Style Specification: A Guide to Formatting Conventions for the DP1 Report

Writing Across the Curriculum Staff March 13, 2009

Introduction and Overview

Technical documents are judged by how completely, clearly, and quickly they deliver information to a reader. Skillful use of paragraphing, sentence structure, and the proper use and definition of technical terminology will help you create an informative document. Careful attention to the formatting of the report will improve its readability and make information easier to find.

Most organizations that produce professional documents have a style specification, style sheet, or other document that determines the overall look of reports and other written material. Although specific conventions vary, guidelines help to ensure consistent format within a particular community of writers. The guidelines we use are based on The Mayfield Handbook of Technical and Scientific Writing

https://web.mit.edu/course/21/21.guide/www/home.htm

For a complete discussion of any topic mentioned in this document, follow the link to refer to the Mayfield Handbook.

Global Document Format

The following conventions allow you to give your report a professional look and make information easy for the reader to find. Writers can achieve a clear, legible page layout using most generally available text editing, word processing, or document production programs.

- Text should be single-spaced, left-justified (ragged right margin). Leave one extra line space between paragraphs.
- Use a single-column layout.
- Font should be standard, 11- or 12-point. You may use a second typeface or type style for headings, captions, and other special text. Use these special effects sparingly.

Headings

Headings should stand out clearly from the running text of your report. <u>Levels</u> of headings should be easy to identify; the reader should easily distinguish high-level information from details and examples.

You may indicate levels of headings through the use of type size and style. For a short document such as the DP1 report, which is limited to 2500 words, too many levels of headings can be confusing. Use just three levels.

Table I gives examples of the formatting styles for three levels of section headings.

Table I. Heading Levels and Styles

Unnumbered Headings	Numbered Headings	
Main Heading	1.0 Main Heading	
Second-Level Heading	1.1 Second-Level Heading	
Third-Level Heading	1.1.1 Third-Level Heading	
Another Third-Level Heading	1.1.2 Another Third-Level Heading	

For more information on headings, see: https://web.mit.edu/course/21/21.guide/www/headxsh.htm

Paragraphs and Logical Units of Information

Readers of technical writing tend to skim documents, read them out of order, and refer to sections that contain information they particularly need. Because readers have such a variety of styles of using a document, they rely on writers to arrange information by topic and to establish a clear progression of ideas.

If you craft a paragraph's first sentence carefully, that sentence can establish context for the rest of the information in the paragraph and announce the structure for presenting that information. These first sentences may be referred to as <u>topic sentences</u>, contextualizing statements, or point sentences. Spend extra time on first sentences, and make sure that paragraphs are unified, focused, and coherent.

Use <u>bulleted and numbered lists</u> sparingly, and do not use them to substitute for full discussions or explanations. Lists should be introduced with a short paragraph that explains and supplies context for the items in the list. Make sure that the items in the list belong together and that they are grammatically parallel.

For example, you might begin each item with a boldface term and one or more sentences explaining the term. You might also list a series of complete sentences or phrases that fit together logically.

For a complete discussion of topic sentences: https://web.mit.edu/course/21/21.guide/www/topic-s.htm

For more information on the role of paragraphs and sentences, see: https://web.mit.edu/course/21/21.guide/www/paragraf.htm https://web.mit.edu/course/21/21.guide/www/sentence.htm

For more information on bulleted lists and other units of information, see: https://web.mit.edu/course/21/21.guide/www/layout.htm

Guidelines for Graphics

If you are not accustomed to using graphics to explain concepts, spend some time looking at the illustrations in your course readings. Which graphics are helpful? Which ones are confusing? When students critique the graphics they find in textbooks, manuals, and published articles, they often complain that these illustrations are cluttered, inaccurate, or difficult to relate to the concepts explained in running text. Give some thought to the specific point being made in your graphic. Adding captions, annotations, and figure numbers helps readers to understand the point being made.

Integrate graphics and text:

- Summarize the intention of the graphic in the body text of your report.
- Place the graphic as close as possible to a description of what it illustrates.
- Use figure numbers and captions so that readers can switch attention between text and graphics easily. Captions do count against your word limit, but readers often pay more attention to captions than to body text.
- The figure number and title belong under the figure. You may put explanatory text after the figure title.

For example, see the caption of Figure 1.

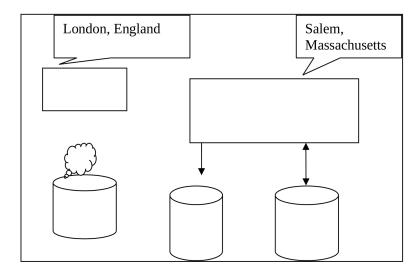


Figure 1. A generic illustration. Note that two unrelated place names are featured, and the cylinder on the left appears to be sulking.

• In contrast, the table number and title belong *on top of* the table, and explanatory text does *not* follow the table title. If necessary, concise

- explanatory notes may go in small type flush under the bottom of the table, as shown in Table II.
- Refer to visuals by number only, not position. For example, write "See Table II" not "See Table II *below*."

Table II. Reported values for $a^2 + b^2$

a	b	$a^2 + b^2$
1	0	1
2	10	103*

^{*} This value is suspect

• Use a separate numbering scheme for tables and figures, as illustrated by Figure 1 and Table II. The next figure would be Figure 2, and the next table would be Table III

Emphasize the important detail:

- Structure diagrams so important features are emphasized (e.g., by position, labels, bold). Avoid distracting lines, pictures, or special effects.
- Label the axes of graphs, and specify the units of measurement you are using.

Using Pseudocode

You may use pseudocode examples, if they are kept brief and not used as a substitute for prose explanations. Remember that readers want to see pseudocode as an illustration, but they will not want to decipher a page of code to understand how your design works. Pseudocode should be formatted as a graphic and explained in the text of the report. For example, the pseudocode in Figure 2 illustrates the use of 11-point Courier typeface to set it off from the rest of the report's text, which is 12-point Times Roman.

```
if(height > 60) {
   cout << "You may ride this rollercoaster";
} else {
   cout << Maybe your older sibling will go with you";
}</pre>
```

Figure 2. Pseudocode for rollercoaster riders.

The example in Figure 3 shows additional hypothetical code. It provides a second illustration of 11-point Courier bold as contrast with the report's running text:

```
while(ROME_BURNS) {
   fiddle;
}
```

Figure 3. Pseudocode for emperors.

For more information on graphics, see: https://web.mit.edu/course/21/21.guide/www/grfxfig.htm

Footnotes

<u>Do not use footnotes</u> in the DP1 Report. Consider the word limit, and then weigh the value of any information you plan to include against the space you have available. If the information is important, find a way to incorporate it into the report's running text. Bear in mind that any text included in footnotes counts against the 2500-word limit.

To document your sources, use the IEEE style of in-text citation. For more information on IEEE citation, see:

https://web.mit.edu/course/21/21.guide/www/doc-ie3.htm