

TEN STEPS FOR WRITING RESEARCH PAPERS

There are ten steps involved in writing a research paper:

- Step 1: Select a subject
- Step 2: Narrow the topic
- Step 3: State the tentative objective (or thesis)
- Step 4: Form a preliminary bibliography
- Step 5: Prepare a working outline
- Step 6: Start taking notes
- Step 7: Outline the paper
- Step 8: Write a rough draft
- Step 9: Edit your paper
- Step 10: Write the final draft

Step 1: Select a subject

Choose your subject carefully, keeping in mind the amount of time you have to write the paper, the length of the paper, your intended audience and the limits of the resources. Check in the library to make sure a reasonable amount of information is available on the subject you choose.

Writing the paper will be much easier if you select a subject that interests you and that you can form an opinion or viewpoint about. In fact, it will be easier later on to narrow the topic if you choose a subject you already know something about. However, avoid controversial and sensational subjects that are not scholarly, or too technical, or will only restate the research material.

Step 2: Narrow the topic

The topic of the paper is what you want to say about the subject. To narrow the topic, you need to read background articles about your subject in encyclopedias and other general references. Do not take notes at this time other than to jot down possible main ideas. As you read, ask questions like the following:

- Who are the important people involved?
- What are the major issues?
- What are my opinions regarding the topic?
- Why is this an important (controversial, interesting) subject?
- How has the problem (or issue) developed? When? Where?

The answers will help you narrow your topic. Remember to keep in mind the length of your paper.

Example of a topic for a five page paper:

Too broad: Sports are enjoyable.

Better, but still too broad: Swimming is enjoyable. (Answers the question, what sport is enjoyable?)

Narrowed topic: Swimming is enjoyable because _____. (Answers the question, why is swimming enjoyable?)

Narrowing the topic is a more complicated process for extensive research. General encyclopedias (like World Book) do not give enough information to get a broad overview of a subject, so instead you need to read specialized encyclopedias, abstracts, etc. At the reference desk in the Bender Library, there are reference guides in business and economics, humanities, history, politics and area studies, and language and literature. Ask the librarian about these and other sources that might be useful to you. When you find the reference books that are available, read only to get an overview of the subject.

Step 3: State your objective or thesis

Before you begin your research for your paper, you need to compose a thesis statement that describes the viewpoint you are going to express and support in your paper. Since your purpose in the rest of the paper is to prove the validity of your thesis, your thesis statement provides a controlling idea which will help you choose the resource materials you will use and will limit your note taking.

Example:

Thesis statement: Ancient Greek culture is reflected in the lives of present day Greeks.

Controlling idea: "reflected in." The writer will look for materials that describe characteristics of ancient Grecian culture and characteristics of modern Grecian culture, and for any similarities between the two.

A thesis statement must not be an indisputable fact or an opinion that cannot be proven. **For example,** it would be difficult to write a research paper to prove the following thesis statements:

- The United States was the first nation to land on the moon. [indisputable fact]
- J.D. Salinger's *Catcher in the Rye* is the most fascinating novel ever written. [insupportable opinion]

Compose your thesis statement carefully, for it is the key to a good paper. As a matter of fact, a good thesis statement can outline your paper for you. **For example**, the following thesis can be divided into three parts that, in effect, provide a rough outline.

Much of Martin Luther King's success resulted from the passive resistance techniques proposed by Mahatma Gandhi.

1. Martin Luther King's success.
2. The passive resistance techniques of Gandhi.
3. The role of Gandhi's passive resistance techniques in Martin Luther King's success.

There are several **common errors** that students make when composing thesis statements. Some of these are listed below, with examples.

1. A thesis cannot be a fragment; it must be expressed in a sentence.

Poor: How life is in a racial ghetto.

Better: Residents of a racial ghetto tend to have a higher death rate, higher disease rates, and higher psychosis rates than do any other residents of American cities in general.

2. A thesis must not be in the form of a question. (Usually the answer to the question could be the thesis.)

Poor: Should eighteen-year-old males have the right to vote?

Better: Anyone who is old enough to fight in a war is old enough to vote.

3. A thesis must not contain phrases such as “I think.” (They merely weaken the statement.)

Poor: In my opinion most men wear beards because they are trying to find themselves.

Better: The current beard fad may be an attempt on the part of men to emphasize their male identity.

4. A thesis must not contain elements that are not clearly related.

Poor: All novelists seek the truth; therefore some novelists are good psychologists.

Better: In their attempt to probe human nature, many novelists appear to be good psychologists.

5. A thesis must not be expressed in vague language.

Poor: Bad things have resulted from religion being taught in the classroom.

Better: Religion as part of the school curriculum should be avoided because it is a highly personal and individual commitment.

6. A thesis must not be expressed in muddled or incoherent language.

Poor: In Act One of *Othello*, to cause them to feel fury against Othello, Iago fuels Brabantio, Othello, Roderigo, and Cassio with deceit by telling them lies.

Better: In Act One of *Othello*, Iago deceives several characters in order to further his plot to destroy Othello's life.

7. A thesis should not be written in figurative language.

Poor: Religion is the phoenix bird of civilization.

Better: As long as man can conceive the idea of a god, religion will rise to give man a spiritual reason for existence.

Step 4: Form a Preliminary Bibliography

A preliminary bibliography is a list of potential sources of information. In addition to the card catalog and the guides to reference books already mentioned in Step 2, there are other sources which will help you locate articles and books relevant to your topic. Some of these are listed below:

- Reference Guides to Indexes and Abstracts Indexes
- Reader's Guide to Periodical Literature, (1900-)
- Business Periodicals Index
- Social Sciences and Humanities Index, (1965-1974)
- Humanities Index, (1974-)
- Social Sciences Index, (1974-)
- Bibliographies (available on many subjects)
- Bibliographic Index: A Cumulative Bibliography of Bibliographies

Evaluate the potential sources as you go along, keeping in mind how well they relate to your topic, how up-to-date they are and how available they are. Watch for well-known authors and try to determine the point of view presented in the articles and whether they sound too technical or too simplistic. The following books can help you evaluate sources:

- Book Review Digest, (1905 -)

- Book Review Index, (1965 -)
- Index to Book Reviews in the Humanities (1960 -)

As you select articles and books, record information regarding them just as you want it to appear in your bibliography. Using 3x5 index cards is a good method. Later, when you complete your final bibliography, you will just arrange this information in alphabetical order. The form for bibliographic entries varies from school to school. If you are uncertain about which form to use, refer to a writer's handbook, such as *A Manual for Writers of Term Papers, Theses, and Dissertations* by Kate Turabian, which is available in the university bookstore.

Also include the call number for each book and a personal note with each entry.

An example of what a bibliographic note card might look like:

Tillich, Paul. Systematic Technology. 3 vols. Chicago: University of Chicago Press, 1951-63.

(esp. vol. 1, chp. 2) bibliographic information; also see chp. 4 for dissenting opinions

Next, gather your materials. Evaluate them again, using the criteria mentioned above. Do this by previewing each source, checking the table of contents and index, finding relevant chapters and skimming them.

Step 5: Prepare a Working Outline

A working outline is important because it gives order to your notetaking. As you do your research, you may find that you need to review your plan if you lack information about a topic or have conflicting information. Nevertheless, it provides a good starting point and is essential before you start to take notes.

Begin by listing the topics you want to discuss in your paper. (You should have a general idea of these from the reading you have already done.) Then, divide the items on the list into major topics and subtopics. An example of a working outline is presented below:

Thesis statement: Ancient Grecian culture is reflected in the present day Greeks.

Working outline:

Ancient Greeks	Modern Greeks
religious beliefs	religious beliefs
family structure	family structure
artistic pursuits	artistic pursuits

Step 6: Start Taking Notes

After you have gathered your materials and prepare a working outline, you can start to take notes. Write your notes on index cards (either 3x5" or 4x6") being sure to include only one note on each card. Each note should relate in some way to one of the topics on your working outline. Label each card with the appropriate topic; then you can easily organize your note cards later when you begin to prepare the final outline of your paper.

Each note card should also include the title of the source of information and the page number to use later for footnoting. This is very important because you must cite all material even if you have not used the exact words of the text. Be sure to write the note in your own words; use direct quotes only when the information is worded in a particularly unusual way. To avoid overlooking any material, write on only one side of each card--if the note requires more space, use another card and label it accordingly.

Read the passage below and the sample note card that follows it. Pay particular attention to the paraphrasing that summarizes the content of the passage and the other items included on the card.

Thesis: Man's attempts to create a healthier and more prosperous life often have unforeseen detrimental effects upon the very environment he hopes to improve.

Ecology and Its Implications

In Malaysia recently, in an effort to kill off mosquitoes, American technologists sprayed woods and swamplands with DDT. Result? Cockroaches, which ate poisoned mosquitoes were slowed in their reactions that they could be eaten by a variety of tree-climbing lizards, which in turn could be eaten by cats, which promptly died of insecticide poisoning. The cats having died, the rat population began to increase; as rats multiplied, so did fleas: hence the rapid spread of bubonic plague in Malaysia. But that is not all. The tree-climbing lizards, having died, could no longer eat an insect that consumed the straw thatching of the natives' huts. So, as Malaysians died of the plague, their roofs literally caved in above their heads.

Peter A. Gunter. *The Living Wilderness*. Spring 1970

Sample notecard:

title of reference

note in your own words: unforeseen detrimental effects

"Ecol. & Its Implications"

Living Wilderness. Spr. '70, p. 31

Recently the use of DDT in Malaysia, originally intended to kill mosquitoes, started a chain reaction of events leading to bubonic plague and the actual collapse of Malaysian's huts.

topic from working outline

page number

Step 7: Outline the Paper

The final outline is similar to the working outline, but is more complex, with each topic being further divided into several subtopics. To accomplish this, sort your note cards into separate piles according to the topics at the top of each them. Then, sort each pile into separate subtopics. For example, one of the topics from our sample working outline might be subdivided like this:

Religious beliefs of the ancient Greeks

- ceremonies
- feelings about death
- deities

Your final outline also should reflect the organizational format you have chosen for your paper. This will depend on the topic of your paper and your thesis statement. For example, if the topic of your paper is the artistic development of a famous painter, you would probably want to use a chronological organization. However, if your paper is a discussion of the family life of baboons and humans, a comparison-contrast format would be more appropriate.

Step 8: Write the Rough Draft

After you have completed your final outline, you can begin to write your rough draft. It is important to remember that this rough draft will be revised. Therefore, at this time, you do not need to worry too much about spelling or punctuation. Instead, you should concentrate on the content of the paper, following your outline and expanding the ideas in it with information from your notes.

Your paper should consist of three parts: the introduction, the body of the paper and the conclusion. The introduction should state the thesis, summarize the main ideas of the paper and capture the reader's interest. The body of the paper should develop each section of the outline. This is not difficult to do if you follow your outline and work through your note cards (which should be arranged to correspond with your outline) using the information from them to support the points you are making. Whenever you use information from a note card, remember to put a number at the end of the sentence. At the same time, write the footnote as it should appear in the paper at the bottom of the page you are working on or in list form on a separate sheet of paper. Number your notes consecutively throughout the paper. The conclusion should summarize your findings and restate the thesis.

Step 9: Edit Your Paper

When you have finished the rough draft, read through it again and revise it. Pay particular attention to the content and organization of the paper. Does each paragraph have a topic

sentence that relates to the thesis? Is each idea supported by evidence? Are there clear transitions from one section to another, from your words to quotations? Are there clear transitions to indicate to the reader when one idea is ending and another one is beginning? Revision often requires many readings, each with its own purpose.

Step 10: Write the Final Draft

The final draft of your paper should be typed and must include citations and a bibliography; some paper might require a title page, depending on the formatting style and/or the professor. The title page should include the title of the paper, your name, the name of the course, the instructor's name, and the date the paper is due.

Footnotes are a matter of style and you can check with your instructor on the format he/she prefers. In general, though, a footnote is indicated by an Arabic numeral raised a half space above the line, placed after the sentence or passage to which it refers. Footnotes may be arranged in numerical order at the bottom of the page on which they appear or a separate page (labeled Endnotes) placed at the end of the paper just before the bibliography.

The bibliography is simply a list of your sources; how it is arranged depends again on the formatting style (MLA/APA/etc).

Before handing in your paper, be sure to proofread it for any mechanical errors.