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Writing a Literature Review

Now that you have reviewed the literature, how should you go about writing the literature review section of your article? In this module we will show you the process that is used by many academics. After completing this module, you will be able to:

1. Organize the content you gathered from reviewing the literature.
2. Draft an outline for your literature review section.
3. Write a literature review that ties together your annotated bibliography and outline into fluid, logical paragraphs.

1. Get Organized

Now that you have developed an annotated bibliography with the help of the *Reviewing the Literature* module, you should identify themes across several sources and organize your annotations into topics, subtopics, etc.

1. **Thematic organization.** As you read widely but selectively in your topic area, consider what themes or issues connect your sources together:
 - a. Do they present one, or multiple solutions?
 - b. Is there an aspect of the field that is missing?

- c. How well do they present the material and do they portray it according to an appropriate theory?
- d. Do they reveal a trend in the field?
- e. Is there a raging debate?

Use the following themes to organize the works into categories. Typically, each work that you include in your review can fit into one category or sub-theme of your main theme, but sometimes a work can fit into more than one.

2. **Global Organization.** Once you have organized your reviewed content into themes, think about how you will organize the themes in your manuscript:
 - a. What is the most effective way of presenting the information?
 - b. What are the most important topics, subtopics, etc., that your review needs to include?
 - c. In what order should you present them? Some options include:
 - Chronological
 - Least common to most common in the literature
 - Broadest to most directly relevant
3. **Develop a Draft Outline.** While you will have an overall outline for your entire manuscript, it can be helpful to zoom in and write one specifically for your literature review. An example framework is:

Section 1. Introductory paragraph for your literature review section

- 1a. Describe the overall topic that you have been investigating and why it is important to the field.
- 1b. Identify themes and trends in research questions, methodology, and findings. Give a “big picture” of the literature, being sure to relate it to your research.

Section 2. Theme A

- 2a. Overview of characteristics of the theme (commonalities, differences, nuances among sources as it relates to this theme)
- 2b. Detailed discussion of the theme
- 2c. Brief summary of first source
- 2d. Discuss what first source says about the theme
- 2e. Transition statement to connect first and second source
- 2f. Brief summary of second source
- 2g. Discuss what second source says about the theme
- 2h. And so on! (3 or more sources for each theme are fair).

Section 3. Theme B – follow rules for Theme A above; studies can be repeated if there are multiple findings that fit under more than one theme. However, there is no need to re-write the summary (just enough to remind the reader about the study).

Section 4. Concluding paragraph

- 4a. What are the overall strengths of the existing literature?
- 4b. What are the overall weaknesses?
- 4c. How does your paper fit into the discussion? Does it fill a gap? Does it add to what others have done?
- 4d. What contribution does your research make to the discussion? State this briefly.

2. Read More

- 1. Based on the knowledge that you have gained in your reading, you should have a better understanding of the topic and of the literature related to it. Perhaps you

have discovered specific researchers who are important to the field, or research methodologies of which you were not aware. Look for more literature by those authors and on those methodologies.

2. Also, you may be able to set aside some less relevant areas or articles that you pursued initially. Integrate the new readings into your literature review draft. Reorganize themes and read more as appropriate.

3. Write Individual Sections

1. For each thematic section, use your draft outline and annotated bibliography to write a section that discusses the articles relevant to that theme.
2. **Make thematic statements about the material you're reviewing:** These statements will not necessarily argue for a position or an opinion; rather they will argue for a particular perspective on the material.

Example 1: Make thematic statements by connecting works from multiple authors

Rather than writing something like:

Smith (2009) claims that smoking is harmful to human health, provides evidence in his ingredient analysis to support it, and says it is probably because of additives. But Smith seems to have neglected the effects of the tobacco leaf itself...

or,

Jones (2011) showed that smoking is harmful to human health by examining the tobacco leaf's molecular structure, which means it is likely because of the carbon chain arrangement. But, his methodology does not exclude other possibilities...

List the themes and then say how each article relates to that theme:

Researchers agree that smoking is harmful to human health (Smith 2009, Jones 2011, Johnson 2012), but they do not agree on why. Smith claims it is probably due to additives, but Jones, by breaking down its molecular structure, tries to show it is likely because of tobacco leaf. Jones' methodology, however, does not exclude other possibilities. Johnson hypothesizes...

Note that many STEM articles will not use authors' names in text but rather only in citations, sticking strictly to discussing content with citations to back it up.

3. **There should be a direct, obvious connection between the themes that you discuss in the current literature and the findings that you present in the paper.** Be explicit and say what these connections are in your paper. Walk the reader through your paper. Don't worry about sounding too obvious in the first drafts. You can always make it sound more sophisticated later. You want your research to provide a *fairly unique* but *clearly related* contribution to the discussion, developments, and research already out there on your topic.
4. Tie the body of your article together with an **introduction, conclusion, and some additions and revisions** in the sections to show how they relate to each other and to your overall theme.

4. Expert Tips from Melanie Fedri's *Literature Review Guide*:

1. **Check out examples** Read existing literature reviews in your area of interest and get a sense of the types of themes you might want to look for in your own research or ways to organize your review. Check out an article from [Annual Reviews](#), a series specifically devoted to literature review articles.

2. **Use evidence** Refer to several sources when making a point/statement about the literature. Your interpretation of the available sources must be backed up with evidence to show that what you are saying is valid.
 3. **Be selective** Select only the most important points in each source to highlight in the review. The type of information you choose to mention should relate directly to the points you're trying to make, whether they are thematic, methodological, or chronological.
 4. **Use quotes sparingly** Some short quotes here and there are okay if you want to emphasize a point, or if what the author said just cannot be rewritten in your own words. Remember to give credit to the author's ideas you're rewording!
 5. **Summarize and synthesize** Remember to summarize and synthesize your sources within each paragraph as well as throughout the review.
 6. **Keep your own voice** While the literature review presents others' ideas, your voice should remain front and center. In general, your voice will appear at the start and/or end of paragraphs, when you critique sources around each theme.
 7. **Use caution when paraphrasing** When paraphrasing a source that is not your own, be sure to represent the author's information or opinions accurately and in your own words. Cite not only direct quotes, but also ideas you got or are discussing from another source or author. Check out our videos on referencing and plagiarism to make sure you are citing correctly.
 8. **Revise, revise, revise** Once you have a draft, rewrite or rework the language of your review so that you've presented your information in the most concise manner possible. Be sure to use terminology familiar to your audience; get rid of unnecessary jargon or slang. Finally, double check that you've documented your sources and formatted the review appropriately for your discipline.
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Sources and Additional Resources:

1. Fedri, M. (2012). Literature Review Guide
2. Wesleyan University Library. (2014). Writing the Review
3. Montana State University, Billings: Writing a Literature Review