon, define technical terms your audience may not know.
- Visuals can greatly assist understanding on your part, but also communication of an idea or concept to others.
- In technical communications clarity of the communication is always essential

Technical Reports “Put it in writing”

- Writing helps thinking.
- Types of Technical Reports
 - Proposal (presents a solution to a technical problem)
 - Progress Report (written to inform management/customer about the status of a project)
 - Final Report (informs management/customer of the final result of a project)
 - Operating Manual (describes use, care, repair of a product)
 - Variation is the application note- detailed description of the use of a product- could be hardware, software, process, etc.
 - Feasibility study (analyzes one or more solutions to a problem or assesses multiple opportunities)
 - Memos/letters
- Written reports can be both formal or informal

Formal Report Structure

- Title page
 - Table of Contents
 - Abstract or Executive Summary
 - Introduction
 - Body
 - Conclusions/Recommendations
 - References
 - Appendix
- This is the general organization, some variation occurs to meet the requirements of the reader.

Proposal

- Purpose: present a solution to a technical problem
- Typical report organization (the body section of the report)
 - Technical section
 - Description of the problem (customer need/requirements)
 - Background (opportunity to educate the reader)
 - Design specification
 - Proposed design solution
 - Project Management section
 - Personnel requirements
 - Facilities/resources requirements and availability
 - Schedule
 - Cost
- The specific format of the proposal is often dictated by a request of proposals (RFP).