Writing a Memo Report

A common form of communication used in business and academia is the memorandum (or memo as it is usually called). Memos are written by everyone from junior executives to professors to engineers to CEOs. It is important that you learn to master this basic communication form. Memos are generally written to solve problems by informing the reader about new information or by persuading the reader to take an action. The most important feature about a memo is that it be concise yet complete and informative.

One format for presenting your lab results is to write a memo report. In this case the audience is your professor who has asked you to perform some task (i.e. measure viscosity, design a system). Your professor wants you to make a "recommendation" or present a key "result" (i.e. recommend using a specific transducer or reporting that you found the viscosity of oil to be 10 cps). Remember - all professors are skeptics - they won’t believe your recommendation unless you back it up by carefully explaining your measurement/analysis technique and presenting your data. However, your professor doesn’t want to read 10 pages! Your challenge is to present the important and relevant information in a two page memo. However, you can include as many attachments as you like.

Memos are generally divided into two parts: the heading and the body.

Heading

The heading segment follows this general format:

**TO:** (readers' names and job titles)
**FROM:** (your name and job title - "sign" by putting your handwritten initials after your name)
**DATE:** (current date)
**SUBJECT:** (what the memo is about)

Make sure you address the reader by his or her correct name and job title. Be specific and concise in your subject line.

Body

Your memo should be concise and informative. To achieve this it needs to be organized. The following are elements generally found in the body of the memo.

1. **Opening:** Start the memo by stating the main purpose of the correspondence. Include the context and problem, the specific assignment or task, and the purpose of the memo. This section should be short (2-3 sentences) and used to tell the reader why you are writing the memo. An example opening statement might start with “The purpose of this memo is to inform you about the results.....”

2. **Findings:** If your memo is longer than a page (which it will be for a lab report) you should include a summary section at the beginning of the memo. This section provides a brief statement of the key recommendations or key results you have reached. These will help your reader understand the key points of the memo immediately. For example, you might include a statement like "I recommend that you purchase 3 types of pressure transducers for a total cost of $##. " or "I measured the viscosity of the oil to be 10 cp which is within specification." Note: This section could be labeled “Findings” or “Key Results” or “Recommendations” or “Summary”. Use whichever title best applies to your memo.
3. **Discussion:** The discussion section is the longest part of the memo. This is where you include all the information that you have gathered to support your recommendations/results. Start with the information that is most important. Use meaningful highlighted headings to direct the reader. Try to write headings that are short but clarify section content. Include the following subsections:

- **Methods:** In one paragraph, briefly describe any experiments (setup and procedure) you performed or calculations that you made. You can include more details (a sketch of the set up for example) in an attachment.

- **Analysis:** In one paragraph, briefly describe your analysis of the data. DON’T include a lot of equations – instead use words to describe how you performed your analysis. You can include more details (specific equations and derivations) in an attachment.

- **Results:** Describe your primary results. You can include a summary table or plot of results but only the important ones (this is not the place to include your raw data – that belongs in an attachment). Use words to describe the results.

- **Commentary:** Discuss your findings! What do they mean? What are the limitations on your findings? Are there further experiments that you would recommend? Discuss sources of error.

4. **Closing:** After the reader has absorbed all of your information, you want to reiterate your main findings and state what action you want your reader to take. Close with a courteous ending (i.e. an offer of further assistance) and include your contact information.

5. **References:** Provide bibliographical information for any material that is not original and which you cited in the your report (i.e. technical specifications, equations, tables, figures done by someone else). Use the MLA citation style. See the following website for more information:

   [http://owl.english.purdue.edu/owl/resource/747/01/](http://owl.english.purdue.edu/owl/resource/747/01/)

6. **Attachments:** Use attachments to provide supporting data and give the reader confidence in your recommendations. You can do this by attaching extra information (procedures, detailed analysis, data, product information etc.) at the end of your memo. This is the longest part of the report and there is no limit on the length of this section. Give a title to each attachment (Raw Data, Experimental Set up...) and include a “List of Attachments” at the end of your memo.

**Other things to keep in mind:**

1. Writing a quick outline may help you to organize your thoughts. Develop a list of the main ideas that you wish to present. Use short paragraphs and analyze each paragraph of your memo for its purpose, content, or function. When you find a paragraph that does more than one thing, consider splitting it into two paragraphs. If you find two short separate paragraphs that do the same thing, consider combining them.

2. Your memo should be no more than two pages. Use size 11 font, 1 inch margins and single line spacing. Include an extra space between paragraphs (it makes it easier to read the text).