

Writing begins with a clear purpose and a clear audience. The writer should ask, "Why am I writing this?" and "Who is my audience?" The writer should then develop a thesis statement and support it with evidence. The writer should also consider the organization of the paper, including the introduction, body paragraphs, and conclusion. The writer should also consider the style and tone of the paper, as well as the mechanics of writing, including grammar, punctuation, and spelling.

# How to Write Chapter One, Introduction

Chapter One is the introduction to your research paper. It is the first chapter and sets the stage for the rest of the paper. It should include a clear thesis statement and a brief overview of the research question and the methods used to answer it. The introduction should also include a brief review of the literature on the topic and a statement of the significance of the research.

## Writing Style

### Chapter One Sections

#### Introduction

#### Statement of the Problem

#### Background and Need

#### Three Parallel Ladders Strategy

#### Purpose of the Study

#### Research Questions

#### Significance to the Field

#### Definitions

#### Limitations

#### Ethical Considerations

#### Summary

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#### Common Obstacles and Practical Solutions

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The beautiful part of writing is that you don't have to get it right the first time, unlike, say, a brain surgeon. You can always do it better, find the exact word, the apt phrase, the leaping simile.

—Robert Cormier

The rest of this book will focus on the writing process and formatting style for the master's thesis. You will write five separate chapters titled Introduction, Literature Review (i.e., Review of the Literature), Methods, Results, and Discussion. Don't worry, I will guide you through each chapter, offering writing tips, examples, and strategies that will help to facilitate the process. I purposely use the term *process* because for all the chapters in the thesis, you will need to write multiple drafts, edit, revise, and ultimately write more drafts. For each chapter of the thesis, I will describe the sections and subsections that need to be included. After reading the description, I recommend that you read the examples in the appendixes from actual students' master's theses so that you can get a sense of the breath, depth, and style of the writing.

There is a tendency for many students to begin the writing process too early. They feel a need to begin writing without having mapped out their thesis and thinking through the content requirements for each chapter. There are risks in beginning to write too soon. The most serious risk is that you may invest energy and time going in the wrong direction. This can be frustrating and cause you to miss important deadlines. Although I know you are eager to start writing, before you sit down at your computer, make sure that you have read all of the research and literature resources related to your research problem and have your organizational system in place. This will minimize your frustration and help you judge whether you have enough resources or need to do more searching.

Your goal in Chapter One is to introduce your research. However, before you can start writing, you need to have a good feel for what will be included in the literature review and the methodology chapters. This level of planning prepares you to determine what to include in Chapter One. I have noticed that most of the students who struggle with writing Chapter One do so not because of the writing per se but because they have not read enough literature about the research problem. Only after you have the "mastered" the necessary background information can you begin the actual writing process. I will first discuss the writing style for the thesis and then address each of the required sections for Chapter One.

## Writing Style

The writing style in a master's thesis is very different from that used in creative writing or narrative writing. The writing style is technical, formal, serious, and impersonal. This can be a very difficult transition for students who are used to writing poetry or stories. For example, the tense must be in third person at all times (e.g., refer to yourself as "the researcher"), and you should not use an informal tone or colloquialisms (i.e., slang). In fact, the thesis should be free of personal biases, judgments, and opinions. As I often tell my students, "There is no room for *you* or *I* in a master's thesis." Thus any "personal positions" that you take throughout the thesis must be supported by the research literature. If you are having difficulty switching or you are unsure how to write in a "technical" style, refer to the APA publication manual (APA, 2010). I have also placed general writing tips in Appendix D.

## Chapter One Sections

The purpose of Chapter One is to communicate the major elements of the research study and to set the stage for subsequent chapters. Chapter One is the first page after the table of contents, and it starts on a new page. The major sections/headings within Chapter One are (a) *Introduction*, (b) *Statement of the Problem*, (c) *Background and Need*, (d) *Purpose of the Study*, (e) *Research Questions*, (f) *Significance to the Field*, (g) *Definitions*, (h) *Limitations*, and (i) *Ethical Considerations* (see Figure 5.1 for major sections in Chapter One). These sections are typical of a master's thesis, but there may be slight variations depending on your institution or the preferences of your chairperson. Make sure to check with your department and chairperson for the thesis requirements for your program. You should also keep in mind that these are general guidelines—you may need to write more or less, depending on your chairperson's and program's expectations. I will discuss each section separately, but they should be considered as part of a whole with fluid transitions and segues between them.

## Introduction

The *Introduction* section in Chapter One describes the general problem you will be addressing in your research study. Your goal is to present an overview of the study in a manner that allows the reader to understand the

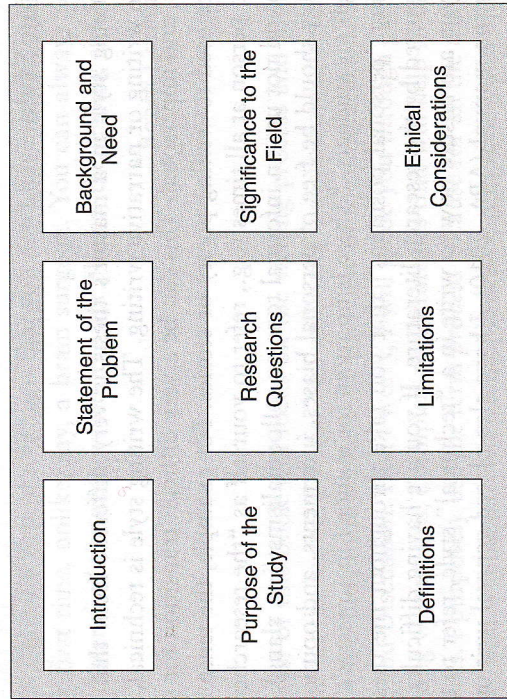


Figure 5.1. Major sections in Chapter One.

context of your research in terms of the issues it addresses, the importance of the research to be done, and the specific research problem to be studied. Readers will expect the introduction to provide them with the context to understand the subsequent sections of the chapter describing the research. There should be at least four paragraphs in the *Introduction* section, and each paragraph has a different purpose. For this section, I have found it helpful to use a funnel writing strategy. In an actual funnel, the opening at the top is wide and then it slowly narrows to a small opening. A **funnel writing strategy** is analogous to a funnel where your first paragraph in the *Introduction* is broad and every subsequent paragraph narrows the topic toward the specific research problem (see Figure 5.2 for the funnel writing strategy for the *Introduction* section in Chapter One).

The first paragraph in the *Introduction* section should be a description of the broad issues related to your study. The purpose of this first paragraph is to give the reader background knowledge and a context for your study (without specifically mentioning your problem yet). Typically, in this paragraph, you discuss *broad* societal trends, or national or international phenomena that are *related* to your research problem. In other words, what is the big picture? A good type of article to help with this section is one that gives you a broad overview of your research problem such as a secondary source, meta-analysis, or literature synthesis. The introduction section of empirical research articles is also a good source to find broad issues.

One of the problems that students face in writing this paragraph is that they are so immersed in their immediate research problem that they cannot

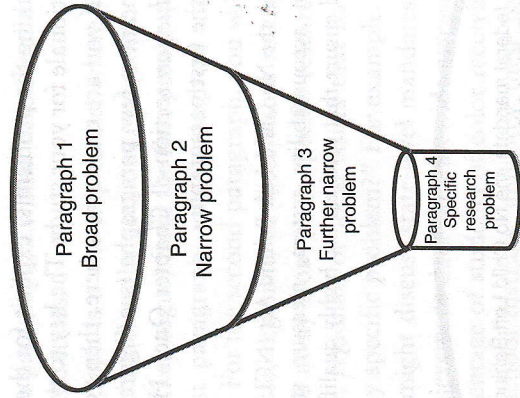


Figure 5.2. Funnel writing strategy for the *Introduction* section in Chapter One.

see beyond it. Thus, take three steps back from your specific research problem and ask, "What are the broad societal issues that have trickled down to cause or influence my specific problem?" For example, if you are focusing on broad issues in education or special education, you might discuss federal mandates, common core standards, bullying, academic achievement data on large-scale assessments, demographic changes, the overrepresentation of students of color receiving special education services, teacher evaluation, and so on. If you are focusing on broad issues related to juvenile delinquency, you might discuss gang membership, crime rates, substance abuse, budget cuts in after-school programs, death penalty for juveniles, and so forth. If you are focusing on broad issues related to counseling, you might discuss mental illness, scarcity of mental health services, drug and alcohol abuse, family relationships, child and spousal abuse, posttraumatic stress disorder, and so on. If you are focusing on broad issues related to business and management, you might discuss the global economy, outsourcing, corporate social responsibility, debt crisis, and so forth.

No matter which societal, national, or international issue(s) you focus on, it is not enough to discuss the issue; you want to show how the issue manifests into actual problems and the consequences of the problems for society. You can do this by supporting your claims with citations from the research, especially from national/international reports with statistical data (e.g., percentages, average). One of the questions I often ask my students to answer is, "So what? What are the implications of this issue?" By answering this

question, you are making the problem(s) explicit for the reader and building a justification and rationale for your study. The key to writing this paragraph is to start broadly—if you are too narrow here, then you will not have any room to funnel in the next few paragraphs (see Figure 5.3 for an example of a funnel for the *Introduction* section of Chapter One). Here is an example of a topic sentence for the first paragraph:

The federal mandate, the No Child Left Behind Act (NCLB) of 2001, requires states to create an accountability system, measure student performance through testing, and ensure that teachers are highly qualified.

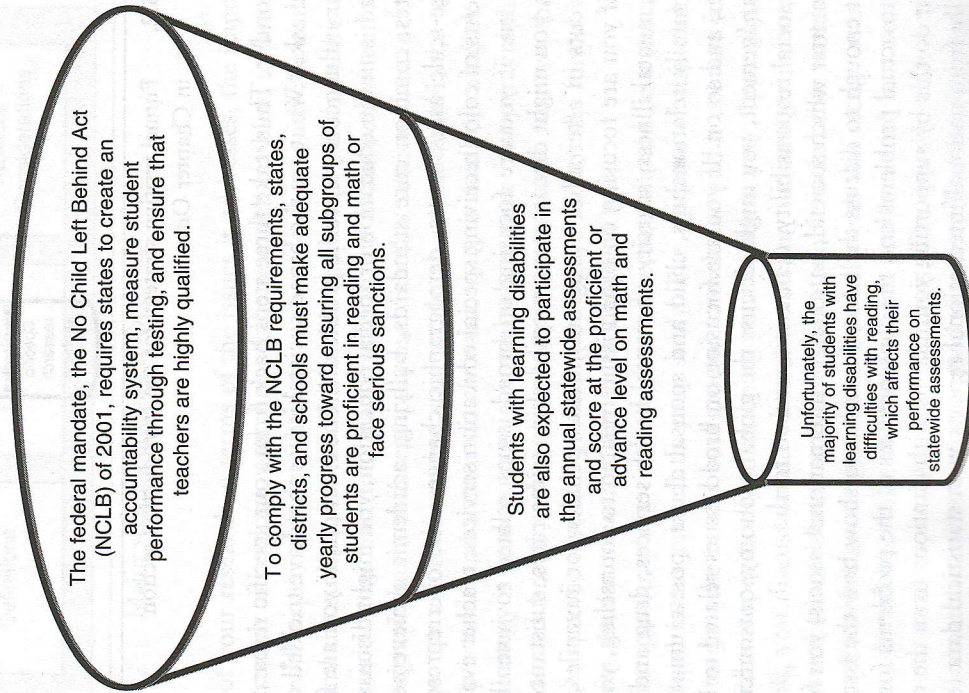


Figure 5.3. Example funnel for the *Introduction* section in Chapter One.

For the rest of the paragraph, I would describe the NCLB mandate and its implications for the states.

The second paragraph is a one-step funnel where you begin to narrow from the broad problem(s) in the previous paragraph. Make sure you have a smooth transition (i.e., segue) from the first paragraph and a strong topic sentence. In the first paragraph, you focused on societal, national, and international trends. For the second paragraph, you will *narrow* the discussion to focus on state, regional, or local issues *related* to your problem. Thus, take two steps away from your specific research problem and ask, “What are the state, regional, or local issues that have trickled down to cause or influence my specific problem?” For example, in education or special education, you might discuss state-level mandates, state content standards, academic achievement data on statewide assessments, demographic changes, or the percentage of students of color receiving special education services in specific school districts, and how these issues affect students, parents, schools, and teachers. The same one-step funnel can be applied to other fields and disciplines. Remember that it is critical to discuss how the state, regional, or local issues manifest into problems and the consequences for the communities and neighborhoods. This adds to the justification and rationale for your study. In addition, support your claims with citations from the research, especially from state or regional reports with statistical data. Be careful not to focus too narrowly here; otherwise, you will not be able to funnel for the next two paragraphs. Here is an example of a topic sentence for the second paragraph:

To comply with the NCLB requirements, states, districts, and schools must make adequate yearly progress toward ensuring all subgroups of students are proficient in reading and math or face serious sanctions.

For the rest of the paragraph, I would describe what states are doing to meet the NCLB mandate and implications for school districts, schools, and teachers.

The third paragraph (with a smooth transition and topic sentence) is another one-step funnel where you begin to narrow from the local problem(s) in the previous paragraph. In the second paragraph, you focused on state, regional, and local issues. For this paragraph, you will narrow the discussion to focus on the *specific* group or subgroups of individuals *related* to your research problem. Thus, take one step away from your specific problem and ask, “How are the groups or subgroups of individuals related to my problem affected by the national, state, regional, or local issues?” For example, in education or special education, you might want to focus on students in elementary, middle, or high school, students with moderate to

severe disabilities, students with specific disabilities (e.g., learning disability), novice or mentor teachers, paraprofessionals, administrators, students from specific cultural/ethnic backgrounds, English learners, and so on. This is the group(s) that will make up the sample group in your study. The same one-step funnel strategy can be applied to other fields and disciplines. Remember that it is critical to discuss how the national, state, regional, or local issues manifest into problems and the consequences for the group or subgroup of individuals targeted in your study. This adds to the justification and rationale for the selection of your sample group. In addition, support your claims with citations from the research, especially from empirical research studies and reference materials. Here is an example of a topic sentence for the third paragraph:

Students with learning disabilities are also expected to participate in the annual statewide assessments and score at the proficient or advance level on math and reading assessments.

For the rest of the paragraph, I would describe the expectations for students with learning disabilities on statewide assessments and their performance as compared to students without learning disabilities.

Finally, the last paragraph in this section focuses directly on your research problem. If you started with the broad problem and slowly narrowed the focus, this last paragraph should be a natural flow from the first three paragraphs. Avoid writing, "My research problem is about . . .," which is the book report method you used in the fourth grade. Often this paragraph will start with words that cue the reader for some type of "disruption" term such as however, unfortunately, alas, sadly, regrettably, and so on. For the rest of the paragraph, you will discuss how the specific problem affects the group or subgroups of individuals you have targeted. Then you want to expand on the consequences of the problem for this specific group. This is also where you would operationally define terms that you will be using as part of your study. Remember to support your claims with citations from the research, especially from empirical research studies and reference materials. Here is an example of a topic sentence for the last paragraph:

Unfortunately, the majority of students with learning disabilities have difficulties with reading which affects their performance on statewide assessments.

For the rest of the paragraph, I would describe the reading difficulties that students with learning disabilities encounter and how this negatively impacts their performance on statewide assessments. Using statistical data

strengthens my claim that this is a real problem that requires attention. This last paragraph is a great lead-in to the next section of the chapter, which focuses on the three areas related to your specific research problem. See Appendix E for a sample *Introduction* section for Chapter One.

### Statement of the Problem

The next section of Chapter One, the *Statement of the Problem*, differs from the *Introduction* section where you discussed broad issues related to your problem. In the *Statement of the Problem*, you will delve deeper into the specific research problem by describing the problems in three areas that are related to your research problem. It will help to visualize your research problem as a ladder and each rung on the ladder as a related area (see Figure 5.4 for a ladder of the three areas related to the research problem). Identifying the three areas related to the research problem is the most difficult part in conceptualizing Chapter One. If you have difficulty with this

Statement of the Problem  
Research Problem

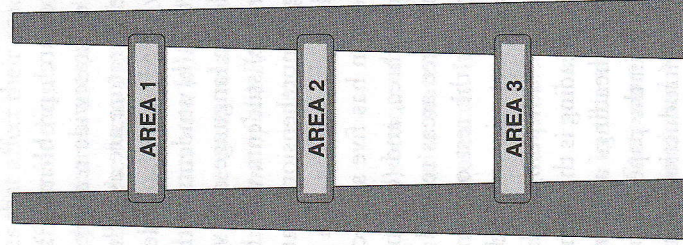


Figure 5.4. Ladder of the three areas related to the research problem.

process, now is a good time to make an appointment with your chairperson. Once you establish the three areas (and your chairperson approves), you will have the organizational framework that will guide you through writing Chapters One and Two.

The first step to identify the three areas is to read the research literature you collected for your research problem. This is where abstracting and a literature matrix really comes in handy. Next identify three to four common themes or patterns that emerge from the literature. Then try to organize and group your literature resources along those themes (it helps to make actual piles). Give each group a name that represents the essence of the theme (you can tweak this later if necessary). If you have too many groups, you may need to subsume smaller groups within a broader one. You may also need to create a "maybe" file for resources that are interesting but not closely related to your research problem. If you have too few groups, you may need to break one of the groups into two smaller ones or find more resources. Finally, select the three areas that are most relevant to your research problem. The areas may be a part of your research problem or a parallel area that is influenced by or affects your research problem. Keep in mind that the areas should not be too narrow because you will need to locate at least three empirical research articles related to each area for your literature review in Chapter Two.

For example, from my research problem of students with learning disabilities performing poorly on statewide reading assessments, three related areas that emerged from the literature are as follows: (a) General education teachers are not adequately prepared to provide accommodations for students with learning disabilities; (b) students with learning disabilities need more exposure to the academic language and vocabulary included in the state reading assessment; and (c) students with learning disabilities do not have a repertoire of reading comprehension strategies.

Once you have identified the three areas, you can write the *Statement of the Problem* section. This section has five subsections: (a) introduction, (b) area one, (c) area two, (d) area three, and (e) summary. The first subsection is a brief introduction to the three areas related to your research problem. This will serve as an outline for the rest of the section. Then write about each related area separately. Do not mix up the three areas because this will confuse your reader; you can use a heading to label each area to help you stay organized and on topic. A heading is the name of a section or subsection used to organize the paper. The headings are formatted depending on how many levels of heading there are in the paper (see Chapter 10 for APA style).

For each area, start with an introduction that briefly describes the area. Next, discuss the relationship between your research problem and the area (make sure you make this connection explicit for your reader). Then, write

about the *problems* within the area and how they affect your target group. Here is where you want to be very specific about the consequences and effects of the problem (i.e., answer the "so what?" question). For example, for my third area—"students with learning disabilities do not have a repertoire of reading comprehension strategies"—I would discuss the problems that students with learning disabilities have with reading comprehension (e.g., poor fluency, lack of metacognition skills, limited vocabulary, issues with working memory) and the consequences (e.g., low motivation to read, failing classes, low test scores).

Remember to focus on the problems within the areas and do not mention any types of interventions or "solutions" to the problems yet—that will go into the next section (*Background and Need*). You should also define any ambiguous terms or phrases that are relevant to your study. Finally, support your writing by paraphrasing (not plagiarizing) information from the research literature and cite the sources using the appropriate editorial format. Include quotes sparingly and only if the author said something so brilliant that you could not paraphrase it without destroying the essence of the quote (see Chapter 10 for APA style).

See Figure 5.5 for an example ladder of the problems within the three areas. In this example, the research problem is, "Students in juvenile delinquent centers have behavior challenges that affect their academic, social, and emotional development and make it difficult for them to transition back to less-restrictive environments." The three related areas are (a) self-regulation, (b) self-esteem, and (c) motivation. Notice that the focus for each area is the problem (which emerged from my literature search) related to students in juvenile delinquent centers. At the end of the entire *Statement of the Problem* section, write a brief summary that highlights the three areas related to the research problem (see Appendix F for a sample *Statement of the Problem* section).

## Background and Need

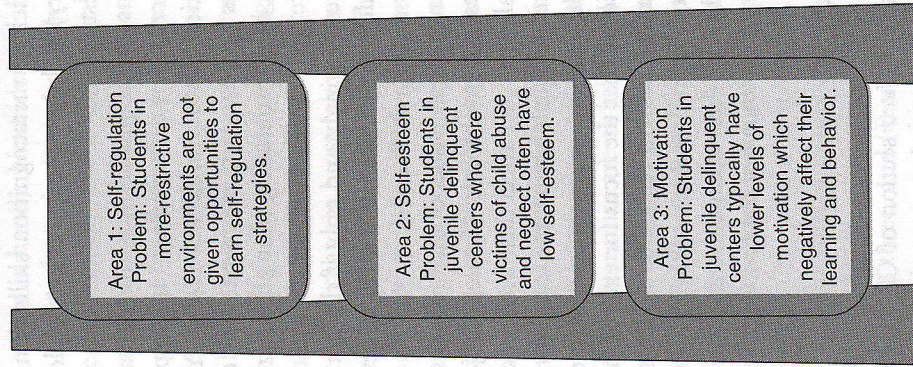
In the *Background and Need* section of Chapter One, you will provide the reader with a clear and concise statement on the background of the problem and the need for more research. In essence, you want to convince the reader that the problem is important to research (i.e., background) and provide a rationale for studying the problem (i.e., need).

**Three parallel ladders strategy.** In this section, I will use the same three areas that were identified in the *Statement of the Problem* section. In other words, each area in the *Background and Need* will match one of the areas discussed in the *Statement of the Problem* section. One model for doing this is the three parallel ladders strategy. The three parallel ladders strategy is an

**Statement of the Problem**

**Research Problem**

Students in juvenile delinquent centers often have behavior challenges that affect their academic, social, and emotional development which make it difficult for them to transition back to less-restrictive environments.



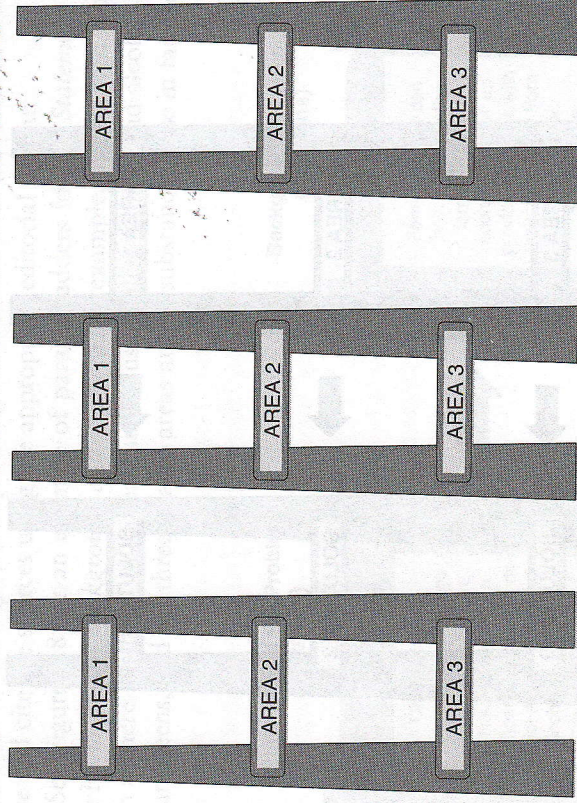
**Figure 5.5.** Example ladder of the problems within the three areas.

organizational writing strategy used to write Chapters One and Two of the thesis. It may also help you to determine the purpose and methods for your study. For this strategy, imagine three parallel ladders lying side by side. The first ladder will represent the *Statement of the Problem*. The second ladder will represent the *Background and Need*. The third ladder will represent the literature review in Chapter Two. The three rungs in each ladder represent the same three areas related to the research problem (see Figure 5.6 for the three parallel ladders strategy for Chapters One and Two).

**Statement of the Problem**

**Background and Need**

**Literature Review**  
(Chapter Two)



**Figure 5.6.** The three parallel ladders strategy for Chapters One and Two.

Since you have already identified the three areas related to the research problem, it will be much easier to write this section. The *Background and Need* has five subsections: (a) introduction, (b) area one, (c) area two, (d) area three, and (e) summary. The introduction serves as the “background” part of the section. Here you want to provide a brief discussion on the background of your research problem. This could include a historical perspective, how the problem developed over time, important information about the problem, or more detail about the contextual issues that were discussed in the *Introduction*.

The next three subsections revolve around the same three areas related to the research problem (don't forget to keep each area separate and use headings). However, in the *Statement of the Problem* section, you focused on the problems that emerged from the literature. In the *Background and Need* section, you will focus on the solutions to the problems from the literature (see Figure 5.7 for parallel ladders for the *Statement of the Problem* and the *Background and Need* sections).

First, include a brief introduction to the three solution areas related to your research problem. This will serve as an outline for the rest of the section. Next, start each subsection with an introduction that describes the area. Then, write about the research-based practice(s) that help to “solve” the problem within the area. This is like a preview of your literature review

### Statement of the Problem

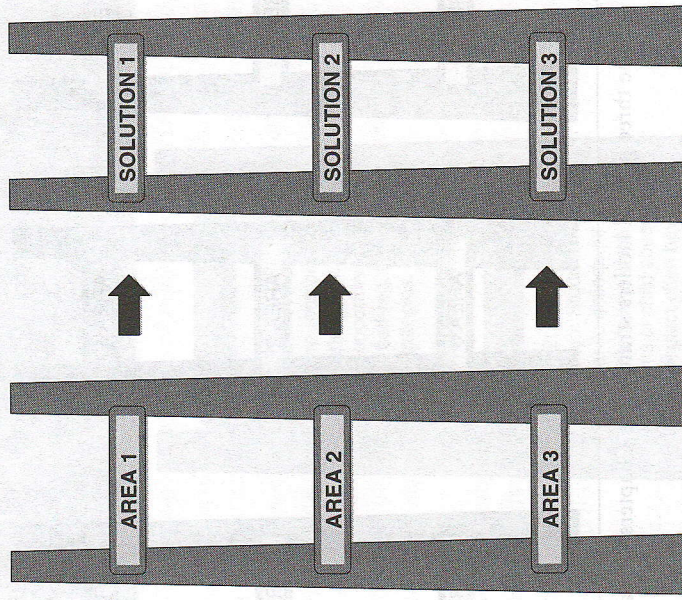


Figure 5.7. Parallel ladders for the *Statement of the Problem* and the *Background and Need* sections.

in Chapter Two. For example, if one of the areas is homelessness, and the problem is that a large proportion of homeless people suffer from mental illness, you would discuss different research-based programs that have been effective in offering mental health services for this population. Try to avoid telling the reader what should be done (i.e., do not preach). Instead, provide a brief description of what has been done and its effectiveness with a particular sample group. Whenever possible, report on practices that were effective for your targeted group or a similar group. This serves as a justification to include these research-based practices in your study.

As you are discussing the solutions reported in the literature, point out the gaps that still remain in the literature related to this area. This is the “need” part of the section. Identifying the gaps is very critical as it serves as a rationale to conduct your study and shows how your study will contribute to the existing research. If there were no gaps left in the literature, there would not be a need for your study! For example, a gap could be that the research-based practices were not conducted with your specific sample group. Another gap could be if your study proposes to adapt, enhance, or

combine existing practices for your specific sample group. Make sure to support your writing by paraphrasing information from the research literature and cite the sources using the appropriate editorial format.

See Figure 5.8 for an example of parallel ladders for the *Statement of the Problem* and *Background and Need*. In this example, the research problem is there has been an increase in the use of illegal drugs and alcohol by young teens, and the three related areas are (a) substance abuse in families,

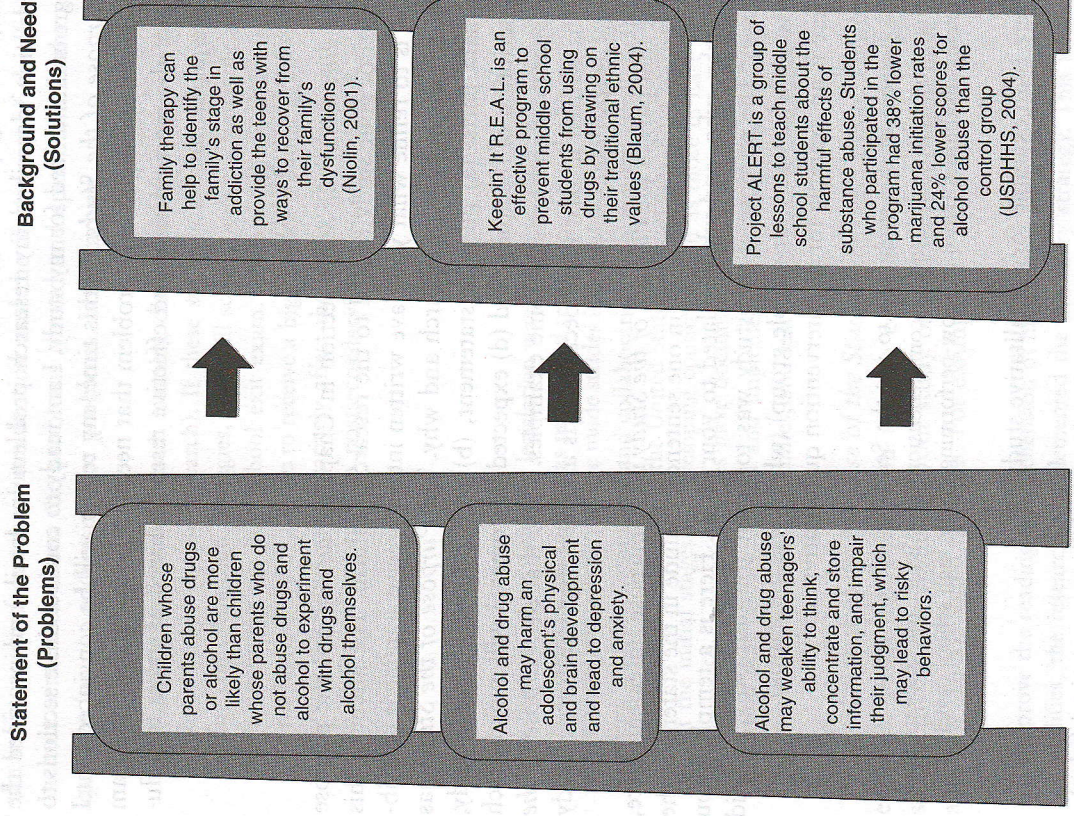


Figure 5.8. Example of parallel ladders for the *Statement of the Problem* and *Background and Need*.



(b) mental health risks, and (c) social/academic risks. Notice how in this example the three solutions are linked to the three problems in each area (and cites the research literature). This will be a nice lead-in to the *Purpose of the Study*: to develop a prevention and treatment program for teens who suffer from family substance abuse that integrates family therapy and school lessons.

At the end of the entire *Background and Need* section, write a brief summary that highlights the research-based practices that have been conducted and the gaps that still exist. Since I have given the reader a broad introduction, described my research problem in detail, and provided the background and need for my study, I am ready to connect these sections to the *Purpose of the Study*. By this time, my reader will be convinced that I have identified a significant problem that needs to be addressed, and I am aware of the most relevant and effective research-based practices to influence the problem.

### Purpose of the Study

The *Purpose of the Study* section in Chapter One explains the purpose and goal of your study related to the research problem. The intent of this section is to refine what you have written into a precise statement describing what you propose to research and why. The *Purpose of the Study* has four main parts: (a) purpose statement, (b) need/rationale for the study, (c) description of the study, and (d) expected outcomes. I will explain each part separately and provide some examples. Note that the *Purpose of the Study* is written in past tense because it is assumed that you have already completed the study.

The first part of the *Purpose of the Study* is the purpose statement. Here, state the purpose of your study in one sentence! Include in the statement the what, why, who, and where related to your study. Here is a template you can use: "The purpose of this study was to (what you did) (why you did this/issue) (who was your sample group) (where was the setting)."

Here is an example for an intervention quantitative study:

The purpose of this study was to use the See Story visual imagery strategy (what) to improve the reading comprehension (why/issue) for students with learning disabilities (who) in a low-performing public high school (where).

Here is an example for a qualitative study:

The purpose of this study was to explore how disability was perceived (what) by special education teachers and parents/families with children with disabilities

(who) and how special education services were provided (why/issue) in a primary school for children with disabilities in East Africa (where).

The second part of the *Purpose of the Study* is the rationale. This briefly explains the need for focusing on this particular problem or issue. Providing a rationale is critical because it provides justification and validation for why it is important or necessary to conduct the study. In qualitative studies, the rationale may also be used to "foreshadow" the design of your study (Creswell & Plano Clark, 2007, p. 102). Here, you can summarize some of the main points from the *Introduction* and the *Statement of the Problem*. Include sentences about the problems (broad and specific) and the consequences for not addressing the problems. For example,

Many high school students with learning disabilities plateau at the fourth-grade reading level (cite research). If these students are not taught explicit reading comprehension strategies, they will score poorly on statewide assessments, including the high school exit exam. In states where students must pass the high school exit exam to receive a high school diploma, poor reading comprehension skills will negatively affect the ability of students with learning disabilities to proceed to postsecondary educational settings or obtain employment.

Here is another example:

Since the first major disability legislation was passed in 1975, the field of disability and special education has progressed tremendously in the United States. Researchers and educators have made strides in assessment, instruction, service delivery, teacher preparation, and collaboration with families in all disability areas. Despite the progress in the United States, special education services are still at the initial stages in developing countries such as those in East Africa. Moreover, few research studies have documented how disability and special education services are defined and implemented in these areas through the cultural lens of the parents, families, and teachers in these communities.

The third part of the *Purpose of the Study* is the description. This briefly explains the methods that you used to conduct the study. Include your sample group, description of your study or intervention (if you have one), and how you collected the data. For example,

To improve the reading comprehension of high school students with learning disabilities, the researcher implemented the See Story strategy. This strategy teaches the students to use visual imagery before, during, and after they read. Fifteen students with learning disabilities (Grades 9–10) were taught and used

the strategy in their English Language Arts classes on a daily basis over a six-week period. The students' reading comprehension levels were measured before and after the intervention using a standardized reading assessment. The students' attitudes toward reading were also measured with a student survey after the intervention was completed.

Here is another example:

To measure the participants' perspectives of disability and special education services, the researcher conducted interviews with 10 parents/families of children with disabilities and the classroom teachers from the primary school. To explore and describe how special education services were provided to the children with disabilities, the researcher conducted eight weekly observations at the school site.

The last part of the *Purpose of the Study* is the expected outcome or goal of the study. This briefly explains the benefits that will result from your study. You can have several expected outcomes. For example,

As a result of the See Story strategy, the high school students with learning disabilities were expected to increase their reading comprehension level. Another goal of the study was to determine whether the students' attitudes toward reading would improve along with their reading abilities.

Here is another example:

The purpose of the ethnography was to explore disability issues and special education services from the perspectives of parents, families, and teachers in a learning community in East Africa. By learning how the members of the community viewed disability and special education services, this provided a cross-cultural context to view these issues through the participants' lens rather than imposing a cultural framework on them. This study also had implications for how special education services were provided to the children with disabilities at the primary school level.

Once you have established the purpose of the study, you need to write research questions that are aligned with the purpose and the methods of the study.

## Research Questions

The research question(s) is the question related to the problem that you are attempting to answer with your study. The key is to frame your research questions so that you are addressing the most critical elements of

your study. This does not mean that you need to develop an exhaustive list of research questions. Instead, select those questions that are most important to you and can be studied within the available time and resources for doing a thesis. Remember that the more research questions you have, the more data you will have to collect and analyze. The research questions are aligned with the methods of the study and vice versa, so you should consider your research methods as you develop the research questions.

Make sure the research questions are written so that once you collect the data, you will be able to answer them. This might involve including the measured variables in the question. A good strategy is to convert the purpose statement into a question. For example, if I want to know the impact of the See Story strategy, I would convert the purpose statement into a question and ask,

What are the effects of the See Story visual imagery strategy (independent variable) on the reading comprehension levels (dependent variable) for students with learning disabilities (sample) in public high schools (setting)?

If I do not have an intervention but want to measure students' attitudes based on a survey, I would still include the dependent variable or other measured variables in my research questions. For example,

What are the attitudes of high school students with learning disabilities toward reading (dependent variable)?

or

What is the relationship between the students' attitudes toward reading (measured variable) and their reading comprehension abilities (measured variable)?

Here is an example for a qualitative study (notice how the questions are more open-ended than for the quantitative studies above):

What are the perceptions toward disability by special education teachers and parents/families with children with disabilities? How are special education services provided in an East African primary school for children with disabilities?

When developing research questions, try to avoid writing research questions that have a yes/no answer such as,

Can high school students with learning disabilities improve their reading comprehension abilities?

or why questions such as,

Why do the parents have these feelings toward their children with disabilities?

These questions are more rhetorical (or not answerable) and do not tell the reader or the researcher anything about the design of the study. In addition, a yes/no research question does not allow much room for discussion and interpretation. An open-ended question (with parameters) allows you to answer the research question but also discuss the implications of the results.

### Significance to the Field

The next section is the *Significance to the Field* (also referred to as *Significance of the Study*). In this section, describe the benefits (short and long term) for the participants in the study as well as the contribution that the study made to the research literature in your field. For example, if you conducted an intervention, you may have made a positive impact on the participants' academic, social, physical, or emotional well-being. If you conducted surveys, interviews, or observations for your study, you may have discovered important information about the participants' attitudes, perceptions, and behaviors. Although this section is typically included in Chapter One, you may want to write this section after you have completed the study.

### Definitions

The next section in Chapter One is *Definitions*. This section is where you will define terms or phrases that need a more detailed explanation than the ones that were provided earlier in the chapter. Remember to use consistent terms to convey the same meaning as presented in the definitions. Thus, if you have labeled a concept or variable with a specific term, use this term consistently throughout the entire text. Once you formally define the term in this section, the reader will know exactly what you are referring to.

Perhaps the most difficult part of writing this section is determining which terms to define. There are three rules that I use in selecting terms to define. The first rule is to define all terms that a person outside of the field would not be familiar with (i.e., technical jargon). For example, if I am a noneducator, I may not know the definition of a *learning disability*, or my definition might be different from the standard definition in the field. Thus, *learning disability* is a term that I would have to define in this section. Whenever possible, I would also use the legal, standard, or recognized definition from the literature and provide the appropriate citations. A second

rule is to define all terms that have been "coined" by their users. This refers to familiar terms that may have new definitions because of changing cultural context. These terms would need to be operationally defined because the standard dictionary definition is not accurate for how the term is understood by the users. For example, *response to intervention* is a very critical term in education today but might not be understood in other fields. Finally, the third rule is to define all terms that may be ambiguous to the reader because the definition of the word is dependent on the context or the participant's interpretation. For example, *transition* has multiple meanings depending on the context. In counseling, *life transition* refers to moving from one life stage to another such as from work to retirement. In education, *transition* refers to moving between elementary, middle, high school, and postsecondary settings. In business, a *business transition* could refer to a change in ownership or management. In sociology, a *criminological transition* refers to changes in society that lead to increases in crime rates ("Criminological Transition," n.d.). By defining the term (with a citation from the literature), this clarifies the concept for the reader and ensures that everyone is on the same page. After you have defined all the terms, list them with bullets and arrange them in alphabetical order so that it will be easy for the reader to find specific terms.

### Limitations

The next section is *Limitations*. This section is where you will discuss all the limitations in the study. Limitations can be inherent to the research design, data analysis, time and resources, or a condition that was set by the researcher. Keep in mind that all studies have limitations, and it is not a personal reflection on you as a researcher. Thus, the best way to deal with limitations is to be up front about them and explain how they affect the results of the study; trying to hide or cover the limitations of a study will only further weaken the study. For example, lack of a control group is a common limitation in students' theses because of the limited access to participants. Another common limitation is small sample size (in a quantitative study).

A limitation is a flaw or weakness in the study that affects the internal validity and external validity of the results. **Internal validity** (within the study) refers to whether the changes in the dependent variable were due to the independent variable or some other variable. If there is no control group in an experimental study, this will reduce the internal validity because it is uncertain whether the changes in the dependent variable were due to the treatment or some other factors. **External validity** (outside the study) refers

to whether the results of the study are applicable or can be generalized to other settings and groups (Gay et al., 2012). Having a small sample size would reduce a study's external validity because of the limited generalizability to other groups. However, depending on the research design, this would not necessarily be a limitation in a qualitative study. We will discuss these in more detail in Chapter 9.

### Ethical Considerations

The last section in Chapter One is *Ethical Considerations*. This section is where you will describe the procedures that you followed to ensure that the research was conducted in an ethical manner. This includes following the Institutional Review Board process for informed consent, obtaining permission from other agencies to access participants, and minimizing the potential risks to your participants. You may need to include a blank copy of the cover letter or informed consent form in the appendix of your thesis, so make sure you keep a copy.

### Summary

Chapter One is perhaps the most important chapter in the thesis because it provides a rationale for your study and establishes a structure for the rest of the chapters in the thesis. It is usually the most difficult chapter to write, so try not to become frustrated if it takes a long time or if you have to write multiple drafts. Once you have described the research problem (and related areas), background literature, purpose of the study, and research questions, this will give you a structure for how to write Chapter Two, Literature Review, and plan for Chapter Three, Methods. In the next chapter, I will discuss how to write Chapter Two, Literature Review, for your thesis. Here is a summary of the most critical points from Chapter 5:

- The *Introduction* section in Chapter One describes the general problem in the study.
- A funnel writing strategy is analogous to a funnel where your first paragraph about the problem is broad and every subsequent paragraph narrows the topic toward the specific problem.
- The *Statement of the Problem* section describes the three problem areas related to the research problem.
- The *Background and Need* section describes the background of the problem, “solutions” to the problems in the *Statement of the Problem*, and the gaps that still exist.

- The *Purpose of the Study* section has four main parts: (a) purpose statement, (b) need/rationale for the study, (c) description of the study, and (d) expected outcomes.
- The *Research Questions* section outlines the questions related to the problem that you are attempting to answer with your study and will determine the methods and data analysis that you use.
- The *Significance to the Field* (also referred to as *Significance of the Study*) section describes the benefits (short and long term) for the participants in the study as well the contribution that the study made to the research literature in your field.
- The *Definitions* section is where you define terms or phrases that are ambiguous or need an operational definition.
- The *Limitations* section is where you discuss all the limitations in the study. A limitation is a flaw or weakness in the study that affects the internal validity and external validity of the results.
- The *Ethical Considerations* section is where you describe the procedures that you followed to ensure that the research was conducted in an ethical manner.

### Resources

#### Common Obstacles and Practical Solutions

1. A common obstacle that students face at this stage is starting the actual writing of Chapter One. Words that come to mind are, “I have major writer’s block.” This is a very natural feeling because, up to this point, you have been focused on reading and conceptualizing your study. The best way to tackle writer’s block is to sit down and write (or in most cases, type on the computer). Believe me—I have been there many times. Start your writing by opening a new Word document and putting in the major headers for the chapter. Next write an outline of the major topics that you will discuss in the Introduction—do not forget to use the funnel strategy! Once you begin to flesh out the outline and pull information from the research, the ideas will flow. If you do not have time to write it all out, make notes to yourself about what information needs to be included and where to find it.
2. Another common obstacle faced by students is formulating the *Statement of the Problem* and the *Background and Need* sections. Words that come to mind are, “I don’t know what my three areas are.” If your three areas have not emerged yet, a good place to look for them is in your organizational filing system. Look to see how you organized your research articles and especially if you created a literature matrix. If neither is available, do a quick scan of the abstracts

and try to put the articles into three piles and label each one with a broad heading. This will also inform you of whether you have enough articles or the most applicable research articles.

### Reflection/Discussion Questions

Before you write Chapter One, it will save you much time and frustration if you discuss "the big picture" with your chairperson. Often, students get so focused on their own study that they lose sight of the broad context in which the study is situated (the rationale for why you are doing the study in the first place). The following reflection/discussion questions will help to identify the broader issues in your field or discipline related to your research topic and also how to narrow your research topic into the three related areas.

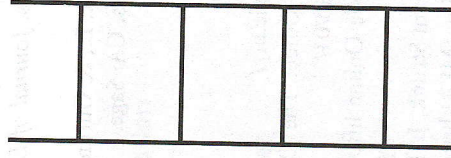
1. What are the foci of the first two paragraphs in the *Introduction* section? Brainstorm different types of problems and issues related to your field or discipline area that would be relevant for these two paragraphs. Discuss how you could use the funnel strategy to transition between paragraphs in the *Introduction* section.
2. What are the similarities and differences between the *Statement of the Problem* and the *Background and Need* sections? What is the focus of each section? Give examples of how you could use the three parallel ladders strategy to organize the writing for these two sections.

### Try It Exercises

The following exercises are designed to help you write Chapter One. In Activity One, you will begin to write the *Introduction* using the funnel method. In Activity Two, you will begin to identify the three problems in the *Statement of the Problem*. In Activity Three, you will begin to develop the *Purpose of the Study* and the *Research Questions*.

1. Activity One: For this activity, focus on the issues related to your research problem.
  - Make a list of the major *national* and *societal* issues related to your research problem. Describe the manifestations and consequences of these issues.
  - Funnel (narrow) one step and list the major *state*, *regional*, and *local* issues related to your research problem. Describe the manifestations and consequences of these issues.

- Funnel (narrow) one step and list the *specific* group or subgroups of individuals *related* to your research problem. Describe the manifestations and consequences of the *national* and *state* issues for this group.
  - Funnel (narrow) one last step and list your research problem and the specific group related to your research problem. Describe the manifestations and consequences of the research problem for this group.
2. Activity Two: For this activity, focus on the specific areas related to your research problem.
    - Imagine that this ladder represents the *Statement of the Problem* section. Write an area that is related to your research problem inside each rung (total of three).
    - Then list the problem(s) within each area.



3. Activity Three: For this activity, focus on the purpose of your research study.
  - List the four parts that need to be included in the *Purpose of the Study* section.
  - Write your purpose statement using the model template from the chapter: "The purpose of this study is to (what do you want to do?) to (why do you want to do this?) for (who is your sample group?) in (where is the setting?)."
    - List three main points for the rationale of the study.
    - Write a brief description of the methods that will be used in the study.
    - List the expected goals and outcomes of the study.
    - Convert the purpose statement into a research question.

## Key Terms

- external validity
- funnel writing strategy
- heading
- internal validity
- three parallel ladders strategy

## Suggested Readings

- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Badley, G. (2009). Academic writing as shaping and re-shaping. *Teaching in Higher Education*, 14(2), 209–219.
- Ferguson, T. (2009). The “write” skills and more: A thesis writing group for doctoral students. *Journal of Geography in Higher Education*, 33(2), 285–297.
- Samraj, B. (2008). A discourse analysis of master's theses across disciplines with a focus on introductions. *Journal of English for Academic Purposes*, 7, 55–67.
- Schwartz, B. M., Landrum, R. E., & Gurning, R. A. R. (2012). *An easy guide to APA style*. Thousand Oaks, CA: Sage.

## Web Links

- APA Style <http://www.apastyle.org/>
- APA Formatting and Style Guide: The OWL at Purdue <http://owl.english.purdue.edu/owl/resource/560/01/>
- The Chicago Manual of Style Online <http://www.chicagomanualofstyle.org/home.html>
- The Elements of Style, William Strunk, Jr. <http://www.bartleby.com/141/>
- Modern Language Association (MLA) <http://www.mla.org/>

# 6

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