

# Writing Research Papers

## **Introduction**

This manual is intended to guide you through the various steps involved in writing research papers at a post-secondary level. Of course, research papers are not the only kind of writing assignment you will be given. Hence, you will need to apply the principles included here to other types of writing, and where necessary seek additional assistance for specific writing assignments you will face.

## **The Purpose of Papers**

Why do we write papers in university/college? The term essay is derived from the French verb *essayer*, which means to “try.” The essay or paper is your attempt to express a reasoned argument. Specifically, papers challenge you to:

1. Explain your ideas on a topic in a clear and logical manner.
2. Develop your critical thinking skills.
3. Develop your research skills.
4. Develop your writing skills.
5. Learn more about general and specific areas of interest.

## **Basic Rules for Writing Research Papers**

1. Follow the instructor's directions to the letter. Your instructor may give instructions regarding the subject, style (MLA or APA), length of paper, getting topic, thesis statement, or outline approved ahead of time, etc.
2. Hand in the paper on time. Many instructors will dock grades for late papers. Learn to work within deadlines – they are real life!
3. Read your course outline very carefully. Some instructors even quiz students in the class on the course outline. Read it as if you were going to be quizzed. Information on the essay requirements may be on the course outline.
4. Hand in a clean copy without coffee stains on it. It makes a difference.
5. No spelling or grammar errors.
6. Always back your work up on disk. Print off a page when you have written one. Students have lost not only papers, but even theses and dissertations!
7. Keep a copy of the paper, as instructors have been known to lose them.
8. Learn from the comments you have received on previous papers. You can record the comments in one place so you can review suggestions. Or, you can keep papers all together so you can review and learn from comments.
9. Try to have your paper complete 3 – 7 days before it is due, so that you have a buffer zone. Unexpected things do happen!
10. Since two minds are better than one, start your papers early. Give your unconscious mind some material to start working with. Learn to use your creative side!

## **The 12 Steps of Research Writers Anonymous**

1. Choose a topic(s)
2. Undertake initial Library research
3. Finalize and refine topic
4. Construct a preliminary thesis statement
5. Construct a preliminary outline
6. Undertake Library Research
7. Finalize thesis statement and outline
8. Write first draft
9. Conduct additional research if needed
10. Write second draft
11. Polish (grammar, spelling, & style) & proof
12. Write final draft & proof read

### **Step One -- Choose Topic(s)**

Sometimes your instructor will:

- Give an assigned topic for you to address. For example, explain why Emperor Constantine's *Holy Roman Empire* was neither holy, Roman, nor an empire.
- Give a question that s/he wants you to answer. For example, Alexander the Great -- Was he or was he not?
- Give you the freedom to choose a topic within certain perimeters.

If you are given a topic to address or question to answer, make sure you understand it. Do not hesitate to ask the instructor, you can save yourself many headaches by avoiding the wrong path.

When given the freedom to choose,

- Try to pick something that interests you.
- Try to choose something you sincerely want to know more about. The research & writing will be more interesting and engaging.
- If it is something that others are not writing on then, so much the better. Your instructor will likely appreciate it.

Think of choosing 2 or 3 topics to start with. You will want to do some preliminary library research first and then narrow your choice down to one.

### **Two Problems to Avoid**

There are two problems to avoid in choosing a topic, choosing too broadly, and choosing too obscurely. If you have chosen a broad topic, you will need to narrow the scope so that your essay has a distinct focus. An unfocused approach often results in gathering masses of information followed by the almost impossible task of trying to pull it all together into a coherent package.

Another problem is choosing a topic that is so obscure that you are conducting your own research, interviewing research subjects, and coming up with your own data. Save that for your PhD!

As you think about a topic, it is likely that you will begin with a broad global theme.

Your goal is to narrow the focus gradually to a manageable scale.

Let us consider an example. In a Sociology class, you could be asked to write a paper on Health Care. That topic is of course too broad, therefore you need to narrow it in some way.

General Topic – Health Care

- Crisis in Health Care (aspect)
- Pharmacare, nursing shortage, problems with rural doctors
- Nursing shortage (aspect)
- BC's nursing shortage (place)
- BC's current nursing shortage (time)
- Causes of BC's current nursing shortage (causation)

## **Focusing Variables**

In the brackets above you will find “focusing variables” (e.g. aspect, place, time, causation) which help you narrow a topic. There are many focusing variables you can use to narrow a topic:

Aspect	More specific type	Activity
Place	Theories	Effects
Time	Implications	Impact
Causation	Results	Prevention
Ethnicity	Research	Any Others?
Group of people	Reasons	

## **Research Question**

Once you have your topic, frame it in terms of a question, which will guide your research. This is known as the “Research Question.” The answer to the research question will be your thesis statement.

For example, if “The causes of BC’s current nursing shortage” is my topic, my research question could be “What are the causes of BC’s current shortage of nurses?”

## **Step Two - Preliminary Library Research**

Preliminary Library research is intended,

- to help choose between possible topics,
- to help narrow and focus your topic
- to help you acquire an idea of the amount of information that might be available on your topic. It is like reconnaissance – you are going out to check the situation before you finalize your strategy.

Where to do preliminary research?

- Read your text, at least the chapter that might have interesting topics for you.
- Read a short background article or encyclopaedia entry about your topics.
- See a Librarian!

## **Step Three - Finalize Your Topic**

Once you have completed your preliminary research you should be able to choose and refine your topic into a manageable project.

## **Step Four - Preliminary Thesis Statement**

A thesis statement is a concise one-sentence formulation of your viewpoint or opinion on some aspect of the topic or question, which sums up the central idea of your essay. It is your answer to the research question. The thesis is the central argument of your paper.

Your paper will be the detailed argument in support of your viewpoint. Everything in your paper will be aimed at proving this argument. Usually a thesis statement contains a belief, or position and a reason why you believe the position is accurate.

### **Sample Thesis Statements**

“BC’s current nursing shortage is due to a shift in public perception of the nursing vocation.”

“BC’s current nursing shortage is due to wage disparity between BC and the USA.”

“Although Freud, Adler and Jung all valued the therapeutic use of dreams, they approached interpretation differently.”

“Students' skills in writing are the critical factor in their success at university because their writing is evaluated to see if they have mastered the key concepts and methods of the discipline.”

“It is better to be married than single because recent research has shown both married men and married women are healthier physically, emotionally and sexually as compared to their single counterparts.”

### **What Thesis Statements Do For Research Papers**

- The thesis controls and focuses the way in which the main points of the essay are presented and developed. Therefore, every paragraph in an essay should relate directly to the chosen thesis.
- The thesis statement sets up expectations in the reader's mind. It obligates the writer to prove what s/he has said. For example,

If my thesis statement is, “BC’s current nursing shortage is due to a shift in public perception of the nursing vocation,” what would you expect to see in my paper? You would expect my paper to,

- Demonstrate that there is a shortage of nurses in BC
- Demonstrate that there has been a shift in public perception of nursing as a vocation
- Describe the nature of that shift
- Prove that there is a direct causal relationship between this shift and the shortage of nurses in BC, i.e. prove my thesis.

How do I know I have proven my thesis? I know I have proven my thesis when:

- I have provided convincing arguments (have someone read your paper and give feedback)
- I have thoughtfully responded to possible objections
- I have addressed other views or data that might be contrary to my opinion

### **A Good Thesis Statement,**

- Is expressed in one direct and concise sentence
- Expresses one main idea
- Is specific, just like your topic is
- Is written in your own words
- Reflects your conviction/conclusion on the topic
- Can be backed by a solid argument
- Expresses a conviction upon which reasonable people could disagree, i.e. the topic is controversial, and because of that it,
- Invites discussion

Remember, at this point you are doing a **preliminary** thesis. This likely will not be your final thesis, because you have not completed all your research yet. You are just coming up with your best guess thesis at this point, something to guide your research. Keep in mind that your ideas may change and new ones may crop up once you start the process of assembling and writing out your thoughts. Once you have your preliminary thesis statement your instructor might be willing to give you feedback on it.

### **Step Five - Preliminary Outline**

The basic outline of a research paper is,

- Introduction
- Main body
- Conclusion

Start by constructing a preliminary outline. You have constructed your preliminary thesis, now give some thought as to how you might outline your paper. Jot down the issues you plan on investigating. Remember to consider the expectations your reader will have in light of your thesis statement. Now, craft a brief, preliminary outline, showing the order in which you might address those issues. Remember, this is a preliminary outline, it will serve more as a guide to research, rather than as a final outline of what you will write. A helpful way of getting an outline going is to use **Concept mapping**

### **Concept Mapping**

Concept mapping is a tool for assisting and enhancing many of the types of thinking and learning that we are required to do at university. It can be used for,

- Developing an outline for your paper
- Summarizing the reading you are doing in a university text book
- Summarizing a lecture
- Making notes in a seminar or workshop
- Reviewing for an exam
- Creative writing

For writing research papers you can use concept mapping at almost any point,

- Choosing a topic
- Refining a topic
- Constructing a preliminary outline
- Finalizing an outline
- Writing paragraphs

To do a concept map, simply write the main idea in the center of the page. It could be a word, a phrase, or a couple of ideas being compared. You then place the related ideas on branches that radiate from this central point

Try to connect all the words or phrases or lists with lines, to the center or to other branches. When you get a new idea, start again with a new spoke from the center. Try to go quickly, without pausing. Try to keep up with the flow of ideas. Do not stop to decide where something should go, just get it down. You can add lines after to show how the ideas relate. See the example at the end on this manual.

## **Step Six – Library Research**

How to conduct Library research is beyond the scope of this manual. You can get assistance on research by,

- Asking a Reference Librarian for help
- Finding a recent academic journal article that deals directly with your topic. If it has a good bibliography, it will be worth its weight in gold.

Before you run off to the library take some time to write down your own ideas that you have regarding your thesis. Do this at least some time before you start to write your first draft. You could use the concept map here. Then after that you can transfer the major ideas to 3 x 5 cards, which you can then use for your paper.

When you do go to the Library to do research you will need some way of keeping track of your resources and the information you uncover. If you can gather this in an organized way you will find writing your paper to be a much easier process. One approach is to use 3 x 5 cards to record bibliographic information and research data. This approach is described next. See the end of the manual for examples of what these bibliographic and research cards can look like.

## **Bibliographic Cards**

As you do your research and you find a book, article or any other resource that looks promising, take out one of your 3x5 cards. On the front of the card record the following information.

**Upper left-hand corner** - record the library call number and any other information that will assist you to locate the resource quickly and efficiently. Even after you have done some research you may need to go back to that resource again to get some further details you may have missed. So, write where you found the resource. This is important if you are working in more than one library. Also note the name of the index in which you found the resource (for example Psych Abstracts on the internet)

**On the main part of the card** - Include all the bibliographic details of the resource. This will help you find it again if you need to. It will also give you all the information that you need to do your bibliography, reference list, endnotes, or footnotes. For that reason put it in the exact form that it will appear in your bibliography or list of references. The form will depend on what style you are required to use (e.g. APA, MLA). This will save you a lot of time when it comes time to do it later. Doing it exactly at this point will ensure that you have all the essential parts of the reference. This way you will not have to go searching later for little details like the volume number of a particular journal article.

**Upper right-hand corner of the card** - Give the card a number. The first card you use will be #1. If you mess up and miss a number it does not matter. The important thing is that you assign a different number to each card.

**Back of card** - on the back you can give a brief record of your opinion of the resource if you like. You can indicate whether it looks useful or not, and what types of information it has.

Be sure to use this system for each potential resource that you find. Only put one resource on each card.

You may want to organize the information on your card in a different way, that is fine, just make sure you have these three basic elements on each card:

- A number for ordering the cards and referencing them
- All the bibliographic details
- Details on where you found the resource including the call #, the index, the library and where in the library.

## **Research Cards**

When you do your library research take along your bibliography cards, blank 3x5 cards for research, your preliminary outline and your research question. Use blank 3x5 cards to take notes on while you do your research.

### **Some Guidelines:**

- Only write one thought, one idea, one quote or one fact on each card. If you encounter a very long quote or string of data, you can write on both sides of the card if necessary. Try to never carry over a note to a second card. The reason why you only put one note per card is that it will make using these cards much easier when it comes time to organizing your final outline and using the cards to write your draft.
- Try to write your information in your own words.
- Use quotation marks around any material that you copy verbatim.
- In the upper left-hand corner of the card write down the resource number that corresponds to your bibliographic card. This will remind you of where the information came from when it comes time to doing endnotes, footnotes or references. Using this resource number will help avoid having to write the resource again and again on each card you use.
- Below this resource number write down the pages on which the information appeared in the resource. You will need this when doing referencing (e.g. footnotes, endnotes, works cited list)
- In the upper right hand corner of the card write a very brief (several words) headline describing the information on the card.
- Only use one side of each card if at all possible.
- When you are finished with a particular resource, go back to the bibliography card that you did and put some indication on it that you used this resource (like a check mark).

While you are doing research you are going to have some thoughts of your own come to you. Do the same thing with these. Use 3x5 cards to jot down your thoughts, ideas, or reflections on what you are encountering. Be sure to indicate on the card that these are your thoughts. Give the card a headline.

## **Step Seven – Finalize Thesis & Outline**

Once you have completed your research you can finalize your thesis statement and your outline. You will find your 3 x 5 system allows you to finalize your outline quite easily.

1. Read your cards over. Decide which ones are necessary for your argument. Remember that everything in the final essay must relate to the thesis statement.
2. Group together all the ones that share a similar headline.
3. Now, sort all the cards that are in these different groupings. Read through them and get them into an appropriate order. Remember as you start writing you will often change the order so do not worry about final precision here.

Now you can rewrite your outline, if need be, into a final form, which will serve to guide you as you write your first draft.

## **Step Eight – Write First Draft**

If you have sorted your cards well, and constructed a good outline, this step will go rather smoothly for you. Some tips for this stage,

- It is strongly recommended that you write the main body first, and leave your introduction and conclusion to the end. Many students get hung up on the introduction and become paralyzed, wasting a lot of time and energy.
- Consider double or triple spacing your first draft so that you will have ample room for editing later.
- Once you have used the information from a 3 x 5 card, indicate this in some way on the card.
- Also, indicate in some way on the corresponding bibliographic card that you have used the resource, so that you know you need to include it in your bibliography or reference list.
- If you decide not to use a certain card do not discard it. Keep it in a separate stack. You may decide you need to include that information somewhere else in your paper.
- As you write your first draft keep your thesis in mind at all times.
- Once you write a page, print it off. Computers do crash. Also, keep a back up copy on a disk.

## **Introductions**

A good introduction,

1. Presents the subject in general, providing a context for the thesis.
2. States the thesis clearly and concisely.
3. Serves as a map to the reader, providing a description of your approach or methodology for proving your thesis, and the kinds of sources that will serve as your evidence. It provides a taste of what is coming, but like the movie description on a video box or the back cover of a novel it does not give away the whole story.
4. Captures attention. This can be done by a provocative statement, an interesting quote, asking a question, or providing arresting statistics.
5. Raises the interest of your reader. This can be done by describing the relevance or significance of the topic.

## **Introductory Paragraphs**

Depending on the length of the essay, introductions may extend from one to three paragraphs or even two or three pages. Most often university papers will contain one or at the most two paragraphs for an introduction.

## Main Body

The body of the paper consists of paragraphs that develop the argument or thesis statement presented in the introduction. All your material must clearly relate to your thesis statement. The body is typically made up of a series of smaller internal arguments. These are the steps of the argument, and when taken together prove the thesis. Each of the smaller arguments is usually stated in the topic sentence of each paragraph throughout the paper. Some tips for this stage,

- The evidence that you present in the body of the essay should be arranged, where possible, in order of increasing importance with the strongest argument last.
- Be sure to begin with a convincing point that will interest your reader in your perspective.
- Make sure all your points and paragraphs flow smoothly. Using transitional words and phrases can help in connecting sentences and paragraphs. Some examples (from Steven Frank *The Everything Study Book*):
- To build upon a previous sentence or paragraph use: *and, also, additionally, as a result, consequently, further, furthermore, in addition, moreover*
- To compare with a previous sentence or paragraph use: *similarly, in the same manner, likewise, at the same time, by the same token*
- To contrast with a previous sentence or paragraph use: *however, but, in contrast, nevertheless, although, yet, on the other hand*
- To summarize or draw a conclusion use: *therefore, in other words, in short, to sum up, thus*

## **Main Body Paragraphs**

A paragraph is a group of sentences conveying a single unit of thought. Paragraphs present and develop one idea. Typically, a main body paragraph does this by,

- Making an assertion (topic sentence). The assertion, or topic sentence, generally appears at the beginning of each paragraph. It tells the reader the exact topic with which that paragraph deals.
- Explaining the assertion (clarification). The rest of the paragraph is devoted to explaining what that assertion means, by doing such things as defining the terms or clarifying the situation.
- Providing evidence (details, examples, illustrations, or other types of proof). The paragraph defends the assertion by providing evidence through details, examples, illustrations, statistics, quotations from other published works, facts, and other types of proof such as appeals to other research, studies, or expert opinion.
- Illustrating with examples.
- Interrelating with the other main points. You may comment on the significance of the evidence. The writer may want to explain the significance of the evidence to the reader to be sure that the reader understands why these particular kinds of proof were chosen and can then judge the validity of the assertion.

## **Conclusions**

What should you strive to achieve in your conclusion? At minimum:

- Restate the thesis affirming that it has been proven
- Recap the major points of your argument

Other possibilities include:

- Remind reader of the topic in general
- Outline suggestions for further enquiry
- Outline what you believe is the significance of your thesis, or the implications, i.e. what should be done about the situation.
- Outline predictions of what is in store for the future, drawing on what you have written in the paper.

## **Tips for Conclusions**

1. End gracefully without introducing new material.
2. Use an appropriate quote if suitable.
3. The length of the conclusion should be proportional to the length of the essay. A short essay will require only one paragraph. In a long paper you may wish to restate your thesis in one paragraph, fully summarize your arguments briefly in a second paragraph, and discuss the significance of your argument in a third.
4. Keep the conclusion as short as possible.

## Dealing with Writer's Block

1. Ideas and writing will flow much more easily if you shelve your critical self while writing at this stage. This means that:
  - You will have a chance to revise your composition and assess how convincing it sounds later
  - You will have a chance later to add in necessary material
  - You will have a chance to polish grammar and check spelling later.
  - You will have a chance to spice up your vocabulary later.

If you try to make your first draft perfect you may find yourself experiencing writer's block. If you cannot get started consider opening with "this essay is going to sound like a load of crap at first but it will get better as I go."

2. If you feel blocked try to focus on the ideas that you want to express and not think ahead to the final product.
3. You might find it easier talking into a tape recorder, or using voice activated word processing software.
4. Some people find that they freeze up as soon as they sit down at a keyboard so try to write your first draft on paper if this works better for you.
5. Pretend you are writing a letter to a good friend, and tell him or her everything you have learned about your subject and why you believe your thesis is correct.
6. Use everyday language. You can spice things up later.
7. Do not edit yourself. Leave that later. This is a rough draft.
8. Try to keep moving. If you get stuck on a particular section do not stew over it for hours. Just write a quick note about what you plan on covering in that section and carry on. You are far better either going on writing another section or taking a break rather than getting fixated on one section. Let your subconscious mind do some of the work for you.

## **Plagiarism & Documentation**

The Art Institute of Vancouver defines plagiarism as: “Plagiarism consists of using another person’s work, words, or ideas as if they were one’s own. Plagiarism may occur as a result of ignorance and/or inexperience about the correct way to acknowledge and reference authors. It may also occur as a deliberate misuse of the work of others with the intent to deceive.” The Art Institute of Vancouver expects honest work at all levels from students. Cheating, plagiarism, and fabrication or falsification of data are not acceptable. The School regards academic dishonesty as a very serious matter and imposes strict penalties on those students who are found to be guilty of an offence. The following courses of action, taking into account the severity of the offence and whether or not there are significant extenuating circumstances, may be followed in cases where academic dishonesty has been established:

- award zero marks for the piece of work or examination, with or without the opportunity to redeem the piece of work,
- or award a fail grade for the whole topic or course of which the piece of work or examination concerned is a part,
- refer the matter to the Dean of Academic Affairs or the Associate Dean,
- or expulsion.

To avoid plagiarism, you must document the source when you put any of the following in your paper:

- Quotations taken from a published source
- Someone else's theories or ideas
- Someone else's sentences, phrases or special expressions
- Facts, figures and research data compiled by someone else
- Graphs, pictures, and charts designed by someone else.

## **Step Nine – Additional Research**

Did you discover any gaps as you wrote your first draft? Were any questions raised that need to be answered? If so, do the additional research required to address these matters.

## **Step Ten - Write Second Draft**

The goal for this draft is to edit for meaning. That means,

- Improving the flow of your paper
- Organizing your thoughts better
- Clarifying any confusing points
- Strengthening any weak arguments

There are a number of questions that you can ask yourself while editing:

- Is my thesis clearly stated?
- Does my paper answer the research question posed?
- Does my argument stop or go off on a tangent?
- Are my main points arranged in a logical sequence?
- Do my ideas flow smoothly from one to another?
- Do all my main points relate clearly to my thesis?
- Have I used all the main points gathered from my reading? If not, why not?
- Do I see any material that is not attached clearly to a main idea?

### **Some Tips**

- Try to get help from a neutral reader at this point. When you become very familiar with the topic, it is often hard to see the forest for the trees. Often someone else will see obvious errors or problems with the flow of thought that you will miss because you have been so caught up in it.
- Reading aloud to a friend is another way of checking for structure, organization, and clarity, and weeding out irrelevant material or unnecessary jargon.
- You may find it difficult to discard ideas or material that you have carefully collected, written down and found very interesting. However, if they do not add to your argument, it is better to delete them from your essay. You are not usually rewarded for adding points that are not strictly relevant, and it is not good policy to have the reader searching for your train of thought.
- Strengthen your writing. Enhance your vocabulary by using a Thesaurus. Choose some synonyms that might do a better job than the words you originally chose. If you have overused a particular word find another that means the same thing. However, be careful not to get carried away and use words that are so obscure that the average reader will not know what you mean.

## **Step Eleven - Polish (Spelling, Grammar, Style) & Proof**

At this stage you are checking your grammar, spelling, and getting the paper into the required style. You will likely be required to use a style that conforms to a certain standard such as:

- MLA (Modern Language Association)
- APA (American Psychological Association)
- Chicago Style (also referred to as Turabian)

There are many manuals that cover style in detail that you can get in the Library.

## **Step Twelve - Final Draft & Proof Read**

Do your final draft. Proof read this as well. Have someone else read it.

Do a title page in accordance with whatever style you are required to use.

Generally a title page includes:

- The title of your paper
- Your name
- Your instructor's name
- The course number and name
- The date

One approach to titling your essay is to provide a title and a subtitle. The title is usually a quotation or a short phrase, while the subtitle is a longer sentence providing more detail on the topic. An example could be, "EQ or IQ: The Quest for a Reliable Predictor of Vocational Success"

Make a copy of your paper (instructors sometimes lose papers). Hand it in, on time of course!

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