

12

Research Proposal

Introduction

Previous chapters describe in detail how to write the content for the major sections of a research proposal. The objective now is to bring those pieces together into a cohesive document: a written research proposal. This culminating activity involves cutting and pasting, rewriting, and new writing. It is a matter of systematically and intelligently bringing the elements you have created together.

Provided here is a generic proposal structure and suggested content that is fairly common among the social and behavior sciences. Since most professors, academic units, and universities have particular guidelines or requirements for proposal structure and content, some adaptation may be required. The organization presented here, however, works for many student research projects. Keep in mind that advisors, committee members, and potentially external reviewers will evaluate the final proposal on clarity, content, *and* whether specified guidelines are met. The following is the content and organization I recommend:

1. A *cover page*, which contains the title, your name, committee member names, and the date
2. An *introduction* to the problem describing the general scope of the project and why it is important
3. A *literature review* synthesizing prior research and describing the theoretical framework of your research
4. *Specific objectives or research questions* and hypotheses (when appropriate) your proposal addresses
5. A detailed description of your *research methods*, including data collection and analytical approaches
6. *Project significance and implications*
7. An annotated *time line* for the anticipated completion of the research
8. An alphabetized list of *references*
9. *Appendix* (optional)

This chapter contains guidelines on the content for each section, parameters to decide how long each section might be, and Action Items describing how to craft and revise the entire document. Several Action Items are embedded in the chapter, as with previous chapters. However, the majority of Action Items appear as a “to do” list at the end of the chapter. The reason for this difference is because I present and describe the contents of the proposal in the order they appear in the final document (as illustrated in the preceding list). Crafting those individual sections, however, requires they be written in a different order, starting with the research methods.

Proposal Content

In the first paragraph of this chapter, I suggested that most of the pieces for the proposal already exist. It appears to be just a matter of bringing them together, and voila, it is done. I wish it were that easy. Remember first that the earlier documents were written as stand-alone pieces. Now they need to be integrated into a cohesive whole. Second, your ideas have matured since you wrote the area of specialization. You have new ideas and a new frame of reference that need to be incorporated. Clearly, both of these reasons suggest revising existing and writing new text. The remainder of this section describes the content for each of the sections of the proposal.



Action Item

Start a new word processing file for your proposal. Using either the organization described earlier or an outline suited best for your project, craft the headings for the proposal sections. As you begin to fill in these sections, pay particular attention to how one section links to another. These transitions need to be overt so the reader knows the logical relationship of your ideas.

TITLE

For each piece from the preceding chapters, you should have written a short title. Hopefully they were more substantive than “Methods for my Project.” The title of the proposal is an important piece because it reflects what you consider the essential elements of your research. The title tells outsiders if they should read further, even just the abstract. Titles that are too short may not tell enough. Long titles may be too cumbersome to explain the concept clearly. Balance these with a detailed, clear, and informative title reflecting the

emphasis of your work. Try starting with a “working” title, and then after the proposal (or manuscript) is written, evaluate it again. Here is an example of a title in development:

Explaining vulnerability

Explaining vulnerability of adolescent girls

Explaining vulnerability of adolescent girls in North America

Explaining vulnerability of adolescent girls in North America to violence

Explaining vulnerability of adolescent girls in North America to violence through empirical field work

As you can see, each subsequent title offers more specificity. The first title could refer to nearly anything. By the final title, the content of the study is clear, including some indication of the methods. However, while specificity is critical, too much jargon or convolution adds confusion rather than clarity.



Quick Task

Write several titles and share them with your advisor and fellow students. Ask for feedback. There are also online forums (e.g., <http://ismythesishotor-not.com>) where you can evaluate and receive feedback for thesis statements.

INTRODUCTION

The introduction describes the topic, which should be obvious from the title, and the context for the research you conducted. This section is relatively short but important because it frames the research and provides enough detail so that the literature review (which comes next) does not seem to the reader like detailed content without purpose. Part of your introduction is derived from your area of specialization statement (AOS) from Chapter 4 but includes reference to a small portion of the problem statement from Chapter 10.

First provide a sentence stating the topic. If you recall from the AOS description, the initial statement was direct, something along the lines of “I am a demographer.” Do not start your proposal with a general area like you did with the AOS; however, it is appropriate to begin with something specific, such as, “The goal of my proposal is to better understand how social networking web-sites impact online dating.” This approach states exactly your plan, leaving the remainder of the proposal to elaborate. Another way to approach the introduction is to begin with a broad statement on the problem context. These statements describe the big picture, such as rising concerns over climate change,

biodiversity, economic crisis, or urban poverty. The remainder of the proposal adds specificity on how you plan to fill a gap in this general research area.

The remainder of the introduction elaborates on your research plans. For first sentences that begin with specific goals, subsequent statements place those goals into the big picture through general statements, definitions, and examples. For first sentences that begin with the big picture, subsequent statements need to provide specificity through definitions, examples, and finally specific research objectives. Regardless of your personal organization, the reader needs to know what the proposal is about (the topic) and why it is important to solve (the context).

LITERATURE REVIEW

The literature review is the next logical section after the introduction because it describes in detail how other researchers have addressed this topic. Given that your experience with your topic has matured since you first wrote the literature review, this section of the proposal probably requires more substantial revisions than others. In the first draft, written in Chapter 7, you were likely new to the subject, so coverage of the material was comprehensive. The goal was to show readers you knew the subject area. It was essential that your understanding of the subject and the gaps in the research were fully discussed.

In contrast to a broad literature review, the literature review in the proposal is written to support your specific research objectives or questions. It is written so the reader understands the specific gaps in the knowledge you aim to fill. In some disciplines, the literature review is so tightly bound to the research questions that it is a skeletal form by comparison. Guidance from your advisor is prudent at this stage to ensure you meet the expected requirements. Regardless of its depth, the literature review in the proposal is a synthesis, not a summary, of what is relevant to your research. Review Chapter 7 for clarity on this distinction.

The literature review in the proposal needs an introductory paragraph to transition from the proposal introduction. The introductory paragraph has two primary elements. First, you state the major themes covered in the literature review. Include a brief statement describing the rationale for the why these themes were selected. Second, the introductory paragraph describes the organizing structure of the literature review. As described in Chapter 6 on writing, you need to “tell them what you are going to tell them.” Key to maintaining this organization is clear section headings on the subtopics and overt transitions between them.

Readers knowledgeable about the topic and subtopics are likely familiar with the larger literature and need to know that you are too. So while you have focused on literature specific to your research questions or objectives, you will need to point to these minor themes not discussed in detail like your major themes. These minor themes (relative to your research) can be identified with a stop sign in the mind mapping of the literature (see Figure 12.1). Refer to these themes in the literature review with brief statements to acknowledge their existence. They can be referenced generally by stating, “There is research

in *such and such* area (REF, REF, REF). They do *this and that*, but it is not related to my topic because of *X and Y*.”

The literature review concludes with a paragraph summarizing the literature and identifying the gaps. The summary simplifies what is known about the topics in your field. Statements describing gaps detail broad unknowns you and other investigators can investigate.

RESEARCH OBJECTIVES OR QUESTIONS

Since the end of the literature review describes gaps in the literature, this is a perfect segue to your specific research questions or objectives. In fact, all sections of the proposal are in some way directly linked to this section. The research objectives or questions represent the heart of your project. The introduction describes the goal of the project, the literature review gaps in knowledge about the project, and the methods your approach. All sections pivot around your research objectives or questions directly.

Writing the research question or objective therefore requires careful consideration of all you have written. Much of what is stated in this section is derived from your problem statement described in Chapter 10. It begins with a paragraph describing the gaps to be filled by the proposed research. This is followed by two to five specific research objectives or questions. The last part of this section is several paragraphs describing the intended outcomes (for objectives) or stating the hypotheses (for questions). The section itself is simple and often short, but it is mandatory that it is clear and specific.

METHODS

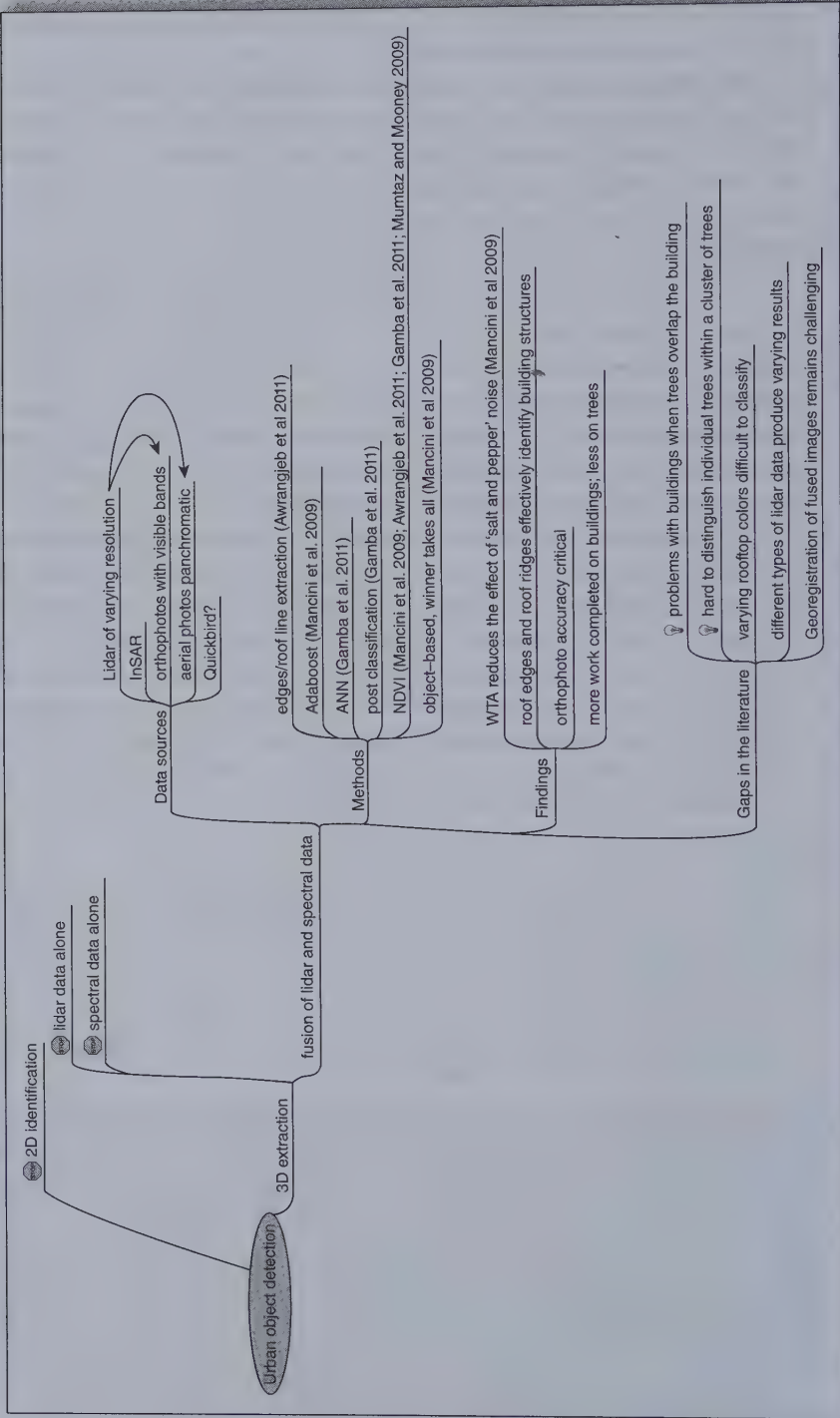
The methods section provides the roadmap for developing a research project. It is detailed and the substance on which proposals are evaluated. The methods section is perhaps the easiest to translate from the original draft (from Chapter 11) to the final proposal. Nearly the whole thing can be copied directly to the proposal. Feedback received from the original draft may provide guidance on content or structural changes, but unlike the literature review, little needs to be trimmed.



Action Item

The methods section is the starting point for writing the proposal. It should be pretty fresh in mind so little momentum is lost. Copy this section into the outline you created earlier. Revise the methods by incorporating feedback, trimming unnecessary words, and adding content where possible. Count the words or number of pages as guidance to the overall length of the proposal. Decide now if you need to expand or trim the methods section.

Figure 12.1 This figure shows how mind-mapping software helps organize the content of the literature review into minor and major themes.



ANTICIPATED RESULTS AND PROJECT SIGNIFICANCE

The content of the proposal concludes with what you expect to learn and why the project has merit. Your goal is to convince your evaluators that what you propose contributes to the body of knowledge in a meaningful way. The National Science Foundation requires that proposals identify the contribution to knowledge and merit through two criteria: intellectual merit and broader impacts. *Intellectual merit* refers to the academic reasons for your research (anticipated results). *Broader impacts* are the societal reasons for your research (project significance).

The anticipated results address what you expect to find. The project significance answers why it matters. These questions are addressed in part in the introduction but only in a general sense. Here you explain exactly how the success of your project will lead to better understanding, new insights, a better environment, or a better society. The section itself does not need to be long but needs to say something substantive. This section also serves to summarize or conclude your thoughts.

TIME LINE

After providing the significance, most proposals contain a time line to describe the project from proposal defense to completion. The time line shows the reader you know how to divide the project into specific tasks and how long each task should take to complete. There are two pieces to the time line: a graphic showing when each stage of the project will be undertaken and a paragraph or two annotating the time line. The steps you need to include in both the graphic and annotation may be obvious to you because they were just described in the methods. However, clarification and specificity are essential for a thorough proposal. Figure 12.2 shows an example of a time line graphic, and the paragraph that follows represents a portion of the annotation.

The spring term (months April–June) will be devoted to data collection and assembly. During this time I will start the writing for Topic #1. During the summer and into the fall (July–Oct), I will be conducting the data analysis. During the fall term (Sept–Dec), I will be writing, applying for academic jobs, and attending professional meetings. Throughout the 12-month period, I will be writing on each of my three topics. I plan to defend my dissertation in March of next year.

A time line should be written as *realistically* as possible. In other words, avoid being overly ambitious or overly cautious. Ideally, you want to be done in the most timely manner possible, but unexpected challenges typically arise. Set a time line that includes these unexpected events. Most students have Plan B in their back pocket (typically not part of the proposal) as a fallback. This is important especially to avoid emotional fallout from drifting away from Plan A.



Action Item

Write a time line. The time line needs to be graphic and annotated. The annotation may seem redundant to what is in the graphic, but explanation is important. Notice a few things here in the content of the time line in Figure 12.2, which should apply to most time lines:

- a. It is roughly 12 months from proposal defense to dissertation defense.
- b. The writing starts immediately; not something saved for the end.
- c. There are roughly two to three activities per month and no more.
- d. It includes other professional, nondissertation activities such as attending professional meetings and applying for jobs.

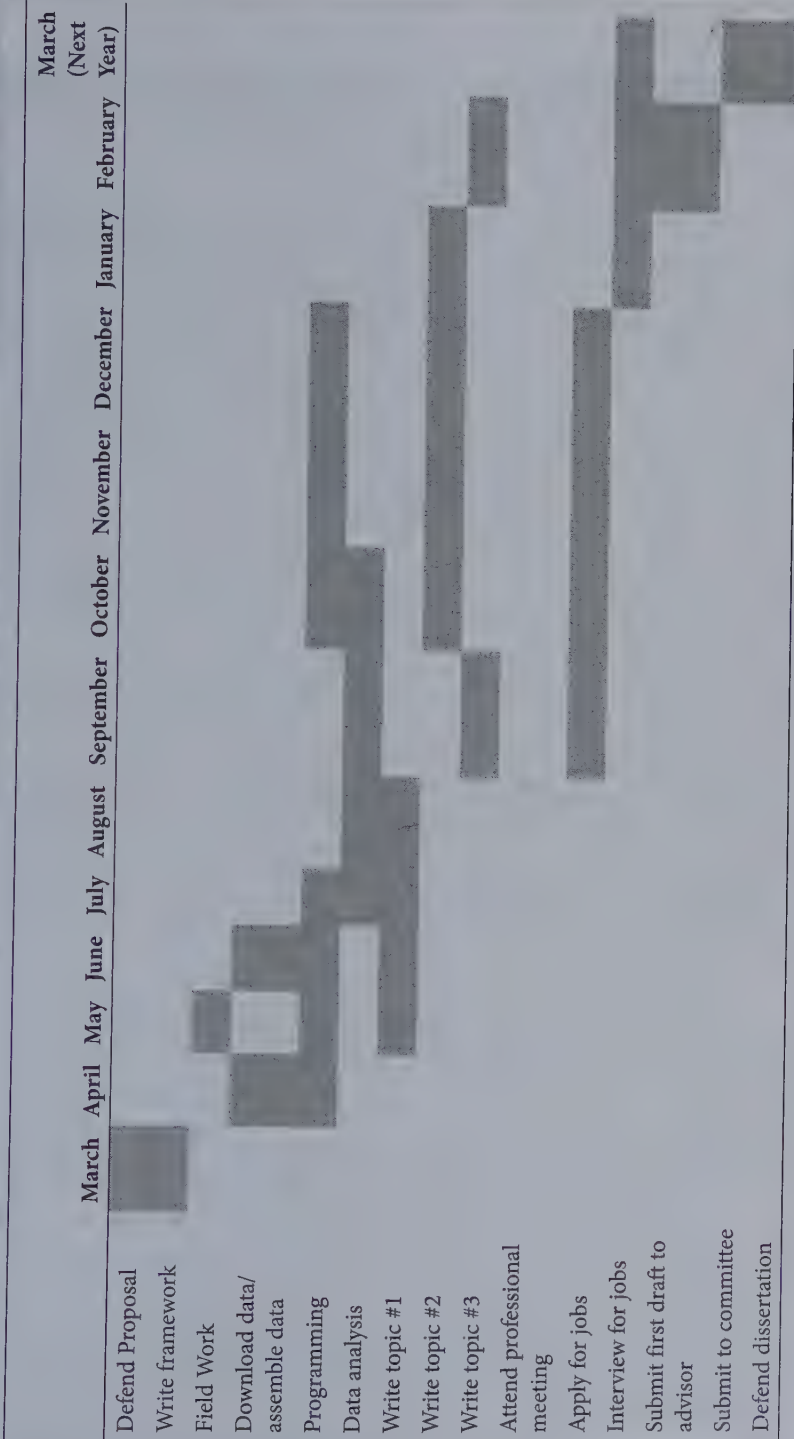
REFERENCES

The reference section is critical and needs to be done right. Each previous section likely referred to existing literature. This section identifies where that literature is published. There are many styles for referencing the literature. My recommendation is to pick a style typical to your discipline and be consistent throughout the document. One suggestion is to pick the style from one of the prominent journals in your field. A bibliographic style is required for the dissertation, so it is easiest to begin the habit of accurate referencing now. Software packages can be used to automatically format references into any desired style. Chapters 6 and 7 discuss reference software.

APPENDICES

The content in most appendices for a proposal is preliminary data or results from a pilot study. The proposal itself does not need to contain results, but you may want to demonstrate the potential of your research with work completed so far. This could involve data collection strategies, computer programs, or results. Many successful proposals do not have appendices, so there is no need to worry if yours does not.

Figure 12.2 Sample time line and supporting paragraph for completing a dissertation.



Length and Formatting

“How long does it have to be?”

That question is not reserved for undergraduate students who want to minimize the amount of work ahead. Rather, proposal length provides an indication of the depth level expected by evaluators (graduate committee or funding agency). The length of your proposal (whether counted in pages or total words) depends on the guidelines provided by advisors, departments, graduate colleges, or external funding agencies. Alternatively, there may be no guidelines, expectations, or rules—but it is your responsibility to ask and to know.

Regardless of the length mandated, each section of your proposal should fit into a standard proportioned whole, as illustrated in Figure 12.3. Each of the 15 tick marks (-) shown in Figure 12.3 can represent a certain number of pages. For example, if each tick mark represents two pages of text, then the total number of pages is 30. This means there are two pages for the introduction, eight pages for the literature review, two pages for the research questions, and so on. Notice that the majority of tick marks (six) goes to the methods. This is because the relative amount of depth in the document should emphasize the approach—what you are going to do. More often than not, student dissertation proposals have long literature reviews, perhaps too long.

Figure 12.3 can be translated easily from pages into word count. Word count is an easier metric to quantify content depth because it is independent of formatting (described shortly). Roughly speaking, 280 words translates into a single double-spaced page and 500 words into a single-spaced page. Using word count, the percentage of words per section can be compared to the Table 12.1 template that follows.

Table 12.1 shows the template percentage, the total words from a PhD proposal, and the observed percentage of each section relative to the whole document (excluding appendices). As you can see, comparing the template percentage to the observed percentage, this sample proposal has a good balance in each section. That means that relative to its length, this proposal provides the appropriate amount of depth per section. In fact, these proportions are more realistic (e.g., a slightly larger introduction and a bit less in the research questions and the significance and time line sections) than the template. In printed form, the total document for this sample is about 45 pages, including title page and appendices, which were not counted here.

Proposal formatting refers to document qualities including font type and size, double versus single spacing, page layout, table style, and reference style. Many institutions or academic units and nearly all funding agencies have rules or guidelines on formatting. These rules or guidelines are in place to maintain consistency among a collection of submitted proposals. Institutions and academic units may have more rules or guidelines for the thesis or dissertation

Figure 12.3 Relative proportion of each proposal section to the total length.

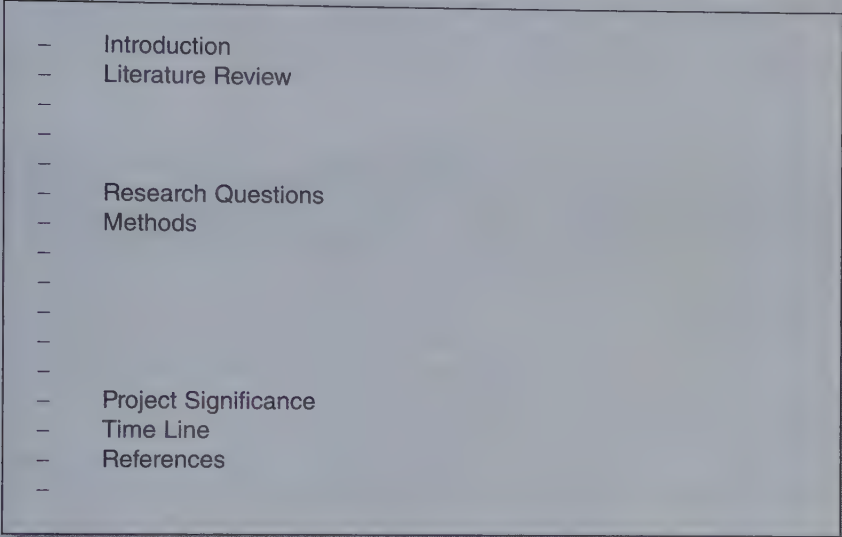


Table 12.1 Template percentages of a recent PhD proposal.

Section	Template percentage (%)	Actual Words	Observed Percentage (%)
Introduction	6.25	999	8.67
Literature Review	25.00	2,916	25.29
Research Questions	6.25	385	3.34
Methods	37.50	4,781	41.47
Project Significance	6.25	232	2.01
Time Line	6.25	147	1.28
References	12.50	2,068	17.94

than for the proposal. For funding agencies, on the other hand, strictness levels the playing field among a group of submitted proposals. This means all proposals competing for funding have the same amount of space to argue their perspective. The total number of pages is not sufficient because font size and page layout, for example, affect the total number of words, giving an unfair advantage to anyone reducing font size and decreasing page margins. To simplify this, many abstract and manuscript submission guidelines are now based on total word count rather than page length.

Proposal Writing Activities

The content, from each of the sections previously written, needs to be evaluated in the context of preparing to write a single document. It is best to start in the middle, work backward to the beginning, and then finish up at the end. Nine simple steps to completion!



To Do List

The following Action Items are listed in the order I suggest you revise the documents you already have in hand. This is not the order in which they should be presented. The presentation order either reflects that suggested earlier or an agreed-upon order between you and your advisor.

1. The research methods were incorporated into your first draft. Calculate the number of words in this section and compare it to the template in Figure 12.3. This gives you a target for the remainder of the proposal. Are you in line with what your advisor expects? Revise now if necessary.
2. Return to the research questions or objectives you wrote in your problem statement (Chapter 10). Do the methods you wrote indeed answer the questions or objectives as written? Remember that the research questions or objectives are a bridge between the literature review and the methods. Is that bridge still intact? Revise this section by trimming unnecessary words and reducing or eliminating the introduction. Once embedded in the proposal, any introductory material will be redundant and should be removed.
3. Still thinking about the bridge, read the comprehensive literature review as is (avoid revising at first). Read now for content. With the comprehensive literature review in mind, write the last paragraph for your proposal where you summarize the literature and identify gaps. This paragraph should include some moderately focused literature and gaps you do not address in your research questions or objectives.
4. Revise the literature review with the context of the research questions or objectives in mind and the last paragraph from the comprehensive literature review. The literature review in this revision is not comprehensive; all that you know is not included. Instead it is focused on the research or objective you aim to answer or complete.
 - Count the words in your comprehensive literature review. Compare that number to Table 12.1 to determine a target length.

- Identify the key topics of your existing literature review that you need to include in detail to support your research questions.
 - Write an outline that structures these topics in a clear and logical order.
 - Copy and then revise these sections in the new structure. Be sure you add details where needed and eliminate unnecessary details.
 - If you are struggling with the section, return to the skills in Chapter 10 to verify you are synthesizing and not summarizing the literature.
5. The content of introduction is derived from both the problem statement (Chapter 10) introduction you just deleted and from your area-of-specialization statement (Chapter 4). Start by composing the introduction from your AOS statement with broad information—the topic of study and how it is being solved. Then add the content from the problem statement introduction to enhance it with more detail on the problem this research proposal aims to solve.
 6. The section on anticipated results and project significance is written after the introduction but is located toward the end of the proposal. This typically short section echoes the introduction by reminding readers why this research matters.
 7. Update your references or bibliography. If you do it manually, check and recheck to make sure nothing is missing from your references and that everything in your reference section is cited in your proposal. If you generate references with software, make sure they are correct too because a title entered incorrectly into the software database will appear incorrectly in your reference list too.
 8. Include appendices if needed. This can be the results from a pilot study, the survey instruments, or any ancillary information needed to support your proposal.
 9. The next important step is to proofread and get feedback.
 - Most people read and edit digitally, using very little paper. This is an occasion, however, where reading on paper is needed. So print the whole proposal. Next, read the proposal backward. Okay, not each sentence but each section starting with the references (or appendices if you have them). To a certain extent, you wrote the proposal backward, so read it that way too. When reading the references, look for too much reliance on a single author; evaluate whether the breadth of the literature is represented appropriately; review the formatting of the references. Then go backward section by section. When done, read the whole thing forward. Look for the connections between each section as designed.

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- Obtain feedback, as much as possible from your village. Check with your advisor on when to give your proposal to your committee. Some committee members only want to see the submitted proposal; others want to be involved in proposal preparation.
- Revise and proofread it again. I have also found it better to revise it and then set it down for 24 hours before proofreading and revising again. A little bit of time gives you mental distance and lets you read (and evaluate) it more objectively.

Reminders

- Start the whole document by rewriting the methods section.
- Revise the literature review so it is focused on your specific problem.
- Include an annotated time line.
- Describe the project's significance.
- Read, reread, and revise.