FYP Report - PRESENTATION Guideline

Several elements are required to get a good grade on a report. In general excellent work, and a lousy report will get you a lousy grade because what you have done is useless unless someone else can understand it. Here are some basic pointers:

INTRODUCTION: Give a brief introduction to the area your project is in. If your project is designing an improved shift-linkage in an automobile which will reduce cost and weight you should start by mentioning cars, and cost/weight reduction. Like:

"With the increasing cost of petroleum products manufacturers are looking for ways to improve the efficiency of motor vehicles. One of the methods is to reduce the weight of the vehicle. Of course any change in a vehicle should maintain or improve it's const competitiveness in the long run."

SCOPE OF WORK - OBJECTIVES: Give the **specifics** of what your part of the project is. The reader now has an idea of the overall picture, now focus in on **exactly what you are doing**:

"My project is to redesign the Proton Waja Shift Linkage system in order to reduce the weight of the system, and reduce the cost of production."

CONSTRAINTS: Another important part to mention at the beginning is the constraints of the project. Specifications, fotos (labeled) and other data from the "current" version, and also the project's goals should be included so that the reader knows ***exactly what you hope to accomplish*** and how it will be measured. For example:

"The current shift mechanism consists of a perpendicularly oriented, bidirectional (push-pull) cable assembly with pivot links at each end of the cable (see figure #1). The total weight of the assembly is 1.65 kg (not including lever arms) and the cost is 25.75RM. My goal is to reduce the weight of the assembly by at least 25%, and the cost by 30% while maintaining a maximum force limit of >550N."

CALCULATIONS: Design Work: Data, Calculations, Analysis, drawings. You are designing a new part (or system or technique), so you must show how you are doing it, what analytical methods are you using? What software? Are you simulating the actual part with a model? How did you make the model? What data did you take? How was it measured? What were the assumptions? Include pertinent calculations explaining how each one of them is used. Also your **calculations should be related back to the initial constraints or the goal**. Drawings are very useful in explaining complex assemblies. Your constraints and calculations should "work together", i.e., calculate out where you are with respect to the original constraints. There are usually several different ways of calculating things: do it different ways and compare the results (e.g., Power = $I^2R = \tau\omega$).

TIMELINE: Be explicit as to what the individual steps in your project are. Give an approximate time frame for when each step is/was to be completed as well as an indication of which steps actually are done.

PROGRESS-CONCLUSIONS: At the end is it good to summarize the progress so far. Think about the initial goal, and where you are. What were the decisions made along the way, and what were they based on? The reader should not have unanswered questions as to what you are supposed to be doing, now tell him exactly where you are, and where you are going:

"Based on the analysis of similar systems previously mentioned in table 1 a direct acting shaft of the "push-rotate" design was selected as most appropriate for the weight and cost goals. This design was rejected by Proton management as the linkage path could potentially interfere with electrical wiring. We therefore focused on using smaller cables, with lighter end connectors. These cables were shown in our measurements (table 3) to have a sufficient pull-force, but the "push" force was not enough to satisfy the "factor of safety" so we are currently considering a design which incorporates return springs. This design will be modeled by 20 Sept, and a working version will be measured by 10 Oct."

DO's

Begin things with some form of the problem statement. Why are you bothering with this project?

Include page numbers on all multi-page documents and presentations. In a presentation the audience will ask "I have a question on your graph on page 12", and you can go to page 12, rather than fumbling around to find where the graph they wanted was.

Figures are the most important thing in your presentation/thesis. Few people actually read the bulk of the text of most long papers (though I will read every word!). Mostly they just look at the title, abstract, drawings, fotos and graphs. Make sure that these tell the whole story without having to resort to word-for-word reading of the text. If there is a foto showing an important test apparatus, label the individual parts.

THINGS TO BE AVOIDED:

Don't "bulk up" the report with a long-winded introduction of a bunch of crap you downloaded from the internet.

Don't include unlabeled fotos, graphs, or data. Give everything a label so that anyone can look at your pictures/data and know exactly what's going on.

Don't just cut and paste blocks of text from other sources. Paraphrase (read it, and then re-write it in your own words) and **always make sure you cite the source** of information. I'll mention this again just so it is clear: YOU WILL LOSE POINTS IF YOU SIMPLY COPY AND PASTE!

DON'T OVERUSE ANIMATIONS IN PRESENTATIONS! The constant "swooping in" of simple lines of text adds NOTHING of value, and is very distracting, and annoying. Occasionally it may be acceptable, but rather than focusing on trick "fade in-fade out" routines focus on making your material more understandable.