

Finding and Evaluating Research

With the rise of the Internet, an abundance of information is available. Be cautious, however. Writing a good research paper is not possible unless you use credible information. The Internet contains a lot of good information, but it also contains a lot of information that is biased or just plain untrue. Ask these questions about your Internet sources:

- What are the author's credentials? Does he or she have a doctorate or other advanced degree in the field?
- What are the organization's credentials? Is it a national organization? Is it accredited? What are its political affiliations? (Check the "About Us" page if there is one.)
- Do other sources confirm the information?
- How recently was the website updated?

If you are in doubt, remember that the library is always a good place to research. Published books and journal articles (with a few exceptions) go through a rigorous editing process, which means they are less likely to contain errors. Your local librarian may also be able to give you advice about where to find research. After all, this is his or her job!

Writing a Preliminary Outline

Now that you have researched, you should know more about what you will include in your paper. Take a minute to organize that information into a preliminary outline of 3–5 main points you think you will need to talk about. When you take notes, jot down information that will help you fill in your outline.

Taking Notes

Now that you have a list of the sources you plan to use, and the topics you plan to address, you need to find and take notes on information to fill in your outline. Notes do not have to be full sentences; they can be dates, events, or keywords that remind you of a specific thought. Traditionally you use index cards to record your notes, but you can use whatever type of paper is easiest for you.

A note card needs to include a quick reference to your source, so that you can remember where the information comes from. The note card should also list the page number for the specific information on the card. At the top of the card, put a brief, one- or two-word topic. These topics should be similar to the main points in your preliminary outline. Try to put only one topic on each card. This will make it easier to organize your information.

If you want to use something word-for-word, be sure to use quotation marks. If you do not directly quote the information you use, you must paraphrase it. Paraphrasing—putting an author's thought into your own words—means not only changing the words but also using your own sentence structure. You will be able to paraphrase more effectively if you are not looking at the source as you write, so put away your source while you are taking notes.

If it is easier for you to take notes on your computer, feel free to do so. Remember to close whatever document you are taking notes from. In particular, do not copy and paste chunks of information from a website. Rewrite the information in your own words, without looking at the document. Do not let the computer make you a sloppy or lazy note taker.

Revising a Final Outline

Once you have the information you want to use, you need to organize it. Look at the topics on your note cards and group similar ones together. Think about how you want to approach your topic. Do you want to talk about your topic in the order that the main events occurred? Do you want to compare and contrast conflicting opinions? Try to organize your paper so it would make sense to someone who had never heard of your topic.

You can make your outline as broad or as detailed as you want; however, a more detailed outline will make your job easier when you start writing.

When you write your outline, use Roman numerals (I, II, III, etc.) for your main points. Aim for 3–5 main points. Use uppercase letters (A, B, C), numbers (1, 2, 3), lowercase letters (a, b, c), and lowercase Roman numerals (i, ii, iii) for subsequent sets of sub-points.

Here is a sample outline on the Civil War:

- I. Introduction
- II. Situation before the war
 - A. Events in the North
 - B. Events in the South
- III. Situation during the war
 - A. Major battles
 1. Northern battles
 2. Southern battles
 - B. Home life
 1. Northern life
 2. Southern life
- IV. Situation after the war
 - A. Reconstruction in the South
 - B. Effects on the North
- V. Conclusion

Writing a Rough Draft

Think of your research as the pieces of a puzzle. Your rough draft should fit those pieces together in a way that makes sense. Remember, this is a **ROUGH** draft. The main point is to get your ideas on paper, so don't aim for perfection — yet.

Have your outline and notes in front of you when you begin writing. As you write, keep track of the sources you are using by including a page number and the author's last name. This will make your job easier when you insert formal citations, and it will help you to avoid plagiarism (see the section on avoiding plagiarism).

Some people like to start at the beginning and write their draft straight through; others prefer to write as they are inspired and then put the sections in order. Either way is fine, but it may help to write your introduction first and save your conclusion for last.

Your introduction should contain two important parts of your paper: your research question or thesis, and a brief "road map." If you are writing a critical paper, your thesis is the argument you are trying to prove. A critical paper about the Civil War might assert, "The Civil War was a result of slavery." The rest of your paper would provide evidence logically backing up that point. For a research paper, you are investigating a topic in an unbiased manner, so you have a research question instead of a thesis. A research paper about the Civil War might ask, "What was the cause of the Civil War?" The rest of your paper would provide experts' answers to that question.

Your introduction should also contain a 1–2 sentence "road map." A road map lays out the basic order in which you will approach your research question. For example, "This paper will look at the two main explanations for the Civil War (slavery and economics) by studying their influences before the war, during the war, and after the war." A road map gives both you and your reader direction.

Your conclusion should wrap up the points you have made in your paper. It should also suggest an answer to the research question you posed in your introduction, or remind readers how you have proven your thesis.

Editing Your Paper

When you are editing a paper, it is easiest to start with the biggest changes and move to the smaller ones. The first thing to check is content. Does your paper answer your research question? Does it address the issue in a way that is unbiased and professional? Does it look at all sides of the issue? Does it use specific facts for

support? If not, go back and cut out generalizations and personal opinions. Some types of papers call for your opinion: research papers are not one of them. The only exception is in your conclusion, where you may offer your input on the topic. Even here, though, your opinion must be drawn from the research you have presented.

The next thing you should look for is organization. Your paper should address your topic in an order that makes sense and smoothly develops your argument. One way to check organization is to create an outline from your paper. For each paragraph, write down the main point in one sentence or less. Look at these topic sentences in the order that they appear in your paper. Do they make sense? Do they follow a logical order? If not, rearrange the sentences. Then rearrange the corresponding paragraphs in your paper.

Now you need to make sure that you have smooth transitions between your paragraphs. If you have just finished talking about a political theory, you should not jump straight into a paragraph about the flaws in the United States' political system. Instead, you should use a transition sentence to link these two ideas. For example, "This political theory explains some of the problems in the United States' political system." You want to make it easy for your reader to follow your train of thought, and good transitions help you to accomplish this goal.

The next two steps may overlap to some extent. First, check for clarity. The most efficient way to find out if your paper is clear is to have someone else read it aloud. If you cannot find someone, read the paper aloud to yourself. Are your sentences smooth or choppy? Does the reader get confused by particularly long sentences? Are your quotes and research smoothly integrated? Most importantly, make sure your paper says what you want it to say.

When you are satisfied that the paper is clear, look for grammatical errors and errors in spelling or word choice. A research paper should be professional. That means no contractions (isn't, don't, can't) and no personal pronouns (I or me) or second person pronouns (we or you). Go back and review information about punctuation and capitalization. Check for run-on sentences and fragments. Make sure your subjects and verbs and your nouns and pronouns agree in number. Check for consistency in your verb tenses. Watch for commonly-confused words (their, there, and they're; its and it's).

Avoiding Plagiarism

There are several ways to use research correctly. You can use the author's words exactly, but you must place

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them in quotation marks. You can also paraphrase the author's words. Remember, paraphrasing does not mean simply changing a word or two; it means completely rewriting the information.

When you use someone else's thoughts, ideas, or information, you must give them credit. This is true whether you use the information word-for-word or whether you paraphrase it. Failure to give proper credit is called plagiarism. Plagiarism is a very serious offense and may result in failure of an assignment or a class. Even more importantly, plagiarism is unethical. It means that instead of doing your own work, you took someone else's and pretended it was yours.

The easiest way to avoid plagiarism is to cite everything that is not general knowledge and not something you knew before you began your research. Plagiarism is still plagiarism, whether it was done accidentally or on purpose, so always double-check your citations before you hand in a paper.

Formatting Your Citations

Depending on what kind of paper you are writing, you will use a different format for your citations. Two of the most common styles are MLA (the Modern Language Association) and APA (the American Psychological Association). MLA is generally used for the humanities, such as literature, art, and history. APA is used in the social sciences, such as psychology and sociology, and some of the natural sciences, like biology.

For MLA, after you use information or a direct quotation in the body of the paper, write the author's last name and the page number in parentheses, with no punctuation in between. The page number(s) refers to the page(s) where you got the quote or idea. The bibliography is called a "Works Cited." Entries are alphabetized by the author's last name. The basic format for an MLA entry is:

BOOK WITH ONE AUTHOR

Author's last name, first name. *Title*. Publisher's location: Publisher's name, year of publication. Medium of publication.

BOOK WITH MORE THAN ONE AUTHOR

Author's last name, first name, and subsequent author's first name last name, *Title*. Publisher's location: Publisher's name, year of publication. Medium of publication.

ARTICLE IN A MAGAZINE

Author's last name, first name. "Title of article." *Title of Periodical*. Day Month Year: PAGE-PAGE. Medium of publication.

ARTICLE IN A NEWSPAPER

Cite as you would a magazine article, but the pagination includes section, and if it is a later edition, include after the date.

Smith, John. "The Coming Fiscal Crisis." *The Washington Post*. 20 Dec 2012: 1 and 6. Medium of publication.

ANTHOLOGY

May include a work in an anthology or a chapter in a book.

Author's last name, first name. "Title of essay." *Title of collection*. Ed. Editor's name(s). City of Publication: Publisher, Year. Page range of entry. Medium of publication.

WEBSITE

MLA no longer requires the use of URLs in MLA citations. Web addresses change often and documents sometimes appear in multiple places on multiple databases on the Web.

Editor, author, or compiler name (if available). *Name of site*. Version number. Name of institution/organization affiliated with the site (sponsor or publisher), date of resource creation (if available). Medium of publication. Date of access.

For APA, after you use information or a direct quotation in the body of the paper, place the author's last name, the date, and the page number in parentheses, with commas in between. The page number(s) refers to the page(s) where you got the quote or idea. In APA, use "p." (for one page) or "pp." (for multiple pages) before the page number(s). The bibliography is called the "References." Entries are alphabetized by the author's last name. The basic format for an APA entry is:

BOOK

Author's last name, first initial. (DATE). *Title*. Publisher's location: Publisher's name.

ARTICLE

Author's last name, first initial. (DATE). *Title*. *Journal* VOLUME (ISSUE): PAGE-PAGE.

WEBSITE

Author's last name, first initial. (DATE WRITTEN). *Title*. Organization. Retrieved DATE from URL.

See Figures 1 and 2 on next page for examples of how to cite different types of sources in MLA and APA.

Figure 1

	MLA — Works Cited page	(in text)
Book, one author	Mills, John. <i>My book</i> . New York: Random House, 1992. Print.	(Mills 28)
Book, more than one author	Jeffers, Anne, and David Miller. <i>Their Book</i> . London: Pearson, 2001. Print.	(Jeffers and Miller 3)
Work in an anthology	Green, Terry. "His article." <i>Collected Book</i> . Ed. John Doe. New York: Scribes, 2005. 54–61. Print.	(Green 58)
Newspaper	Harris, Tom. "Front page news." <i>The Washington Post</i> 20 Apr. 2012 late ed.: A2. Print.	(Harris A2)
Journal	Brown, Alice. "Her article." <i>Literary journal</i> . 35.4 (1998): 13–21. Print.	(Brown 14)
Magazine	Smith, Mary. "Christmas Cookies." <i>Good Housekeeping</i> Dec 2012: 72–73. Print.	(Smith, 72)
Website	Dennis, George. <i>His website</i> . Research Foundation, 2005. Web. 19 Oct. 2013.	(Dennis)

Figure 2

	APA — References page	(in text)
Book, one author	Mills, J. (1992). <i>My book</i> . New York: Random House.	(Mills, 1992, p. 28)
Book, more than one author	Jeffers, A. & Miller, D. (2001). <i>Their book</i> . London: Pearson.	(Jeffers & Miller, 2001, p. 3)
Work in an anthology	Green, T. (2005). His article. In Roe, T. (2005). <i>Collected Book</i> . New York: Scribes: 54–61.	(Green, 2005, p. 58)
Journal	Brown, A. (1998). Her article. <i>Literary journal</i> , 35(4): 13–21.	(Brown, 1998, p. 14)
Newspaper	Harris, T. (2007 April 30). Front page news. <i>The Washington Post</i> A2.	(Harris, 2007, A2)
Website	Dennis, G. (2005). His web text. Research Foundation. Retrieved 4/14/2007 from http://www.research.org/webtext	(Dennis, 2005)

For more detailed information about citation formats, look at the *MLA Handbook* or the *Publication Manual of the APA*. These should be available at your local library.

A helpful website that will format a bibliography in Microsoft® Office Word is: <http://easybib.com/>.

The Owl Purdue Online Writing Lab is an excellent source for writing, grammar, and citations in both MLA and APA formats.

The main differences between MLA and APA can be explained by the fields for which they are used. Because science is such a rapidly-changing field, APA focuses on the date when the source was written, placing it early in the citation. MLA is used for more constant fields of study, so its focus is on the author and the title.

Formatting Your Paper

Before you hand in your assignment, you have one more step to complete—you need to format the paper itself. As was true for the citations, MLA and APA require different formats for the paper.

A few things are standard for both styles. The entire paper should be stapled together in the top left corner. It should be typed, double-spaced, in 12-point font. Times New Roman is the most widely accepted font. Since the paper is double-spaced, you should not have additional breaks between paragraphs. The first line of each paragraph should be indented 1/2 inch; this indicates that you have started a new paragraph.

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Quotations that are longer than four lines of text should be placed in a separate paragraph, all of which are indented half an inch from the left side of the paper, and single spaced. These are called "block quotations" and do not need to have quotation marks around them. Block quotations should still have the in-text citation at the end.

Papers written in MLA format do not have a cover page. Instead, on the first page of the paper, at the top left corner, type your name, your teacher's name, the name of the class, and the date (each on a separate line). Enter down one line, and then center align the title of your paper. Enter down again and begin typing your paper on the next line, left-aligned.

At the end of your paper, start a new page for your Works Cited page. Type "Works Cited" at the top of the page, centered. Space down one line and left align your entries (in alphabetical order). Your Works Cited page should also be double-spaced, with no extra spaces between entries. If an entry is longer than one line, indent the second (third, fourth, etc.) line half an inch.

Every page in your paper, including the first page and the Works Cited page, should have the same "header": your last name and the page number, with one space and no punctuation in between.

APA-formatted papers have a cover page. In the middle of the page, center-aligned, type the title of your paper. Space down about three lines, and type your name. Space down another three lines (almost to the bottom of the page) and type the name of the class, the name of your teacher, and the date (each on a separate line). On the second page of the paper, center align your title at the top of the page, and then space down one line and start typing your paper, left-aligned.

At the end of your paper, start a new page for your References page. Type "References" at the top of the page, centered, and then space down one line and left align your entries (in alphabetical order). Your References page should also be double-spaced, with no extra spaces between entries. If an entry is longer than one line, indent the second (third, fourth, etc.) line half an inch.

Every page in your paper, including the first page and the References page, should have the same "header": an abbreviated title of your paper and the page number, with five spaces and no punctuation in between.

Whether you are writing a two-page paper with three sources or a fifteen-page paper with twenty sources, following these steps will help you achieve better research skills, stronger and more organized writing techniques, and a professional and ethical writing style that will serve you well both now and later.

The Owl Purdue Online Writing Lab has an excellent example of an MLA formatted research paper.

An example of an APA formatted research paper can also be found at this site.

(Links have not been provided because they are subject to change. However, you should be able to locate the site using a search engine.)