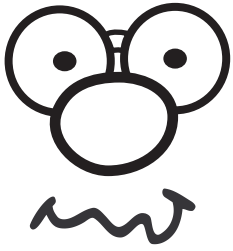


Writing for Scientists



and the rest of us

"It was written for rocket scientists...
but the rest of us can still understand it!"



Introduction

Now don't shy away for this manual just because it has scientist in the title. True, this manual was designed with scientist in mind to make the writing process easier. However, the content of this manual will help anyone who struggles with the writing process.

The writing process is very much like scientific process with set standards to complete the process and rules why these standards are used. This manual makes the writing process more like a lab experiment with step to follow and questions to answer along the way. Also, like a lab experiment write up, this manual should not be read once and then put up on the shelf. Instead it should be used every time you are pressed to develop an academic or professional essay, document, or memo.

So, let's put our writing coats and safety goggles on and begin the writing process.

What are these symbols?



The purpose of these little commentaries is to help explain the purpose of why writers do the things they do in the writing process or to define unfamiliar writing terms that may not be common to everyone.



This symbol marks easy to follow examples or provide a scientific counterpart to the writing concepts.





Read over the assignment carefully.

PRE-LAB: ANALYZING THE ASSIGNMENT

In the writing process, just like the in a lab experiment, there are certain precautions that you must know before you can even begin. Although, a document won't explode in your face, it will seriously affect your grade if you don't take into account the following considerations:

What is the purpose of the assignment?

Is there a set length or a range requirement?

Are there any formatting restrictions to the assignment? If so, what are they?

Is documentation needed? If so, what convention?

What is it you should and/or WANT to learn from this assignment?



What is documentation? What convention??

When using research in your essay, you must document your sources. There are several convention of documentation. The most common are MLA (Modern Language Association), APA (American Psychological Association), and CMS (Chicago Manual of Style). To Learn more about which citation to use and how use it properly, contact your professor.



Example Assignment Analysis:

What is the purpose of the assignment?

Write a Rhetorical Analysis on Jonathan Smith's "A Modest Proposal"

Is there a set length or a range requirement?

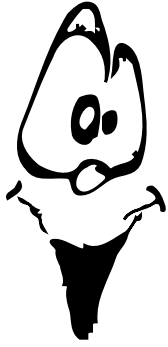
3-5 pages

Are there any formatting restriction to assignment? If so, what are they?

Yes, One inch margins on all sides, Times New Romans, 12 point

Is documentation needed? If so, what convention?

Yes, MLA



Just remember, there is someone on the other end reading what you write.

PART I: PRE-WRITING – PREPARING TO DO THE EXPERIMENT

STEP 1: AUDIENCE – CHOOSING THE RIGHT LANGUAGE

One of the most difficult and often forgotten parts in the writing process is choosing the right language for the audience. This essay or memo you are writing will be read by a person, perhaps by several people, so it is important to keep them in mind. The following questions should help with the establishment of the audience.

Who will be reading this paper?

Who do you assume would WANT to read this paper?

What can you assume your audience knows about the topic?

What are the audiences' expectations of the paper?

How would you address the readers in person?



Why is knowing the Audience important? Aren't we going to write the same way, anyway?

The answer to the second question is, "no." Would you write an essay in French if your professor can only speak English? You would have a confused professor, possibly resulting in a poor grade.

Writing for the appropriate audience is very important. Understanding who your audience is and knowing what your audience understands are key elements for writing an affective essay. So when you write, always keep in mind that there will be a person on the other end reading what you write. For communication to be successful you must chose the language, setting, style, and terminology that fits your audience.

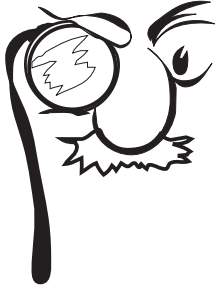


Example Audience Analysis:

Who will be reading this paper?
My professor

What can you assume your audience knows about the topic?
I assume that my professor has read "A Modest Proposal" and understands the underline meaning.

What are the audiences' expectations of the paper?
That it will show that I have read "A Modest Proposal" and understand the underline meaning. That my paper contains no grammatical errors. That my thesis is well supported.



Remember, the thesis statement is like the hypothesis. It is the most important part of the paper.

STEP 2: THESIS STATEMENT – WRITING YOUR HYPOTHESIS

What is a thesis statement and why do I need to write one?

In experiments, the hypothesis is what you believe will happen when you were complete an experiment. For example, I hypothesize that mixing baking soda and vinegar together will cause a bubbling reaction. Throughout the entire experiment, I will be working to prove my hypothesis.

A thesis statement is a similar to an hypothesis. It should be your goal or what you are trying to prove when you write. This is why it is so important to start the writing process by establishing a thesis statement.

a. Answer the following question as best that you can

What is your topic?

What are you trying to prove, explain, or state?

What is the objective of the paper?

What should the reader learn from reading this paper?

What type is the paper (narrative, compare/contrast, rhetorical analysis, etc.)?

b. Now using the Answers from above from a write a pseudo-thesis (Don't worry about getting it perfect. You can change it later)



Why does it make a difference what type of paper I am writing?

For many of us writing essays, memos, professional documents, is not something we do every day, but we do write every day in e-mails and To Do lists. Since we write these documents every day, we do not often realize that we change our style for each one. Surely, you do not write to your friend in the same way that you write your to do list. It might look like this:

Dear Friend

1. How are you?

2. I am fine.

3. Talk to you later!

4. Ted

Your friend would be confused to receive an e-mail like this. Well, the same concept is applied to the different types of document you will need to write for a class or the professional world. So keep in mind these differences and how they affect your thesis statement.

STEP 3: CREATING AN OUTLINE – DRAWING THE BLUEPRINTS



Best to read over your thesis statement before beginning your outline.

When constructing a building, machine or circuit, scientists know that it is best to begin with drawing up a blueprint. The same is true for the writing process. When writing, the outline provides a design or structure for your document without setting it in stone. Although outlines allow a great deal of flexibility, it is still a great guide to keep you on task and not to accidentally leave out crucial details.

Before beginning your outline, it is best you reread your thesis statement, projected audience, and the purpose of the assignment. Then answer the following questions.

Relating to the purpose of the paper can your thesis be broken down into parts or sections of discussion? What would they be?

Can these parts or sections be formed into questions about your thesis? What would they be?

What are some major points that would answer the question above, or support your thesis?

What is the most logical order to list the parts or sections of your thesis statement?

Now using the answers above. Create an outline.



Are outlines really that important to the writing process?

Outlines are not as important as the thesis statement, but they are a beneficial part of the writing process. As mentioned above, an outline is a guide to be used when writing your essay. Outlines help keep you on task and help you focus on your thesis statement as you write. For this reason, many professors will require an outline to be completed before you begin your writing your document.

Can you write without an outline? Absolutely. Outlines are not a necessity to the writing process, but certainly make it easier to complete your assignment more effectively and efficiently.