OU Writing Center “Science Friday” presents:

Tips on Writing a Science Synopsis

First a little background...

This is by no means a comprehensive guide. I imagine that an internet search on “science writing” and “writing a synopsis” would turn up similar tips and tricks, including ones that I have perhaps neglected. I have, however, noticed some similar challenges writers face in crafting science synopses and other science reports during my time as a Writing Fellow and Consultant and would like to give you some tips for success in science writing.

A synopsis is intended to help you think critically about an article. Thinking critically means that you have read the article and understand the main points and are able to connect those points to the overarching idea the author is trying to convey. Hopefully you are also able to connect the ideas in your current article to ideas you have read in other articles. Finally, the articles you read will hopefully stimulate questions and ideas of your own that expand on the ideas the author is presenting (think about this for writing lab report introductions too). This is often how professional scientists and researchers design new experiments and studies of their own.

My tips fall into two main categories: organization and clear, concise writing.

Organization

If you begin to write without taking time to organize your thoughts, your synopsis may lack “flow,” or smooth transitions that connect one idea to another. You may also fall into writing a summary that follows the author’s organization, which may start to bring you into the realm of plagiarism. Here are a few ideas to keep you on track with a synopsis rather than a summary.

1. Give yourself time to think about what the article is saying before you have to write and turn in your assignment. Even if you read the material and then go fix yourself a snack, take 15 minutes or so to begin mulling over what you read.

2. Without re-reading the article, make a few notes as to the main theme or idea the author is discussing in the article. What were some of the important points?

3. Sketch out a quick outline. This does not have to be formal or complex. I usually write my outlines on the back of a napkin. Think about the main ideas, in what order you want to discuss them, and what examples or evidence you will include for each idea.
Be Clear and Concise

Professors write a lot in the course of their career and can recognize effective and ineffective writing. The problem however, is that they are unsure how to tell students why their writing is ineffective, so they often will highlight a sentence and write “awkward”. (This is true across all disciplines.) In science, “awkward” often means be clear and concise in your writing. Clear writing means that you are saying what you mean to say without trying to use big words and jargon where it is not appropriate. Concise writing means that you write efficiently, without putting unnecessary words and phrases into your writing. Here are some ideas on clear and concise writing.

1. Say what you mean to say. Don’t feel like you should try to sound “smart” or “academic”. Think about how you would discuss this article with one of your classmates and write as if you were talking to someone face to face.

2. Sometimes using the thesaurus is okay… just use it wisely and think about whether the word you are substituting actually fits your sentence. Does this new word mean what you want it to convey in your context? If you’re not sure, seek another person’s opinion.

3. Write in active voice. I know that your high school teachers probably told you never to use “I” or “we” when writing scientifically. They were misguided. The scientific field is much more accepting of appropriate use of “I” and “we”. It makes a paper a lot less boring to read.

   Passive Voice: Samples were analyzed using a spectrophotometer.
   Active Voice: I analyzed samples using a spectrophotometer.

4. Don’t write “fluff”. “Fluff” describes any sentences or paragraphs that don’t add anything to what you are saying. For example, in the context of evaluating your professional writing, your professor does not care that “I think asexual reproduction is very interesting.” Scientific synopses focus on information and processes (the research), not necessarily the feelings and experiences of the writer.

5. Cut out unnecessary words and phrases. You can look up lists of these online. For example, “In order to understand the connection between lightening and electricity, Benjamin Franklin made use of a kite and key methodology” is a very verbose way of saying, “Benjamin Franklin used a kite and key to understand the connection between lightening and electricity.”
One final suggestion is to give your paper to friends, family, classmates and the OU Writing Center for review. Just make sure you give your reviewers enough time to help you with your paper before it is due!

Carrie Miller-Deboer
Zoology Department Writing Fellow (2010-11)