Science Unit Paper—Assignment and Guidelines

Invention and Discovery: Modern Scientific Developments

Your first paper assignment requires you to research one invention or discovery and give an account of its significance. The object you are researching can be any item that has produced some significant impact because of its arrival. It can be a “generic” item (e.g. the chainsaw) or it can be a specific product (e.g. Pepto-Bismol). You are to research the item in question, giving some account of its development, some details of how it works, as well as its intended purpose(s). You should then trace the object’s significance by looking at its impact in historical and/or social terms. For more recent inventions or discoveries, you may want to consider accounts that speculate on possible future impacts. You may also want to limit your research by considering the impact of the object within a set social group or segment of society rather than the entire world or even all of the United States (e.g. the impact of blow-dryers in the state of California).

The essay should be 5-6 pages in length, typed (12 point Times Roman font), double-spaced, with one-inch margins and page numbers. Cite all sources using APA style and include a title.

In order, to write the paper successfully, you should:

1. **First, select your item for investigation:**
   Try to pick something that relates to your personal interests or your own daily life. Make sure that the topic has some unique qualities, either because of the object itself, or due to its social significance. The more unique or personal the topic is, the more rewarding you will likely find the assignment. Your writing will also be better if you are working on something that you find exciting.

   In order to brainstorm your topics, on **Monday October 9** please bring a one page typed response with **three possible topics** and some statements of why these topics are of interest to you. We will do some “workshopping” in class with these topics. Your final paper doesn’t need to be based on one of these topics, but this assignment will help you to begin narrowing your focus down to a specific topic.

2. **Compile a bibliography:**
   Once you have a potential topic in mind start looking around for some resources on it. You must include **at least five** sources for this essay, including at least two journal articles. The databases for the UCSB Library are a good place to begin your search (http://www.library.ucsb.edu/databases/). We will discuss research strategies in more detail in class. Your final bibliography must be in APA format, which we will also discuss in further detail in class.
3. Take a position:
After reviewing a number of sources on your topic, decide where you stand on the matter. What do you think are the effects of the object you are investigating? Is it something that is purely beneficial? What are some potential drawbacks or concerns? Considering such questions will lead you toward the development of your paper’s thesis and will allow you to focus your paper.

4. Write a Rough Draft:
You will need to bring three copies of a draft to class on Monday Oct. 16. We will then be working on the drafts in a peer review session, in order for you to clarify your thoughts, finalize any points, and make final revisions.

5. Revise, Revise, Revise:
After our peer review session, you must bring everything together into a clear, coherent final version, with a bibliography in APA format attached. The final draft is due at the beginning of class on Monday October 23 as the centerpiece of your Unit One Portfolio.

Paper Evaluative Criteria:
- The paper is clearly and logically structured
- The paper features a clear and coherent thesis statement
- Use of five or more reliable outside sources (two or more from journal articles) and correct citation in APA format
- The essay draws on the sources for support, using them in developing its own claims about the topic, but demonstrates a clear division between your ideas and those of the authors you cite
- The topic being investigated suggests originality rather than cursory reflection
- The paper shows clear usage of grammar, spelling, diction, and mechanics
- The paper features a compelling title that points toward its thesis

Unit One Portfolio Grade Breakdown
Your unit one portfolio will consist of four items. The portfolio must be turned in at the beginning of class on Monday October 23 with the final draft of your paper.

Topic Brainstorming Response__________________________5%
Research Scavenger Hunt Worksheet____________________ 5%
Peer Review Worksheet_______________________________5%
Rough Draft________________________________________10%
Final Draft_________________________________________75%