

Critical Thinking

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MGM115

Lecture 9



Finding, evaluating, and using sources

Mostly from Critical Thinking, Bassham and others

Finding, evaluating, and using sources

This lecture includes:

- **Finding sources**
- **Evaluating sources**
- **Using sources**

This lecture shows you how to find sources, how to evaluate the sources you find so that only the most accurate and reliable information makes it into your arguments, and how to place those sources into an argumentative essay.

Years ago, students doing research in their college libraries might have complained that the library didn't have the necessary resources to permit a thorough investigation of a topic. Today, the opposite seems to be true: You can easily feel overwhelmed by the amount of information available in a modern library and online. The following advice is provided for the critical thinker preparing an argument.

Finding Your Search: Questions and Keywords

Forming Questions:

Most researchers approach the library or the Internet with two types of questions in mind. The first is a simple question that requires the retrieval **of specific data**:

What are the names of Jupiter's moons?

Why is the sky blue?

The second type of question requires a **more complicated and intensive search**:

How dangerous is huffing?

Was there a conspiracy to assassinate President Kennedy?

What led to the nuclear arms race?

This second type of question often calls for an extraordinary amount of research

Finding Your Search: Questions and Keywords

Forming Questions:

Before you begin searching for information, jot down specific questions you want to answer and any general questions you have concerning areas you need to learn more about. **Use your questions to direct but not restrict your research.** While you look for information and draft a paper, new questions will occur to you, requiring additional research for answers.

Finding Your Search: Questions and Keywords

Keywords and Subject Headings:

Most of the sources we will discuss require you to state your search in what are called keywords or subject headings. Keywords are natural language terms that describe your topic. You could, for example, type the word “huffing” into a database and see what happens. Other keywords from the questions above include “nuclear arms race,” “Kennedy assassination,” “conspiracy,” and “pet therapy.” Any of these terms will produce a number of hits in any search, whether you type the words into Google or into one of your library’s databases. But, as you know, each word or phrase might result in thousands or millions of hits, many of which will be useless to you.

Finding Your Search: Questions and Keywords

Keywords and Subject Headings:

You can refine your research by using subject headings, sometimes called descriptors. Subject headings describe the content of items such as books, journal articles, and so forth. They are a kind of “official” or “controlled” vocabulary applied to sources by librarians and publishers to make searching for information more manageable and productive.

While searching by keywords can be helpful in generating many potential sources of information, searching by subject headings will help you find more relevant results

Finding Your Search: Questions and Keywords

Keywords and Subject Headings:

Two kinds of source material will be most helpful: material that will provide the information you are looking for, and material that will direct you toward the material you are looking for. Informational material includes encyclopedias, newspapers, journals, magazines, dictionaries, books, government documents, and Web sites. Directional materials include indexes, bibliographies, card catalogs, guides to reference sources, and online databases.

The following are among the most popular and accessible reference works and search engines for pointing you in the direction of information located in books and periodicals and on the Internet.

Bibliographies

A bibliography is a list of books that provides for each book the name of the author, the title, the place and date of publication, the name of the publisher, and, in some cases, the price of the book. Bibliographies can also include recordings, films, photographs, and computer software programs. The most familiar bibliography to student researchers is the catalog, available in nearly every library in electronic form and listing all the books held by the library and stored on the shelves (often called “stacks”) or in special collections areas.

Keep in mind that these bibliographies will usually provide only lists of what is available, with little additional information about the publication.

Indexes and Databases

Almost everything published after 1990 (and some older works) can be accessed through the electronic databases available through your library. Some databases are subject- or discipline-specific. Depending on your topic, you could search, for instance, Business Source Premier, Communications and Mass Media Complete, Philosopher's Index, or ERIC, which indexes articles and documents in education. General databases, such as LexisNexis, search a wider variety of sources in, for example, business, law, and communications. Some databases provide only the information needed to locate a source (author's name, title of the article, and so on), whereas others provide the full text of selected articles. Some databases are extremely expensive and are therefore not available in every library.

Internet Search Engines, Guides, and Directories

Using Google Scholar (www.scholar.google.com), you can limit the number of search “hits” to reliable sources from academic publishers. Many of the resulting links, however, will take you only to abstracts (brief summaries) of articles, the full text of which is available only to subscribers or those willing to pay a one-time fee. Before you agree to spend money for an article, check your library’s databases; many of the articles, whether scholarly or popular, that are available for sale online are free if accessed through databases

Bibliographies, indexes, and Internet search engines and guides will help point you in the right direction, though they will not provide the actual information you are seeking, whether your inquiry is simple or complex. What follows are some of the informational sources you will find in libraries and the kinds of informational sites you will find on the Internet.

Encyclopedias

General encyclopedias such as Encyclopaedia Britannica, Collier's, Encyclopedia Americana, Compton's, and Grolier are excellent starting points for finding information about a topic, whether you are seeking specific answers or overviews and historical perspectives. Several of these encyclopedias are available online or you can consult a widely used, free online encyclopedia, Wikipedia (wikipedia.org). Because Wikipedia can be edited by anyone using the site, content does not pass through a review process before it appears on the page. So, Wikipedia.org is not a reliable source and that is why we cannot use it in our arguments.

Encyclopedias

Although encyclopedias don't always get the respect they deserve in colleges and universities, they can be helpful first steps toward understanding the basic concepts behind difficult subjects in disciplines such as psychology, philosophy, theology, science, and literature. In fact, many encyclopedia entries conclude with a short bibliography of reliable sources for further study

Almanacs, Yearbooks, Fact Books, Directories, Handbooks, Manuals, and Atlases.

These are the volumes you will most often consult when you need factual answers to uncomplicated questions such as “How many Americans are on Social Security?” or “Where is Mozambique?” or “Who said, ‘Neither a borrower nor a lender be’?” As we noted earlier, people frequently assume that their basic knowledge is accurate only to discover that they have been wrong all along. Ready-reference materials such as almanacs and fact books can help researchers find solid evidence to affirm or correct their assumptions and support their claims.

Almanacs, Yearbooks, Fact Books, Directories, Handbooks, Manuals, and Atlases.

Some of the more popular sources of factual information include The New York Public Library Desk Reference, The Guinness Book of World Records, Information Please Almanac, World Almanac and Book of Facts, Statistical Abstract of the United States, Facts on File (a weekly publication), The New International World Atlas, Emily Post's Etiquette, and Bartlett's Familiar Quotations.

Biographical Sources

When you need to find out who someone is or was, you can turn to a host of biographical sources, some of which are highly reliable sources of information about a person's life, accomplishments, contributions, publications, and even misdeeds or crimes.

example: Who's Who series

Dictionaries

When most students think of a dictionary, they think, sensibly, of a book that provides definitions of words, and there are plenty of such books in most college libraries. The best dictionaries for college use are unabridged, meaning that few English words have been excluded from the book no matter how colloquial, vulgar, esoteric, or archaic.

The Oxford English Dictionary contains a half-million words. Several Internet dictionaries are convenient and reliable such as OneLook Dictionaries (www.onelook.com), Merriam-Webster's home site (www.m-w.com) and the Oxford English Dictionary

Government Documents

Many libraries have access to government documents through databases and online services, and a few libraries (at least one in every state) are depositories for government documents, meaning that hard copies are kept on hand. Government documents include everything published by the government.

Human Sources

Often overlooked in our dependence on the written word are human beings who could easily supply needed information. In looking for library sources, you would be wise to consult a librarian. Most librarians have advanced degrees and have had extensive, concentrated training in locating information. faculty members, local experts, government officials, members of the business and legal community are great sources of information.

Human Sources

Before you interview someone (whether in person, by phone, or in writing), prepare a list of questions you would like the interviewee to answer. Divide your queries into simple, fact-based questions (“How much revenue does the city take in each year in taxes?”) and questions that allow the interviewee to expand on an issue or to think out loud (“Should the city lower the tax rate?” or “What benefits do citizens enjoy because of taxes?”). Avoid vague questions or loaded ones (“What do you think of taxes?” or “Don’t you think taxes are an unfair burden on the elderly?”). And don’t let your questions restrict you; as long as the interviewee stays on track and doesn’t digress into irrelevant areas, you might discover information and opinions that you hadn’t anticipated.

Information is so abundant that one edition of the New York Times contains more information than most of us could read in a week, let alone one day. But with all this information comes the difficulty of separating the truth from the lies, the useful and reliable information that helps advance our understanding of the world from the efforts to manipulate our thinking or control our spending. In evaluating all this information, we need to ask several questions about the content, the author and the publisher of the information, and the intended audience .

Content: Facts and Everything Else

Fact is an item of information that is objective and true. The sun is about ninety-three million miles from the earth. That is a fact, whether you knew it or not, believe it or not.

it is best to separate verified and documented facts from everything else that a writer offers, including matters of fact that have yet to be verified.

Facts can be verified through eyewitness testimony, measurement, agreement among several sources, and documentation. Be sure that any facts you collect are objective and verifiable and that they could be documented. be certain that the facts are relevant to your purpose and that the facts are up-to-date.

The Author and the publisher

When you read or listen to someone, ask the following questions:

- **What is the author's background?**
- **What are the author's bias and purpose?**
- **What are the author's sources?**
- **Who is the publisher or sponsor?**

The Author and the publisher

- **What is the author's background?**

What credentials does he or she have? What education and at what level? How much research went into the writer's own work? How much experience does the author have? Is the writer an expert in the topic at issue? Is the author recognized by others as an authority in the field?

The Author and the publisher

- **What are the author's bias and purpose?**

Writers and speakers may have a personal or professional interest in the information they are presenting. And although they may not lie outright (some might), they may hide contradictory information, “cherry-pick” evidence, or carefully select language in which to present information most favorably. Perhaps the author is speaking for a company, a special-interest group, an institute, a foundation, a think tank, or a political party. He or she might be getting paid for an endorsement or opinion. In the case of surveys or studies, the author may have worded the questions in such a way as to ensure the sought-after response.

The Author and the publisher

- **What are the author's sources?**

When you read someone's work, chances are that that writer has depended on other sources for information, ideas, and inspiration. The original sources that a writer cites are "primary sources." It may be important for the success of your work to consider how reliable the primary sources are and to uncover those sources if necessary to ensure that they have not been misquoted or misrepresented.

The Author and the publisher

- **What are the author's sources?**

Be wary of unnamed, undocumented, or completely unreliable sources in a writer's essay or argument. Writers often attempt to give legitimacy to their work by referring to a well-known political figure or celebrity as the source of information. Others allude to "an anonymous source" or "sources at the Government" as the originators of important information. Other allusions include such phrases as "surveys have shown" or "according to recent studies." What surveys? What studies?

The Author and the publisher

- **Who Is the Publisher or Sponsor?**

Most students know that not all publications are equal, which is why you don't usually find students using the National Inquirer or even People magazine as a source of factual evidence.

Published opinions are another matter. Many periodicals have an editorial bias that governs not only the topics chosen but the perspective and slant of the writing as well. Although there is nothing wrong with a periodical's having a political slant, the careful reader should know what that slant is.

Publishers of academic books and journals are usually extremely careful to publish work of high quality, which is ensured by a rigorous system of peer review

The Audience

- **Who Is the Intended Audience?**

Knowing something about the author's intended audience can help you evaluate the information. In some cases, journals and books are aimed at readers far better versed than you are in the topic under study. To familiarize yourself more completely with an issue, you may have to research a topic even more deeply than you first expected. On the other hand, writing intended for younger audiences, though accurate, may not contain the complete picture.

Evaluating internet Sources

Evaluating electronic sources is similar to evaluating print sources: ask a great many questions about the content and the author. When evaluating the site itself, give preference to those maintained by recognized and respected organizations and institutions such as universities, government agencies, and noncommercial, service-oriented sites. Often the URL, the address of the site, will provide some information about the site's sponsor. Internet addresses with .edu or .ac (short for education) usually originate at colleges and universities. Other current URL suffixes include the following:

.com or .cc (commercial site)	.gov (government agencies)	
.info (information sites)	.mil (military sites)	.net (networks and service providers)
.org (nonprofit organizations)		

Evaluating internet Sources

- See if you can find out more about the author or the sponsoring site.
- If an organization sponsors the site, see if you can find out more about the organization by following links to the home page, by clicking on any links labeled “About Us” or “Who We Are,” or by looking at the part of the URL before the first slash. Is the sponsor reputable?
- What does your common sense tell you about the site? Does the author seem to have a pronounced bias? Are opposing views ridiculed or misrepresented? Is the author attempting to sell you something or solicit a donation? Is the site littered with banner advertisements?

Evaluating internet Sources

- **Follow the author's links to other sites. Do the linked sites reveal the same bias as that of the original site? Are the linked sites reliable and objective sources of information?**
- **How current is the information? Many Web sites are not updated regularly and may even have been abandoned by their creators. When you suspect information may be outdated, be sure to check other Web sites to compare. And if you find broken links, that's usually a good sign that the information may not be current.**

Taking notes on what you have read, especially when researching a topic, means carefully selecting what is important and useful as you try to faithfully represent the opposing argument and support your own claims.

When taking notes, the notes will contain summaries, paraphrases, and quotations from sources.

Quotations

Obviously, the easiest note to record is a quotation. Select quotations carefully; as you will see shortly, it is far better for both you and your reader to paraphrase when possible. But when you do record a quotation, be very careful to place quotation marks around the material and to transcribe the quotation accurately. It is best not to omit anything if you copy a quotation, but if you do, replace the omission with ellipsis points (three dots).

Williams, page 201

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“He [Burr] shot coolly, seriously and with conviction. He killed his man, logically and as he meant to do and knew he must. For a moment, as he saw his adversary fall, he was overcome with compassion, then he turned away.”

QUOTATION

Summaries

A summary of an argument, essay, or article contains only the main idea (the thesis) or the claim and, depending on the purpose of the summary, the main premises or supporting points. A summary of an essay might contain the thesis sentence and the topic idea from each body paragraph. How much you summarize depends on how much of the original work you will need to remember and how much you intend to use.

To write a summary, read the original several times, underlining the main idea and subpoints on the second or third reading. Then try to write the summary without looking at the source. You can start with a sentence like “The author is saying that . . .” or “The author is arguing that . . .” or “The author is trying to prove that. . .”

Paraphrasing

Whereas a summary condenses an entire argument or article, a paraphrase restates a passage in different words. Just as explaining a complex process to someone else helps you better learn the process, recasting an idea into your own words helps you take possession of the idea. You still have to acknowledge your source, but you will be better able to use the idea for your own purposes if you have stated it in a manner that you understand.

Avoid Plagiarism (cheating) by acknowledging sources. plagiarism appears in a scholarly work, it usually takes one of three forms:

- **Material from an outside source is presented word-for-word** as the student's original work with no acknowledgment whatsoever of the source. In this type of plagiarism, a student is taking credit for an author's words and ideas.
- **Material from an outside source is paraphrased with no acknowledgment** of the source. In this type of plagiarism, the student is taking credit for an author's idea.
- **Material from an outside source is incorporated into a student's work and a weak effort is made to acknowledge the source.** Usually, the student fails to use the conventional means of acknowledgment: introductions to quotations, quotation marks where necessary, parenthetical mention of page numbers, indentation of longer quotes, internal references ("the author goes on to argue . . ."), footnotes, and so forth. This kind of plagiarism is usually the result of indifference, uncertainty, carelessness, or ignorance.

Incorporating sources

The argument you write should present your conclusion, your point of view, your opinion, backed up by the evidence and arguments that you have collected.

Because it is your paper, let your sources serve you rather than the other way around. Present your case and use your sources to bolster your argument. In other words, as you write, think, **“This is my argument and so-and-so agrees with me,” or “This is my argument and here’s the evidence I found to prove it.” Don’t think, “This is what everyone else said, and I agree with them.”**

The trick to using quoted material is to make the quotation fit gracefully and logically into your own writing. Even with quotations added, your sentences must make grammatical sense, and your paragraphs must be coherent.

Quoting Words and Phrases

If you use a quoted word within a paraphrase, be sure to use quotation marks around the word. Example: One especially poor customer saved a few pennies for “luxury” items, a packet of Kool-Aid and a small angel food cake for his children (Fetterman 117).

Quoting and Paraphrasing Longer Passages

In quoting a sentence or two (usually under fifty words) from the original, introduce the sentence that establishes its context and helps the reader understand its meaning and relevance to your point. Your introduction can include the author of the quote and, if necessary and applicable, the printed source of the quote. Examples: As Tracey Kidder points out, “. . .”

As Albert Camus once noted, “. . .”

According to Julia Kristeva, “. . .”

From this evidence, concludes Cate, “. . .”

Block Quotations

If a quotation amounts to more than four or five lines of type in your text (generally fifty or more words), you should block the quotation, maintaining the double spacing, omitting quotation marks, and indenting the left margin five spaces. Example:

It's difficult not to be moved by Lincoln's testament to the fallen soldiers at Gettysburg:

The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from the earth.

Thank You