

Introduction to Science Research

Assignment: Review of Literature

Due: May 2, 2015,

Assignment: By now you have read numerous articles and completed the necessary background research in your field of interest. This is the first step in writing a review of literature. A review of literature is a key component in the final research paper you will write as a senior. **Since most of you are not at the point where you have developed a research plan for your own experiment, you will be writing a review of literature based on the most important readings you have done so far in the area of science you have been researching this year.**

The paper itself:

- Must be typed, double-spaced, with a font size of 12 point.
- Make sure your writing is clear and concise; **do not write pages and pages on each article.** You are not re-writing summaries of these articles, you are evaluating them, the techniques *used*, and how they are relevant to your current topic of interest. If you hand me in something that reads like a summary of the article, you have done the assignment incorrectly.
- Must include an introduction which talks about the topic that you have chosen for your research.
- Must include a conclusion paragraph that talks about how the review of literature will impact your work moving forward.
- Make sure to cite any information that is not yours, that includes paraphrasing, correctly.
- Include a bibliography of the articles used (this does NOT need to be checked by the librarian).

“When you write your Review of Literature you might want to copy words, pictures, diagrams, or ideas from one of your sources. It is OK to copy such information as long as you footnote or reference it. If the information is a phrase, sentence, or paragraph, then you should also put it in quotation marks. A reference and quotation marks tell the reader who actually wrote the information.”

(http://www.sciencebuddies.org/science-fair-projects/project_review_of_lit.shtml)

See next page for information on how to get started!

Review of Literature - Getting Started

A review of literature is an evaluation of research completed by others in your field. To start the process you should:

- Look at all the articles you have read so far in your topic to build your knowledge. You should have a partial list already compiled from a previous assignment. You can include articles from the past 5-10 years that relate to your research question.
- Not all of the articles you have read may be relevant to your current area of interest. The next step is to choose the articles that are the most important to the aspect you want to study. **You must include 1 review article and at least 4 other articles, mostly primary, in your review.** You can include more if there are other important articles you have read.
- Make an outline. Organize the articles by type (primary, review, etc.). You will be writing about these articles in chronological order, so be sure to organize your outline that way. Include the important information for each article in the outline. Things include:
 - The author, title, and year of publication
 - Information from a research paper to look at (you will notice a lot of this is what you did in your summaries)

1) Problem statement	7) research design
2) Definition of concepts	8) methods and findings of data analysis
3) Hypotheses	9) interpretation of data- did it support/reject hypotheses
4) Theories and assumption	10) recommendations for further research
5) Research methods	11) note any missing data and limitations of research
6) Data collection instruments	
- Write the review of literature. Use the information in your outline as a starting point for your evaluation of the research conducted.

The following is a list of some of the things you might want to consider as you write, these allow for an evaluation and a critical review of the literature you have read. **I do not expect to address all of these for every article;** they are just guidelines to give you some direction to help with your evaluation.

- qualification of the author to undertake the research
- the extent to which the introduction informs the reader of what the author has studied – the problem, definition of concepts, objectives, hypothesis, variables, operational definitions, assumptions, and theoretical perspectives
- Is it a primary or secondary source?
- Is the research design appropriate for the study?
- Does the method of sampling allow the author to generalize findings?
- Was the method of data collection ethical and proper?
- Did the author completely discuss the data, tested hypotheses, present data in tables and graphs, use consultants where necessary, and explain how missing data was handled?
- How did the author compare the findings to those of others in the literature?
- How did the author generalize the findings to target populations?
- Did the author examine their own strengths and weaknesses, report limitations, and make recommendations for further research?
- Were all works cited included in the bibliography?
- Was the abstract clear and concise?
- Was the writing style organized and objective?