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On-line Handbook / Types of Documents / Understanding Genre

Genre is usually defined as a "type" or "form" of writing, such as a romance novel or detective fiction. These genres have shared characteristics – romance novels must involve a love story and detective fiction must involve some sort of crime – but each novel has unique features as well. Genres also, however, include the types of documents we write in documenting engineering work, such as lab reports, progress reports, etc. In thinking about genres of engineering writing, we still apply the concept of "shared but unique."

In understanding genre in relation to engineering writing, we have to do two main things:
1. Develop a structure that we can use to frame engineering work
2. Learn how to adjust this structure for specific situations

Developing a Structure: In your high school English classes, the dominant genre was the "essay." You are probably most familiar with the "five-paragraph essay" structure, which starts with an introduction (including a thesis statement), three supporting paragraphs, each with one main idea that supports the thesis, and a conclusion that summarizes the report. This genre, while often useful, is highly restrictive and unsuitable for engineering work.

In looking for a way to understand engineering writing, we can return to high school and the writing you did in your science classes: the **lab report.** The lab report uses a fairly rigid structure that derives from the scientific method:

1. Introduction: hypothesis and background
2. Method: procedure
3. Results: findings
4. Discussion: interpretation of results

The lab report starts with a hypothesis, which it confirms or disproves via experimentation and analysis of results: it is actually a mode of scientific verification, and is the underlying genre of all scientific writing.

Engineering writing is very similar, except that the goal of experimentation is not purely scientific, but practical. So we adjust the structure to include a hypothesis which poses a solution to a problem, multiple iterations of design / test /analysis to confirm the solution, and an "implementation" section which describes practical application.

1. Hypothesis: Problem - Solution
2. Design of experiment / Test
3. Results
4. Discussion
5. Iterations of 2-5
6. Implementation

This revised lab report structure can serve as a way of understanding or framing engineering work [1]. *(**See also Online Handbook / Accurate Documentation / Conducting and Understanding Secondary Research in Engineering)***

Improvising Genre: In scientific writing, genres are often understood as templates for content: forms that theoretically allow the writer to fill in spaces without having to think about the structure. This is a dangerous and simplistic way of thinking about genre, especially in engineering writing. Templates cannot accommodate the demands of different situations, unless they are revised according to those situations (as we did with the lab report structure above). In other words, genre can be thought of as both a type of document and a specific situation [2].

Our pages on the different "genres," then, do not prescribe a set "format" that you must adhere to,

but a generic structure which needs to be adjusted to each context (such as a particular assignment statement, an RFP, or a request from your boss).

Understanding genre well involves the ability to "improvise" based on the situation. But knowing the generic requirements and structure well is important, because the more you are familiar with the possibilities of a certain genre, the more capable you are of improvisation [1].

Our pages on "types of documents" provide a good foundation for your improvisation *(See Online Handbook / Types of Documents).* Avoid using them as templates that you can simply fill in by:

1. Identifying the purpose of your document, and developing a structure which is best suited to that specific purpose
2. Analyzing your audience, and developing a structure which best meets their needs
3. Using informative and specific headings (instead of generic ones like "background") relevant to your topic
4. Determining what content is required and allowing content to shape structure

[1] Irish, R., Tiede, K., and Weiss, P. *Communication Course Notes.* Engineering Communication Program, Faculty of Applied Science and Engineering, University of Toronto. 2004.
 [2] Burnett, R. and McKee, J. *Technical Communication.* 3rd ed. Toronto: Nelson, 2003.