## Assignment Reports (EAS 372, 2013)

I'm occasionally asked: **"What do you want us to write?"** My response is to flip this around. What do *you* want to write? What are *your* objectives? There is no formula. Even if there were a "minimum satisfactory response," would it be advisable to aim (only) to achieve that minimum?

In any situation where one is called upon to write, there is a *context*. In the university setting, the context is to some extent competitive, and the point of the writing is to *demonstrate the quality of your learning, thinking, and writing*. Its a bit of a game. But as Alan Watts wrote (in, admittedly, a very different context): "The first rule of the game is that the game is not a game."

Certainly you will want to present results ("the product") that confirm you have *completed* the work. But is that all? Is there an opportunity, within the defined constraints (length of report, etc.), to demonstrate that you *understood*? To demonstrate thoughtfulness, a critical mind? The ability to see nuances? In short, achieving excellence is not merely a question of "doing everything you asked for."

- At a minimum, to classify as "organized," any piece of writing has to have an identifiable structure. The easiest way to ensure your writing will be perceived as being organized (i.e. structured) is to observe these rules:
  - Use informative *Headings* that help make your report coherent. Do not necessarily assume the headings you have used in other types of writing assignment (e.g. Physics lab. reports) fit well for write in the context of EAS 372. Think it through. For instance, I have noticed it is common for students to have a section titled *Methods* following their *Introduction*. A *Methods* section may be appropriate in any case where you are reporting calculations or use of instruments; but avoid it unless it really fits, and above all, don't include it by habit and stuff it with filler because every section has to have *something* in it.
  - Start with an Introduction. This can be very brief. It may be a single sentence. More likely, it will be a paragraph. An obvious, safe opening is to inform the reader of the context and meaning of what s/he is about to read. For example a safe opening might be something like: "This report documents an exercise in the interpretation of weather analyses. Part 1 focuses on the 1000-500 hPa thickness field and its interpretation. Part 2 focuses on the identification of zones of thermal advection."
  - Make sure you "carry" the reader through the main body of the report, your *Results* (or perhaps it is your *Methods and Results*). Organize your Figures and Tables

(probably in sequential order at the back) by giving them numbers and headings, and direct the reader to them by explicit statements in your narrative: See Fig. 1 for the computed trends in q and  $\overline{T}$ . Refer to your images and tables in the order of their appearance in the document.

- Close your report with some form of *Conclusion*
- An abbreviated form is fine (unless an "essay" style has been mandated), but it still needs to have an identifiable structure, it still needs to "flow" in a way that carries the reader.
- Even at the visual level, your report should have an evident structure. If it doesn't look organized, it isn't.
- Take command of the reader (in an appropriate, courteous way, of course). Tell him/her what to see, where, why.
- In addition to the issues of tidiness and structure, it is more satisfying to a reader if you provide a *reaction* to and/or *interpretation* of your findings. This need not be laborious.
- Be sure to edit your documents carefully for typos/mistakes of grammar or spelling if time permits, ask a friend to check for you.
- In reporting results of calculations, give an appropriate number of significant figures, reflecting a realistic degree of exactness.
- Treat given limits (page count; number of allowed figures) as exactly that upper limits. Such limits are given to avoid excess, and they don't mean the receiver of the document *wants* the limit to be hit. They don't mean you need to hit the max to show you've done your best. People acheiving top marks often do so by accomplishing an effective report that is also brief. Seeing people hit the limit, with a wordy, unclear wandering report tells that the writing job has been a struggle, and that the student's approach is "follow-the-instructions" rather than "take-the-initiative." This doesn't necessarily even speak to effort, because it takes no time to stuff a report with charts.

## Notes

1. How to construct the past tense of the verb "to forecast"? — I cast a stone, he casts a stone, he cast a stone in the water – not *he casted* a stone in the water