

The Writing Center

at

Empire State College
Genesee Valley Center
Rochester, N.Y.

THE RESEARCH PAPER

INTRODUCTION

A **research paper** uses information from multiple sources to verify, disprove, or make known **conclusions** reached after one has carefully **studied** the subject at hand and **evaluated** all of the information about it that has been gathered.

- The information you gather must be supported by your own unique ideas.
- Think of a **research paper** as a mystery or puzzle that must be solved:
 - Ask **multiple questions** about your chosen topic;
 - Gather **possible answers or responses** from the information you study;
 - **Assess** the information (or *evidence*) you gather; and
 - **Settle upon an answer** to the mystery with which you are comfortable (this will become the thesis of the paper -- see also “Finding Your Thesis”).

I. PLANNING THE PAPER

A. When Your Mentor Gives You a Subject

- (1) If the subject is specific, you can probably come up with a working thesis statement quickly and get started on your research right away.

Examine the works of Jung, Levi-Strauss, and Campbell. Compare their thinking about mythic tales as cultural records, focusing on ritual, religion, and community status.

The mentor wants you to **examine** and **compare** the information in three different sources on the topic of *mythic tales as cultural records*. The assignment also offers subheadings (*ritual, religion, and community status*) that should help organize your paper.

- (2) If the subject assigned is rather broad (*i.e.* “World War II,” “Drug Abuse in America”), you will want to narrow the topic down to a more specific focus.

B. When Your Mentor Asks You to Choose Your Own Subject

- (1) Environment — What are the greatest threats to environmental health? How might the economy be changed to improve the environment? What household activities could we alter for the sake of protecting water, soil, etc?

- (2) Your job — What are you struggling with at work? What are the current difficulties in your area of specialization?
- (3) History — Which historical figures do you admire? Why? What historical time period would you like to explore and why?
- (4) Hobbies and interests — What do you do for fun in your spare time? At what activities do you excel? This might include outdoor recreation, sports, the arts, gardening, home crafts, etc.
- (5) With your research topic in mind, read newspapers and magazines. Flip through encyclopedias, almanacs, or even educational television to search for ideas of interest.

C. Narrowing Your Subject into a More Specific Topic

Too Broad

John Lennon
The Presidency
Dinosaurs
Dieting

More Focused

British pop star as voice of social conscience
The US President as international leader
The feeding habits of Tyrannosaurus Rex
Proper nutrition and exercise when attempting to lose weight

D. Developing Guiding Questions

Brainstorming on the “John Lennon” question: John Lennon started out as a writer of simple “pop” love songs, but eventually began crafting music for the sake of social enlightenment. It’s interesting to think that somebody so rich and famous would cultivate a social conscience. Celebrities are often perceived as being only self-interested.

Guiding questions: Did John Lennon’s blue-collar roots nurture his compassion for social justice? What other aspects of his personal life may have shaped his public life? Does being a celebrity demand a level of greater responsibility to the community?

Brainstorming on the “Presidency” question: In the US, the Presidency is often granted nearly mythic characteristics. Great leaders of our country such as Abraham Lincoln and F. D. R. have become icons for having exhibited what are considered the finest qualities of government leadership – qualities that are useful even in international affairs.

Guiding questions: Why do Americans assume the President must be an international leader? In what ways should a US President merely be a strong ally and not one compelled to guide other nations? During wartime, how does the international role of a US President change?

E. Brainstorming Strategies

The following strategies may be applied to any part of the research process discussed thus far:

- Choosing a subject
 - Defining a more focused topic
 - Developing guiding questions
- (1) Free-write
- Write down any or all of the thoughts that come to mind about your chosen topic.
 - Write non-stop for 10 minutes without lifting the pen from the page or your hands from the keyboard.
 - Step away from your work for a little while (maybe a half-hour or so).
 - Look over your free writing: Choose the idea that seems both most interesting to you and most capable of offering depth and complexity.
 - Starting with this new, narrower topic, repeat the whole process.
- (2) Idea Wheel
- Write your topic in the center of a blank page.
 - Surround it with related topics, connecting sub-topics to the main topic. Do this by drawing a line from the sub-topic to the main topic as if you were connecting spokes to the hub of a wheel.
 - Branch other topics off of the sub-topics (making smaller wheels).
- (3) The List
- Under your topic heading, simply list your thoughts as they come to you through free-association.
- (4) Journalistic Questions
- Ask “Who? What? Where? When? Why? How?” about your topic.
 - Answer each question as completely as possible.
- (5) Discovery Questions
- Explore your topic by answering the following questions:
 - a) Can you discuss an incident about it?
 - b) What causes it?
 - c) What can you **describe** about the topic?

- d) What results from it?
- e) How does it compare to something else?
- f) What are its parts, sections, or aspects?
- g) What do you remember about it?
- h) Why is it valuable or important?
- i) Are you for or against it? Why?
- j) How do you respond or feel about it?

II. LIBRARY RESEARCH

What texts might be useful?

A. The Reference Section

- General Encyclopedias. Provide a wide survey of multiple topics. Numerous entries also offer a list of works for further reading. There are several good choices:
 - *Collier's Encyclopedia*
 - *Encyclopedia Americana*
 - *Encyclopedia Britannica*
 - *Funk & Wagnall's New Encyclopedia*
 - *World Book*
- Specialized Encyclopedias. Many academic fields provide their own encyclopedias:
 - *Encyclopedia of African American Culture & History*
 - *Encyclopedia of Popular Music*
 - *Encyclopedia of Religion and Ethics*
 - *McGraw-Hill Encyclopedia of Science and Technology*
 - *Oxford Companion to English Literature*
 - *Routledge Encyclopedia of Philosophy*
- Biographical Works. These contain short entries on significant people, focusing on their lives and accomplishments:
 - *American Men and Women of Science*
 - *The American Presidency*
 - *Biography and Genealogy Master Index* (Will direct you to resources focusing on numerous people)
 - *Dictionary of American Biography*
 - *Dictionary of National Biography* (British)
 - *International Who's Who*
 - *Native American Tribes*
- Other Works.

- *Dictionary of Special Library and Information Centers*
- *New York Times Index*
- *Video Source Book*

A number of encyclopedias are also available online.

B. Finding Books

Libraries now have access to their card catalogues through a computer terminal. In the public libraries of Monroe County, this computer system is called LIBRAWeb. Through LIBRAWeb, you can search for books according to an Author, Title, Subject or Significant Word. You can search the Public Library catalog from any computer with access to the Internet by going to <http://www.rochester.lib.us:1080/> and clicking on the button, "Public Library Catalog."

To browse the collections of other local libraries such as college libraries, click on "Magazine Indexes and other Databases," then click on "ROARing Cat." If you find useful materials at a college library, often you can borrow them through interlibrary loan.

C. Finding Magazine Articles

From the LIBRAWeb page (<http://www.rochester.lib.ny.us:2080/magref.html>), click on "Magazine Indexes and other Databases." You may then select Infotrac, which contains citations to articles from popular and academic journals. A commercial site called Northern Light (www.northernlight.com) also offers a database of citations from journals, magazines and newspapers. Finally, the Empire State College Web Site (www.esc.edu) provides students access to several useful resources:

- **AP Media Archive** — database of over 400,000 images compiled by the Associated Press.
- **CollegeSource Online** — a database of U.S. college and university catalogs.
- **Dialog@Cart** — 250 indexing and abstracting databases, including the full text of major newspapers (*i.e.*, 90 days of *The New York Times*).
- **FirstSearch** — over 70 indexing and abstraction databases, many with full-text articles. Each record in FirstSearch provides a listing of libraries that own the particular item.
- **GaleGroup** — includes the Literature Resource Center, Biography Resource Center, Expanded Academic Index, OneFile and Associations Unlimited.
- **GPO** — guide to the Government Printing Office database of documents produced by federal government agencies.
- **Harpweek** — full-text electronic version of Harper's Weekly from the 19th century.
- **Health Reference Center Academic** — consumer health information.
- **NetLibrary** — a collection of over 1,000 electronic books that you can "check out" for up to four hours.

- *ScienceDirect* — over 700 full-text journals covering science, business and the humanities.

D. Finding Newspaper Articles

1. Newspapers such as The New York Times, The Wall Street Journal, and The Christian Science Monitor have their own online indexes.
2. Infotrac indexes The New York Times and The Wall Street Journal.
3. Northern Light (www.northernlight.com) includes citations from major US newspapers.

There is also a wealth of on-line and Internet resources that can help you with your research. For more information on available on-line resources, see the handout titled *Researching On-Line*.

III. TWO WAYS TO TAKE NOTES ON YOUR SOURCES

A. The researcher's notebook

Divide a notebook or loose-leaf binder into the following sections:

1. **“Resource Strategy” Section.** In this section, make a list of what sources to investigate for information on your topic. As you explore them, make a check next to the sources on your list. This helps you to remember which sources you have already researched.
2. **“Sources & Bibliography” Section.** Keep a full record of bibliographic information on each source that you use (author, publisher, etc.). Write this information down according to the documentation style that you will be using for the research paper (the most commonly used are MLA Style, APA Style, and Chicago Style).
3. **“Notes on Sources” Section.** Using the following three-step process, take notes on each source that you study:
 - a) **Preview.** Get a rough idea of what the source is all about by skimming the title, the major subject headings (start with the *table of contents* and the *index*), and the introductory paragraphs and concluding paragraphs of the various sections or chapters.
 - b) **Read and Respond.** Read through the source carefully, and take notes on *your responses to the text only*. What crosses your mind as you read? What questions does it raise for *you*? What questions does it answer? How might you use it for your project? Or why won't it make a good resource?
 - c) **Summarize.** *In your own words*, summarize the main points of the source. What is its main argument (thesis), and how does it go about proving this thesis? What details support the thesis, and how do you react to each of them?
4. **“Answering the Guiding Questions” Section.** After you have thoroughly studied your source material, think about how you might be able to use it. Compare what one

source says with what another says. If you discover disagreement, how do you respond to it? Do you agree with some sources and not others? Why? What answers are you finding to your Guiding Questions? What new questions arise? Can you begin to develop a working Thesis Statement? Can you rough out an early outline for the paper?

B. Note cards

- Write **bibliographic information** on 3x5 inch cards.
- Write **significant ideas or concepts** on 4x6 inch cards .
- Use only **one card** for **each** major point.
- In the upper-left corner of each card, write down the **author and title of the book, article, etc.**
- In the upper-right corner, write the topic of the note card as a **short key word or phrase**, i.e. “*Tyrannosaurus Rex: Diet.*”
- Write the **exact page numbers** for each piece of information you gather.
- File each note card under the key word or phrase. As you gather notes, you will be **organizing groups of cards** according to the various aspects of your subject.

IV. THREE KINDS OF NOTE TAKING

There are three kinds of note taking: summarizing, paraphrasing, and quoting. When you summarize, paraphrase, or quote, be sure to include exact page references, since you will need the page number later if you use the information in your paper.

A. Notes that summarize

Summarizing is the most useful kind of preparatory note taking because it is the quickest. A summary condenses a chapter down to a brief paragraph or perhaps only one or two sentences. A summary is best written in your own words. However, if you do use phrases from the primary source, place quotation marks around them.

Here is a passage from an original source researched for an essay on apes and language. Following the passage is a note card summarizing it.

ORIGINAL SOURCE

Public and scientific interest in the question of apes' ability to use language first soared some 15 years ago when Washoe, a chimpanzee raised like a human child by R. Allen Gardner and Beatrice Gardner of the University of Nevada, learned to make hand signs for many words and even seemed to be making short sentences.

Since then researchers have taught many chimpanzees and a few gorillas and orangutans to “talk” using the sign language of deaf humans, plastic chips or, like Kanzi, keyboard symbols. Like Washoe, Sarah, a chimpanzee trained by David Premack of the University of Pennsylvania, and KoKo, a gorilla trained by the psychologist Francine Patterson, became media stars.

–Eckholm. “Pygmy.” P.B7

SUMMARY

<i>Types of Languages</i>	<i>Eckholm, "Pygmy"</i>
<p><i>The ape experiments began about 20 years ago with Washoe, who learned sign language. In later experiments some apes learned to communicate using plastic chips or symbols on a keyboard. (p. B7)</i></p>	

B. Notes that paraphrase

Where a summary uses fewer words to condense information, a paraphrase presents information in about the same number of words as the original text. However, if you choose to keep certain passages in their original language, place them in quotation marks to distinguish your paraphrasing from the author's exact words.

The following note card paraphrases the original source. Note how the word choice is different from the original. If one were to refer to this card later, a student would not risk plagiarism.

<i>Washoe</i>	<i>Eckholm, "Pygmy"</i>
<p><i>A chimpanzee named Washoe, trained 20 years ago by U. of Nevada professors R. Allen and Beatrice Gardner, learned words in the sign language of the deaf and may even have created short sentences. (p. B7)</i></p>	

C. Notes that quote

Quotations are exact words drawn from a source. Be certain to place all direct quotations inside of quotation marks. It is VERY difficult to recall later on which passages, paragraphs, or words you have quoted. Also, make sure that when you quote you have written down everything precisely, including punctuation and capitalization.

It is good practice not to use direct quotation too often. They are best reserved for those instances when a writer's exact words are necessary to explain most effectively a difficult idea, to capture a sense of the writer's personality or style, or to express clearly how the writer objects to or supports an opinion.

<i>Washoe</i>	<i>Eckholm, "Pygmy"</i>
<p><i>Washoe, trained by R. Allen and Beatrice Gardner, "learned to make hand signs for many words and even seemed to be making short sentences." (p. B7)</i></p>	

V. THESIS STATEMENT

Tentative Thesis Statement

- Does it seek both to address and solve a question?
- Does it offer complexity?
- Do you want to write about it?
- Does your research support it?

An example:

Guiding questions: Should all high school graduates be required by law to serve in the military for one year? Should this include both men and women? What good might this do for young people? What harm?

Tentative thesis: We should require one year of military service for all high school graduates because it will instill in them a sense of discipline and pride that will guide them throughout their adult lives.

Revised thesis: A significant number of young people today are finding themselves in serious trouble with the law because of flirtation with drug use, gang activity, or other criminal mischief. Perhaps to fight this sense of aimlessness, the rigors of government-mandated military service would offer young people a sense of dignity, discipline, and drive that would guide them in making wise decisions for their future.

For additional help, see also “Finding Your Thesis.”

VI. OUTLINE

Prepare an Outline

An outline is useful for the following reasons:

- It gets your argument down on paper for the first time;
- It encourages you to organize and develop your material; and
- It is the first step that takes you that much further to completion.

A research paper’s most important elements — organization, argumentation, and evidence — should all be in hand after developing a solid outline.

For additional help, see also “The Outline.”

VII. WRITING THE FIRST DRAFT

When writing your first draft:

- Focus on your ideas, on ***what*** you say, not ***how*** you say it; and
- Treat the first draft as raw material.

A. Incorporating Quotations into Your Paper.

When you are using a writer's words, you need to smoothly blend those words into your own writing. Imagine the writer’s words as an extension or complement to your own thoughts and ideas.

Here are some suggestions on how to incorporate quotations effectively into your own work.

1. Give the source's full name when you first refer to that source. Include the person's credentials if possible.

U.S. General Franklin J. Crookmayer, director of the National Military Recruitment Committee, claims that military volunteerism is down is 42%, and that very little is working to improve that figure (115).

If you refer to Crookmayer again, you can simply cite his last name.

Crookmayer suggests that a mandatory period of military service for all high school graduates would help “to boost the flagging number of recruits throughout all branches of the U.S. military” (117).

2. Introduce quotations smoothly by using several methods. Here are four ways to integrate a quotation:

Original Passage

In order to maintain the international respect that the United States is accustomed to commanding, it is essential that we build a strong military upon which the rest of the world can count in this era of global danger and violence – Gen. F.J. Crookmayer.

a) Introduction and colon

General F.J. Crookmayer identifies one reason why we must improve our military: “It is essential that we build a strong military upon which the rest of the world can count in this era of global danger and violence” (119).

b) Introductory Phrase

According to General F.J. Crookmayer, “It is essential that we build a strong military upon which the rest of the world can count in this era of global danger and violence” (119).

c) Subordinating Using THAT

In the face of global violence and tyranny, Crookmayer declares that “it is essential that we build a strong military upon which the rest of the world can count in this era of global danger and violence” (119).

d) Interrupted Quotation

*“It is essential,” **professes Crookmayer**, “that we build a strong military upon which the rest of the world can count in this era of global danger and violence” (119).*

B. Documenting Sources

Documentation is a necessary step in the presentation of supporting evidence in a research paper. You must identify the source of every quotation, opinion, statistic, or fact about your topic that you incorporate into your writing. You do so for the following reasons:

- It fosters academic integrity.
- Documentation offers a reference for any reader who wants to study your research.
- It informs the audience of the extent of your research.
- It gives credit where credit is due.

Any facts that are considered common knowledge (for example, the fact that table salt is sodium chloride or that the American Civil War took place from 1861 to 1865) do not need to be documented.

We acknowledge that we have borrowed from other writers by inserting into the text of our paper citations that announce certain ideas or words belong to another author. Use the documentation style commonly adopted by your discipline. Every discipline has its own way of documenting sources. Most humanities researchers use the Modern

Language Association (MLA) format; social scientists often use the format supported by the American Psychological Association (APA); the natural sciences use a number system. Ask your mentor which style of documentation to use. Ask also whether you should use endnotes or footnotes. Any good guide to writing research papers will provide information on how to use documentation. Furthermore, you can turn to the reference manual published for each discipline.

For example:

- *MLA Handbook for Writers of Research Papers*
- *Publication Manual of the American Psychological Association (APA)*
- *The Chicago Manual of Style*

1. The MLA Parenthetical References and List of Works Cited Format

The preferred MLA format uses parenthetical notations that generally offer the author's name and the page number after the quoted material. If readers want to know more, they can refer to a list of **Works Cited** at the back of the paper. In most cases, this system allows you to acknowledge your sources both easily and immediately. All of the citations in this document have been in this format.

2. The American Psychological Association Style (APA)

The American Psychological Association (or APA) style also uses parenthetical text references. However, instead of author and page number, the basic reference contains the author's last name and the year of publication. Page numbers are not always provided because of the common practice of referring to an article or study as a whole.

At the end of the paper, readers can find complete information on each source under the heading of References.

Some examples:

Every autumn, American microbreweries begin the process of brewing their malty Oktoberfest beers. (Jackson & Cormish, 1990).

Porters, beers with a rich, smoky flavor, were almost lost to us until the recipe was recreated from beer salvaged from a 19th century shipwreck. (Merman, 1979, p. 211).

C. Plagiarism

Plagiarism is the use of the thoughts, writing, or scholarship of another without appropriate acknowledgement or citation. Most plagiarism occurs simply because new writers don't know the rules. To avoid unintentional plagiarism, take very careful notes, placing quotation marks around any words taken directly from a source. Also, if you have paraphrased another's work within your notes, be certain to jot down a side note reminding yourself that you have done that. For additional help, see also "Plagiarism and How to Avoid It."

Source

The earth is suffering from many small abuses rather than from a few large ones. By treating the spectacular abuses as exceptional, the powers that would like to keep us from seeing that the industrial system (capitalist or communist or socialist) is in itself and by necessity of all of its assumptions an extremely dangerous and damaging way of life. The large abuses exist within and because of a pattern of smaller abuses. (Wendell Berry, Sex, Economy, Freedom, & Community).

Use

The powers that be have kept us from noticing that the industrial system is in itself an extremely dangerous way to live. We treat its spectacular abuses but don't acknowledge that the world is suffering from a pattern of smaller abuses.

In this instance the writer clearly used material belonging to another without acknowledging the source. Borrowing **ideas** can also be plagiarism:

Use

Because Americans don't typically pay attention to the smaller abuses of the environment for which industry is most responsible, we are faced with the inability to end the planet's suffering. This arises mainly from the fact that our focus is trained primarily upon larger environmental problems.

These ideas may be rephrased in the writer's own words, but he or she has borrowed them from the source without proper citation.

Here are guidelines for incorporating source material:

1. When you integrate sentences, phrases, or paragraphs into your paper from the text of another writer, you must place quotation marks around the borrowed words — or indent passages longer than four lines — and also you must acknowledge the source. For example:

According to Wendell Berry, our environmental dilemma stems from “many small abuses rather than from a few large ones.” These are a result of “powers that would like to keep us from seeing that the industrial system (capitalist or communist or socialist) is in itself and by necessity of all of its assumptions an extremely dangerous and damaging way of life” (30).

2. When you make use of another writer's thoughts or ideas but change his or her original choice of words or reorganize the presentation of the ideas — that is, when you paraphrase — you still need to cite your source:

Wendell Berry asserts that because Americans don't typically pay attention to the smaller abuses of the environment for which industry is most responsible, we are faced with the inability to end the planet's suffering. This arises mainly from the fact that our focus is trained primarily upon larger environmental problems (30).

3. When the work you use is commonly known and generally available — that is, not an interpretation — you can cite the source simply in a parenthetical reference rather than in the text.

Franklin D. Roosevelt will always be remembered for his reference to the December 7, 1941 Japanese attack on Pearl Harbor as a date which will live in infamy (Englert 92; Callman 80).

4. When you make use of information gathered by another writer or scholar, you must announce this as well.

The following examination of tribal rituals will use as its touchstone the work of Jamake Highwater, particularly The Primal Mind.

VIII. REVISE: A THREE-PHASE APPROACH TO REVISION:

- Remember: The first draft is the foundation for what will *become* a finished paper.
- Try to become objective about your writing. Seek critical distance.

A. Phase One: Re-Think

Objective: To reevaluate the thought and development of the paper as a unified work.

1. Think about your goals. What are you trying to say with this essay? How well does the paper achieve its purpose? How could this be improved?
2. Have you kept your audience in mind? How much might they already know about your subject? How receptive might they be to your perspectives? Is your tone consistent and considerate of your audience?
3. Identify your thesis. Does it assert something about your topic? Does it maintain a position? Is it clear? Specific? Interesting? Do you believe it? Do you care about it? Do you want to write about it?

To focus on the purpose and central idea of your essay, answer the following questions:

- **Before** it reads my paper, my audience believes _____ about my topic.
 - **After** it reads my paper, my audience will think _____ about my topic.
4. Do the body paragraphs of the paper enlighten and/or support the thesis?
 5. Do ideas develop in a logical, clearly written pattern? Test the organization of your paper by sketching out an outline of the argument.
 6. Is your argument fully developed? Have you looked at it from numerous points of view? Have you asked who, what, when, where, how, and why? Do details and examples effectively support your ideas? Are they engaging and complex? Do you need more proof?

7. Does the introduction grab the audience's attention? Does it explain something fresh about the topic?
8. Does the conclusion offer a unique insight? Does it flesh out clearly the importance and depth of your argument?
9. Is the title imaginative? Does it direct the audience's attention to the main idea of the essay?

B. Phase Two: The Paragraph

Objective: To examine the coherence and clarity of each paragraph.

- Does each paragraph have a main point, *i.e.* topic sentence? (Try identifying the main idea of the paragraph)
- Are the sentences within each paragraph clearly related to the main topic of the paragraph?
- Are the sentences logically connected? Could you use transitional words and phrases to make the relationships between sentences more clear?
- Are transitions between paragraphs smooth and clear?

C. Phase Three: The Sentence (see also "The Sentence")

It is often ineffective to read for both content and grammar at once. So, in the first two phases of revision, try to focus only on content, on the quality of your ideas and on how well they are developed and expressed. Once you are pleased with what your paper says, it is time to proofread the grammar.

In the final examination and assessment of the essay, check for grammar, mechanics, and style. Use rich, imaginative prose, and avoid unnecessary words, clichés, redundancy, and pronouns (*it, this, there, they*) that don't refer clearly to a noun. Incorporate into your writing a variety of sentence lengths and patterns. To keep from slipping back into reading for content, begin with your final sentence and read your paper backwards.

If grammar is not your strength, don't be afraid to ask for lots of outside help. Refer to a grammar book. Use the computer's spell-check and grammar-check (if either is available, but don't trust them to catch all errors). Ask a friend (one who knows English grammar) to help you proofread, but be certain that he or she can explain your errors to you.