

# Analysis and Organization

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## WHAT'S COVERED

In this lesson, you will learn how to locate and evaluate resources for your paper. Specifically, this lesson will focus on:

1. Using Primary and Secondary Sources
2. Finding Print Resources
  - a. Using Indexes and Databases
3. Finding Electronic Resources
  - a. Using Internet Search Engines

### 1. Using Primary and Secondary Sources

Now that you have planned your research project, you are ready to begin the research. This phase can be both exciting and challenging, so it's helpful to break down the different source types you will likely be working with. As you learned in a previous lesson, writers classify research resources into two categories: Primary Secondary Primary sources are direct, firsthand sources of information or data.

**EXAMPLE** If you were writing a paper about the First Amendment right to freedom of speech, the text of the First Amendment in the Bill of Rights would be a primary source.

Other examples of primary sources include: Research articles Literary texts Historical documents such as diaries or letters Autobiographies or other personal accounts Secondary sources discuss, interpret, analyze, consolidate, or otherwise rework information from primary sources. **EXAMPLE** In researching a paper about the First Amendment, you might read articles about legal cases that involved First Amendment rights, or editorials expressing commentary on the First Amendment.

These sources would be considered secondary sources because they are one step removed from the primary source of information. Other examples of secondary sources include: Magazine articles Biographical books Literary and scientific reviews Television documentaries Your topic and purpose determine whether you must use both primary and secondary sources in your paper. Ask yourself which sources are most likely to provide the information that will answer your research question. **EXAMPLE** If you are writing a research paper about reality television shows, you will need to use some reality shows as a primary source, but secondary sources, such as a reviewers' critiques, are also important. If you are writing about the health effects of nicotine, you will probably want to read the published results of scientific studies, but secondary sources, such as magazine articles discussing the outcome of a recent study, may also be helpful.

**TERMS TO KNOW** Primary Source A direct, firsthand source of information or data. Secondary Source A

discussion, interpretation, analysis, consolidation, or other reworking of information from a primary source or another secondary source.

**2. Finding Print Resources** Once you have thought about what kinds of sources are most likely to help you answer your research question, you may begin your search for print and electronic resources. The challenge here is to conduct your search efficiently. Writers use strategies to help them find the sources that are most relevant and reliable while steering clear of sources that will not be useful.

Print resources include a vast array of documents and publications. Regardless of your topic, you will want to consult some print resources as part of your research. You will of course use electronic sources as well, but it is not wise to limit yourself to electronic sources, as some potentially useful sources may be available only in print form. The table below lists different types of print resources available at public and university libraries.

**2a. Using Indexes and Databases** Library catalogs can help you locate book-length sources, as well as some types of non-print holdings, such as CDs, DVDs, and audio books. To locate shorter sources, such as magazine and journal articles, you will need to use a periodical index or an online periodical database. These tools index the articles that appear in newspapers, magazines, and journals. Like catalogs, they provide publication information about an article and often allow users to access a summary or even the full text of the article. Print indexes may be available in the periodicals section of your library. Increasingly, libraries use online databases that users can access through the library website. A single library may provide access to multiple periodical databases. These can range from general news databases to specialized databases. The table below describes some commonly used indexes and databases.

**3. Finding Electronic Resources** Some types of resources, such as television documentaries, may only be available electronically. Other resources - for instance, many newspapers and magazines - may be available in both print and electronic form. The following are some of the electronic sources you might consult: Online databases CD-ROMs Popular web search engines Websites maintained by universities, nonprofits, or government agencies Newspapers, magazines, and journals published on the web E-books Audio books Industry blogs Radio and television programs and other audio and video recordings Online discussion groups The techniques you use to locate print resources can also help you find electronic resources efficiently. Libraries usually include CD-ROMs, audio books, and audio and video recordings among their holdings. You can locate these materials in the catalog using a keyword search.

**3a. Using Internet Search Engines** When faced with the challenge of writing a research paper, some students rely on popular search engines as their first source of information. Typing a keyword or phrase into a search engine instantly pulls up links to dozens, hundreds, or even thousands of related websites— what could be easier? Unfortunately, despite its apparent convenience, this research strategy has the following drawbacks to consider: 1. Results do not always appear in order of reliability. The first few hits that appear in search results may include sites whose content is not always reliable, such as online encyclopedias that can be edited by any user. Because websites are created by third parties, the search engine cannot tell you which sites have accurate information. 2. Results may be too numerous for you to use. The amount of information available on the web is far greater than the amount of information housed within a particular library or database. Realistically, if your web search pulls up thousands of hits, you will not be able to visit every site— and the most useful sites may be buried deep within your search results. 3. Search engines are not connected to the results of the search. Search engines find websites that people visit often and list the results in order of popularity. The search engine, then, is not connected to any of the results. When you cite a source found through a search engine, you do not need to cite the search engine. Only cite the source. A general web search can provide a helpful overview of a topic and may pull up genuinely useful resources. To get the most

out of a search engine, however, consider strategies to make your search more efficient, such as using multiple keywords to limit your results or clicking on the "Advanced Search" link on the homepage to find additional options for streamlining your search. Depending on the specific search engine you use, the following options may be available: Limit results to websites that have been updated within a particular time frame. Limit results by language or country. Limit results to scholarly works available online. Limit results by file type. Limit results to a particular domain type, such as .edu or .gov. Use the "Bookmarks" or "Favorites" feature on your web browser to save and organize sites that look promising.

**□ SUMMARY** In this lesson, you learned about using primary and secondary sources in your research. You also learned how to find print resources by using indexes and databases, and how to find electronic resources by using Internet search engines. Using both of these methods can help you locate a variety of relevant sources for your research essay.

Best of luck in your learning!

**TERMS TO KNOW** Primary Source A direct, firsthand source of information or data. Secondary Source A discussion, interpretation, analysis, consolidation, or other reworking of information from a primary source or another secondary source.

### 1.2.2 Connecting Source Materials

**WHAT'S COVERED** In this lesson, you will learn how to draw connections between your source materials, and apply those connections to your writing project. Specifically, this lesson will focus on: 1. Applying Critical Thinking to Research 2. Selecting Useful Information 3. Drawing Connections between Sources

**1. Applying Critical Thinking to Research** Beginning writers sometimes attempt to transform a pile of note cards into a formal research paper without any intermediary step. This approach presents problems. The writer's original question and thesis may be buried in a flood of disconnected details taken from research sources. The first draft may present redundant or contradictory information. Worst of all, the writer's ideas and voice may be lost. An effective research paper focuses on the writer's ideas— from the question that sparked the research process to how the writer answers that question based on the research findings. Before beginning a draft, or even an outline, good writers pause to engage in critical thinking about their research. This involves asking questions like: How has my thinking changed based on my research? Do I need to rework my thesis based on what I have learned? How do my sources help me answer my research questions? Have any additional questions or subtopics come up that I need to address? How do my sources complement each other? Where do my sources disagree with each other, and why? A careful analysis of your research notes will help you reevaluate your working thesis and determine whether you need to revise it. Remember that your working thesis was the starting point - not necessarily the ending point - of your research. You should revise your working thesis if your ideas changed based on what you read. Even if your sources generally confirmed your preliminary thinking on the topic, it is still a good idea to tweak the wording of your thesis to incorporate the specific details you learned from research.

**2. Selecting Useful Information** When you conduct research, you keep an open mind and seek out many promising sources. You take notes on any information that looks like it might help you answer your research questions. You will not use all of your notes in your paper, so begin by identifying the notes that clearly support your thesis. As you identify the crucial details that support your thesis, make sure you analyze them critically. Ask the following questions to focus your thinking: 1. Is this detail from a reliable, high-quality source? Is it appropriate for me to cite this source in an academic paper? The support for your thesis should come

from reliable, reputable sources. If most of the details that support your thesis are from less-reliable sources, you may need to do additional research or modify your thesis. 2. Is the link between this information and my thesis obvious, or will I need to explain it to my readers? Remember, you have spent more time thinking and reading about this topic than your audience. Some connections might be obvious to both you and your readers. More often, however, you will need to provide the analysis or explanation that shows how the information supports your thesis. As you read through your notes, jot down ideas you have for making those connections clear. 3. What personal biases or experiences might affect the way I interpret this information? No researcher is 100 percent objective. We all have personal opinions and experiences that influence our reactions to what we read and learn. Good researchers are aware of this human tendency. They keep an open mind when they read opinions or facts that contradict their beliefs. HINT It can be tempting to ignore information that does not support your thesis or that contradicts it outright. However, such information is important. At the very least, it gives you a sense of what has been written about the issue. More importantly, it can help you question and refine your own thinking so that writing your research paper is a true learning process.

**3. Drawing Connections between Sources** As you find connections between your ideas and information in your sources, also look for information that connects your sources: Do most sources seem to agree on a particular idea? Are some facts mentioned repeatedly in many different sources? What key terms or major concepts come up in most of your sources? Look for subtler ways your sources complement one another, too: Does one author refer to another's book or article? How do more recent sources build upon the ideas from earlier sources? You will also want to be aware of any redundancies in your sources, and determine how you will address any contradictions found among different sources.

**IN CONTEXT** If you have amassed solid support from a reputable source, such as a scholarly journal, there is no need to cite the same facts from an online encyclopedia article that is many steps removed from any primary research. If a given source adds nothing new to your discussion and you can cite a stronger source for the same information, use the stronger source. Alternatively, if one source cites a startling fact that you cannot confirm anywhere else, it is safe to dismiss the information as unreliable. However, if you find significant disagreements among reliable sources, you will need to review them and evaluate each source. Which source presents a sounder argument or more solid evidence? It is up to you to determine which source is the most credible and why.

**□ SUMMARY** In this lesson, you learned that you will need to apply critical thinking to research in order to revisit your research questions and working thesis as you transition from the research phase to the writing phase. You also learned, since you will not use every piece of your research, it is important that you take time to select useful information and draw connections between sources. Identifying these connections will help you identify important ideas to discuss in your paper.

Best of luck in your learning!

### 2.2.3 Annotated Bibliographies

**WHAT'S COVERED** In this lesson, you will learn how to construct an annotated bibliography. Specifically, this lesson will cover: 1. Purpose of Annotated Bibliographies 2. Structure and Style 3. Reference Formatting 1. Purpose of Annotated Bibliographies Many courses may require you to write an annotated bibliography, or bibliographic information about your sources and a short description of each, as preparation for writing a paper. These bibliographies are often no more than a page or two in length, but they are important because they force you to dive deeper into the source material.

TERM TO KNOW Annotated Bibliography A document containing bibliographic information for an essay's sources, as well as a brief description of each source's content and relevance.

2. Structure and Style When you write an annotated bibliography for a course, consider that the professionalism of the product is a direct reflection of the quality of the paper that will result. The following steps can help you be conscious of the structure and style of your annotated bibliography.

STEP BY STEP 1. Begin by listing complete bibliographic information (author, year, source name, publisher, etc.) just as you would on the "References" page at the end of a paper. 2. Provide a sentence or two describing the contents of the source. 3. Summarize the various relevant topic areas that the source discusses. 4. Avoid vague phrasing and empty sentences. Weed out any generic sentences such as, "This source is very useful because it has tons of really good information." 5. Use present tense and future tense verbs to facilitate the immediacy of the information and the actual future use of sources. 6. Discuss the exact way that you will use the source (e.g. for background information, for data, for graphics, or as a bibliographic tool). 7. Carefully judge the value of the source by considering, for example, its level of detail, bias, or the timeliness of its data. 8. Note if the source's text or bibliography will lead you to other sources. 9. Comment on anything that you find especially noteworthy about a source: Is it controversial? Definitive? Political? New? 10. Format the annotated bibliography so that each description is clearly associated with the proper source.

3. Reference Formatting The bibliographic information you will include at the beginning of each entry in the annotated bibliography should be formatted according to APA (American Psychological Association) guidelines. This information allows your reader to follow up on the sources you cited and do additional reading about the topic if desired. The format of these citations will be the same as those you include on the "Works Cited" page at the end of your essay. Just like the citations on that page, you will want your annotated bibliography entries to be double-spaced and appear in alphabetical order by the author's last name. If you get the formatting of these citations right on your annotated bibliography, you will save time later when creating your "Works Cited" page. The specific format of entries in the list of references varies slightly for different source types, but the entries generally include the following information: The name(s) of the author(s) or institution that wrote the source The year of publication and, where applicable, the exact date of publication The full title of the source For books, the city of publication For articles and essays, the name of the periodical or book where they appear For periodical articles, the volume, issue, and page numbers For sources on the web, the URL where the source is located Below is a sample reference list with each source labeled by type (you will not need to label your source types; this is shown here as a formatting example). Remember that in your annotated bibliography, you will include a paragraph below each source summarizing its argument and explaining its relevance to your thesis.

Book Agatson, A. (2003). *The South Beach diet*. New York, NY: St. Martin's Griffin.

Journal article with multiple authors Ebbeling, C. B., Leidig, M. M., Feldman, H. A., Lovesky, M. M., & Ludwig, D. S. (2007). Effects of a lowglycemic load vs. low-fat diet in obese young adults: A randomized trial. *Journal of the American Medical Association*, 297(19), 2092-2102.

Web source Harvard School of Public Health. (2018). Diet review: Ketogenic diet for weight loss. The Nutrition Source . Retrieved from <https://www.hsph.harvard.edu/nutritionsource/healthy-weight/dietreviews/ketogenic-diet/>

HINT In APA style, book and article titles are formatted in sentence case, not title case. Sentence case means that only the first word is capitalized, along with any proper nouns.

□ SUMMARY In this lesson, you learned that the purpose of annotated bibliographies is to organize your sources and communicate their relevance to your research essay. You also learned that there are steps you can take to ensure the structure and style of your annotated bibliography appropriately convey the required information. The formatting of your references will follow the same APA guidelines as the "Works Cited" page you will include with your essay.

Best of luck in your learning!

TERM TO KNOW Annotated Bibliography A document containing bibliographic information for an essay's sources, as well as a brief description of each source's content and relevance.