

Report Writing

1. Introduction.

- state the goals
- a short preview of the most important results

2. Methods.

- Key methods used
- limitations, assumptions

3. Results.

- summarize the analysis (key results only, put the rest in an appendix)
- use subsection, e.g. data transformations, least squares fit, diagnostics, outliers, ...

4. Conclusions.

- Interpret results
- Most important discovery
- Problems or surprises?
- What is the next step?

5. Appendix.

- All the results you want to mention but were not key to drawing the final conclusions.
- As we move along to more complex analysis in the labs, most of the basic tools from the early labs end up here (data transformations, outlier detection and removal)

And....

- Use full sentences in your report as much as possible - not just figures and bullet points
- Spell check
- Don't go crazy with different fonts, colors, etc.
- Don't use cut-and-paste tables and results from the software output. Put these in proper tables (see e.g. `xtable()` to create a \LaTeX table in R).
- Tables and Figures should be numbered and have captions. The captions should explain the content of the Figure/Table and perhaps include one or two sentences summarizing the "message".
- Use sections, subsection, paragraphs, indents - anything to break the text up into more accessible segments.