SCIENTIFIC WRITING: Six Major Rules for Developing Your Final Draft

1) **Stick to the point.** Delete any irrelevant information no matter how interesting it is. Store it away for later, but you don’t want asides to interrupt the flow of your writing.

2) **Say exactly what you mean.** It often helps to read aloud what you have written and to listen carefully to what you say as you read. Don’t try to use jargon or technical wording without you, and the reader, knowing exactly what it means.

3) **Never make the reader back up.** You want to lead the reader, line by line, paragraph by paragraph, from the start of your paper all the way to the end. Link sentences and paragraphs carefully, using transitional words such as *therefore* or *in contrast*. Avoid casual use of the words *it*, *they*, and *their*. You don’t ever want the reader to have to go back and try to figure out what *it* is or *they* are.

4) **Be concise.** By being concise, your writing will gain clarity. Give all the necessary information, but avoid using more words than you need for the job at hand. Why say:

   - Our results were based upon observations of short-term changes in behavior. These results showed that feeding rates did not vary with the size of the caterpillar.

When you can say:

   - Our observations of short-term changes in behavior indicate that feeding rates did not vary with the size of the caterpillar.

Or even better:

   - Feeding rates did not appear to vary with caterpillar size.

For more tips on how to edit for redundancy and wordiness, see SLAC’s handouts on Technical Writing: Improving Wordy and Awkward Sentences and What to Avoid.

5) **Don’t be teleological.** That is, don’t attribute a sense of purpose to other living things, especially when discussing evolution. Don’t write, “Insects may have evolved flight in order to escape predators.” Instead, write, “Flight among insects may have been selected for by predation.”

6) **Proofread.** It can be annoying, but it is essential that you always do a last pass over your paper before turning it in. You may think you’ve read and reread the paper plenty of times and surely have caught every mistake, but you would be surprised to see that beautifully revised paragraph includes an accidental sentence fragment or that you have repeated a sentence while copying and pasting!