

Chapter 1

Writing should be thought of as a tool scientists use. Much like statistics is a tool to interpret and measure data, is writing a tool to communicate research. No matter how good the raw data, or how astounding the findings are, will everything be wasted if it can not be communicated effectively. Scientific writing is more about rewriting, rather than “writing”. Almost every first draft will not be good enough to publish. So the art of writing is more about making a manuscript ever so slightly better for each draft. Being a successful scientist will not be measured by the amount of published work, but rather on usability of the paper. This mean that success really is measured by the number of citations, here will it be essential that you as a writer have been able to communicate the results.

Chapter 2

Many scientists do not see their writing as writing a story, it almost feel like deviating from what being a scientist is about. But in reality, the best scientific writers are also great storytellers. Raw data itself does not tell a story, however in that data there is a story waiting to come out. The art of scientific writing is to find that story. It really is as simple as:

1. Collecting the data
2. Gain information from the data
3. Gain knowledge from the information
4. Understanding, and present the understanding

The further along you can take the process from data to understanding, the better will the paper be. The data will try to tell the story, let it be the main character and listen to it. Their is essentially three aspects to effective storytelling:

1. Content; what makes a story engage and stay with us?
2. Structure; how to put together that content to make it easy for us to get?
3. Language; How ro weite the story in the most compelling way possible

Exercise 2.2: Write a short article

Step 1. Identify the key story points for your work

1. What is your opening? This should identify the larger problem to which I am contributing, give readers a sense of the direction of the paper going, and make it clear why it is important. It should engage the widest audience practical.
2. What is the specific question or hypothesis?
3. What are the key results from the work? Identify these in a short list. There should be no more than two or three points
4. What is the main conclusion? What did you learn about nature? This should use the results from section 3 to answer the question from 2, and should address the larger problem identified in 1.

Step 2. Write the article

Write a short article describing the research. Target audience is scientists who are not specialists in my discipline. I will try to tell the story of the work and engage and educate my readers, not write a technical paper. The tone can range between somewhat technical and more casual, but it must be something that technical readers would find interesting. Use the answers from step 1 to frame the story. Word limit is 800-850 words.