

## How to Write a Project Report

### Advancing the ball

As their careers grow, engineers write with increasing frequency. Why? Because they belong to a goal-oriented profession whose object is to advance the ball on any given project, to help others make decisions and take actions. Engineering without documentation is like the sound of one hand clapping; there's no hope for applause if you're unable to express what you've learned. The following suggestions will help you write project reports that encourage readers to act upon your recommendations.

### Recipes, not rules

The greatest virtue of any report is its usefulness. Let's assume you've designed a new mode of transportation. Your job as a writer is to breathe life and give form to the inert facts and figures of your project.

- Will executives (with perhaps zero knowledge of engineering principles) be enthused and enlightened by the brief and jargon-free **summary** you've provided?  
Note: The summary (or abstract) is your report in miniature. Although it appears *first*, common sense dictates that you must write it *last*.
- Will your **introduction** state the topic of your report, its potential significance, and the specific objectives of your design project? Will its display of error-free grammar and spelling boost your credibility?
- Will the clarity and logic of your **methods** section impress fellow engineers? Based on what you've told them, will they be able to duplicate key aspects of your work?
- Will your **results and discussion** section walk your readers through an interpretive and scrupulously honest tour of your tests and data?
- Will your **conclusions** highlight the most significant consequences of your work?
- Will your **recommendations** make the case for what comes next? Will it compel your readers to act upon what you've attempted and achieved?

### A final note: ambiguity and how to avoid it

When writing a personal essay, a touch of ambiguity (defined as "doubtfulness or uncertainty as regards interpretation) is not necessarily a bad thing. States of mind are difficult to pin down—words like "perhaps," "some," or "many" mirror that elusiveness. However, in writing of an empirical nature (defined as "relying on or derived from observation or experiment"), ambiguous terms or phrases can often lead to serious misinterpretations.

The report writing process—from scribbled notes to first draft then on to the finished product—is a movement away from vague thinking to precise expression. Your task—as engineers and writers—is to inform and persuade readers through the clarity and exactitude of your descriptions.