

Common mistakes observed by Dr. Lulay in technical writing.

Spelling: all documents must be free of spelling mistakes. Some words not always flagged by spell checkers since they are correctly spelled, just the wrong word: to/too, affect/effect, week/weak, meet/meat, it's/its, principal/principle...

Paragraph structure: paragraphs contain a central thought (thesis) and as such they typically contain four to six sentences, not one full page in length.

Formatting: Section headings (example: Discussion) should not be at the bottom of a page while the first sentence in that section is on the next page (use “keep together” option in paragraph – MSWord). Figure and table captions must be on the same page as the figure or table.

Tense: if you are discussing work completed, use past tense. If you are discussing plans or work yet to be completed, use future tense.

Unsubstantiated claims, “judgments,” ambiguities, vagueness: sentences such as “the material was strong” should be avoided since “strong” is a relative word. What defines “strong” (or “tough” or)? One can claim one material was stronger than another material, one can claim the material is “sufficiently strong” for a given application (if there is testing and analysis to support the claim), and one can claim the material meets some specification, since all of these things can be shown to be true. Other similar statements to avoid include: “the testing went well”, “the results were bad”, “the results were in error since the calipers were not accurate” (this sentence is acceptable if you can define “accurate” and have evidence that this lack of accuracy really did cause the results to be in error). Remember, according to the ASME Code of Ethics, engineers shall not engage in “puffery”. Technical reports are not a TV commercial. **IF YOU MAKE A CLAIM, YOU MUST SHOW IT TO BE TRUE AND UNAMBIGUOUS!**