Chapter 7

Researching

Your Research Process

When you are given an assignment that requires you to conduct research, you should make an overall plan, choose search terms wisely, manage and evaluate the information you find, and make ethical choices regarding its use.

7.1 Organizing Research Plans

In Chapter 5 "Planning" and Chapter 6 "Drafting", you learned about choosing and narrowing a topic to arrive at a thesis, and you learned that once you have a thesis, you can plot how you will accomplish your rhetorical purposes and writing goals. But sometimes just coming up with a thesis requires research—and it should. Opinions are cheap; theses are not. Remember how important it is to be flexible; plans can change, and you need to be prepared for unexpected twists and turns during the research process. Making decisions about the issues in this chapter will give you a solid beginning toward conducting research that is meaningful to you and to your readers.

Revisiting Your Assignment

As you prepare to start researching, you should review your assignment to make sure it is clear in your mind so you can follow it closely. Some assignments dictate every aspect of a paper, while others allow some flexibility. Make sure you understand the requirements and verify that your interpretations of optional components are acceptable.

Figure 7.1

Choosing Your Genre(s)

Clarify whether your assignment is asking you to inform, to interpret, to solve a problem, or to persuade or some combination of these four genres. This table lists key imperative verbs that match up to each kind of assignment genre.

Key Words Suggesting an Informative Essay	Key Words Suggesting an Interpretive Essay	Key Words Suggesting a Persuasive Essay	Key Words Suggesting a Problem-Solving Essay
• Explain • Define • Describe • Review	• Classify • Analyze • Compare • Examine • Explain	• Interpret • Defend • Determine • Justify • Refute	

If the assignment does not give you a clear idea of genre through the imperative verbs it uses, ask your instructor for some guidance. This being college, it's possible that genre, like some other matters, is being left up to you. In such a scenario, the genre(s) you adopt will depend on what you decide about your purposes for writing. The truth is, genres blend into each other in real writing for real audiences. For example, how can you "take a position" about a social issue like teen pregnancy without doing some reporting and offering some solutions? How can you offer solutions to problems like climate change without first reporting on the severity of the problem, arguing for the urgency of the need for solutions, arguing that your solution is the best of several proposals, and finally arguing for your solution's feasibility and cost effectiveness?

Take the case of Jacoba, who is given the following **inquiry-based research**[1] assignment, a genre of academic writing that is becoming increasingly common at the college level:

In an essay of at least twenty-five hundred words, I want you to explore a topic that means something to you but about which you do not yet have a clear opinion. Unlike other "research papers" you may have been asked to write in the past, you should **not** have a clear sense of your position or stance about your topic at the outset. Your research should be designed to develop your thinking about your topic, not to confirm an already held opinion, nor to find "straw men" who disagree with you and whose ideas you can knock down with ease.

Make no mistake, by the end of this process, if you have chosen a topic about which you're really curious and if you research with an open mind, you will have plenty to say. The final product may be submitted in any number of forms (possibilities include an interpretive report, a problem-solving proposal, a manifesto-like position statement) but it must be grounded in source work and it must demonstrate your ability to incorporate other voices into your work and to document them appropriately (using MLA standards). And like any other writing we have done in this course so far, you are responsible for determining the audiences you want to reach and the purposes you want to achieve.

In this assignment, Jacoba and her classmates are intentionally given very little direct guidance and very few explicit instructions from their instructor about how to proceed. After some class discussion and some initial brainstorming on her own, she decides he wants to research and write about the crisis in solvency in Social Security. Prior to researching, she isn't exactly sure how she feels about the issue, much less about an appropriate audience or purpose. She just knows she's worried about her own aging parents and feels they deserve what's coming to them. At the same time, she's rankled that, in her early twenties, she has no expectation of ever

1. A type of assignment requiring exploration of a topic about which the student does not have a prior opinion.

seeing any of the money that's been coming out of her paycheck every two weeks. The combination of uncertainty and interest she feels about the topic actually makes it ideal for this kind of inquiry-based research project.

Using the tips in <u>Chapter 4 "Joining the Conversation"</u>, Jacoba puts together two preliminary statements of purpose intentionally at odds with each other.

Table 7.1 Statement of Purpose I

Voice	**I am writing as** a daughter and young adult.
Message	**I want to convey the message that** we need to come up with realistic solutions for how Social Security needs to be fixed.
Audience	**I want to write to** people my parents' age: 55 years old and up.
Attitude	**My attitude toward the subject is** positive toward Social Security and what it has meant to this country since the Great Depression.
Reception	**I want my audience to** have the tools they need to mobilize support for saving Social Security, for themselves, and for my generation.
Tone	**My tone toward my readers will be** concerned but determined to find solutions.

Table 7.2 Statement of Purpose II

Voice	**I am writing as** a concerned and informed citizen and voter.
Message	**I want to convey the message that** we need to come to terms with the fact that Social Security has outlived its usefulness and must be gradually phased out.
Audience	**I want to write to** members of Congress eager to reduce the size of government.
Attitude	**My attitude toward the subject is** negative toward the strain Social Security is placing on our budget deficit.
Reception	**I want my audience to** have the tools they need to persuade their colleagues in Congress to develop the political will to phase out Social Security.
Tone	**My tone toward my readers will be** respectful but assertive and persuasive.

Jacoba knows that these are just two of the possible purposeful paths she may take over the course of her research process. A change to any of the six elements of her chart will mean writing up another statement of purpose. Using a research log, she

will periodically reflect on how each of the elements of her preliminary statements of purpose are affected by each new source she encounters.

Deciding How and Where You Will Research

Although you might think that you can accomplish all of your research online from the comfort of your home, you should at least begin by visiting your school library. Talk to a research librarian about your planned paper and get his or her advice. You will likely learn about some in-library sources that would be helpful. But you will also probably discover some online sources and procedures that will be very beneficial. Another technique you can use for learning about research options is to talk to fellow students who have recently completed research projects. As always, you might be surprised what you can learn by such networking. **Primary sources**[2], such as in-person interviews and observations, can add an interesting dimension to a researched essay. Determine if your essay could benefit from such sources.

Selecting a Writing Venue

Your writing venue might be predetermined for you. For example, you might be required to turn in a Microsoft Word file or you might be required to work on an online class site. Before you start, make sure you know how you will be presenting your final essay and if and how you are to present drafts along the way. Having to reroute your work along the way unnecessarily wastes time.

Setting Up a Method of Documenting Sources

You will need to document your sources as you research since you clearly do not want to have to revisit any of your sources to retrieve documentation information. Although you can use the traditional method of creating numbered source cards to which you tie all notes you take, it makes much more sense to create digital note cards. Most college library databases include options for keeping a record of your sources. Using these tools can save you time and make the research process easier. Such sites also allow you to take notes and tie each note to one of the citations. Make sure to explore the services that are available to you. If you haven't seen a college library database in some time, you will be pleasantly surprised at all the time-saving features they provide.

2. Firsthand source (e.g., in-person interviews and observations).

3. Online tool into which you can plug source information and receive a properly written citation in a chosen documentation style.

You can also create your version of digital note cards simply by making a file with numbered citations and coding your notes to the citations. If you choose, you can go online and find a **citation builder**[3] for assistance. Once you put a source's information into the builder, you can copy and paste the citation into your citation file and into the citation list at the end of your paper. Your college library's

databases include tools that will help you build citations in American Psychological Association (APA), Modern Language Association (MLA), or other styles. Similar tools are also available with no college or university affiliation, but these tend to have ad content and can sometimes be less reliable. Another, less commercial option is an **online writing lab (OWL)**[4]. OWLs are college-level writing instruction sites managed by university writing programs and usually open to public use. The most famous and, according to many, still the best, is managed by the Purdue Writing Program: http://owl.english.purdue.edu. Bookmark this site on your computer for the rest of your college career. You won't regret it.

Determining Your Timeline

Begin with the amount of time you have to complete your project. Create a research and writing schedule that can realistically fit into your life and allow you to generate a quality product. Then stick with your plan. As with many time consuming tasks, if you fall off your schedule, you are likely to find yourself having to work long hours or having to make concessions in order to finish in time. Since such actions will probably result in an end product of lesser quality, making and keeping a schedule is an excellent idea.

As a rule, when you make a schedule, it is best to plan to spend a little time each day as opposed to long blocks of time on a few days. Although, on a long project, you might find it beneficial to have some lengthy days, as a rule, long hours on a single project do not fit into one's daily life very well.

As you schedule your time, plan for at least one spare day before the project is due as sort of an insurance policy. In other words, don't set your schedule to include working through the last available minute. A spare day or two gives you some flexibility in case the process doesn't flow along perfectly according to your plan.

If you plan to have others proofread your work, respectfully consider their schedules. You can't make a plan that requires others to drop what they are doing to read your draft on your schedule.

Starting a Research Log to Track Your Ideas

A research log is a great tool for keeping track of ideas that come to you while you are working. For example, you might think of another direction you want to pursue or find another source you want to follow up on. Since it is so easy to forget a fleeting but useful thought, keeping an ongoing log can be very helpful. The style or format of such a log will vary according to your personality. If you're the type of person who likes to have a strict timeline, the log could be a chronologically

4. A university-sponsored, ad-free, free-to-use site full of writing instructions.

arranged to-do list or even a series of alarms and reminders programmed into your cell phone. If, on the other hand, you're a bit more conceptual or abstract in your thinking, keeping an up-to-date statement of purpose chart might be the way to go.

KEY TAKEAWAYS

- When preparing to start a research paper, revisit your assignment to make sure you understand and remember all the guidelines. Then choose the writing genre that best fits the assignment guidelines and your statement of purpose. In some cases, you may elect to use a mix of writing to inform, to interpret, to persuade, and to solve a problem.
- As a rule, you should begin your research with a meeting with a college librarian to make sure you are aware of your research options. Also, as you begin a research project, you have to decide whether you will use a simple word processing document or a more complex format, such as an online class site set up by your instructor. At the very beginning of a project, you should also make a plan for documenting your sources so that you are organized from the start.
- Based on the desired length of your essay and the amount of research you have to do, plan a realistic schedule that you can follow. Create a research log to keep track of information you want to remember and address as you research.

EXERCISES

1. Describe your research plans for this sample assignment:

   In ten to fourteen pages, compare the leisure activities that would have been typical of your ancestors prior to coming to the United States to your current-day leisure activities. Upload each version of your work to the class site for peer editing and review. The final version of the project is due to File Exchange in three weeks.

   Include essay genre and length, how and where you will research, your writing venue, a method of documenting sources, and a day-by-day timeline.

2. Describe your research plans for this assignment:

   In eight to ten double-spaced pages, take a stand on gay marriage and defend your position. Turn in a hard copy of your essay at the beginning of class one week from today.

   Include essay genre and length, how and where you will research, your writing venue, a method of documenting sources, and a day-by-day timeline.

3. Describe your research plans for this assignment that is due at the end of the semester:

   Work with a team of four to six people and create an online collaboration site. Each of you should choose a different topic related to technology benefits and review the related information. Complete your first draft with at least four weeks left in the semester. Then have each of your teammates review and make suggestions and comment. Complete all peer reviewing prior to the last two weeks of the semester. Gather all the reviews and make edits as desired. Limit your final paper to thirty pages and publish it on the class site by the last day of the semester.

Include essay genre and length, how and where you will research, your writing venue, a method of documenting sources, and a day-by-day timeline.

4. For each of the above projects, work with your writing group to develop at least one preliminary statement of purpose (indicating voice, audience, message, tone, attitude, and reception). Then change at least one element of the six and revise the statement of purpose accordingly. (See Chapter 5 "Planning" for more on compiling a statement of purpose.)

7.2 Finding Print, Online, and Field Sources

> **LEARNING OBJECTIVES**
>
> 1. Understand the value of your university library to you as a researcher.
> 2. Be aware of the different research options that are available online.
> 3. Know that you might find some field sources helpful in your research.
> 4. Be aware of other online tools that will help you in your research process.

Your status as a student grants you access to your college library, and it is in your best interest to use it. Whether you are using your library online or in person, you will most likely need some guidance so that you know the research options available and how to access them. If you are attending a traditional brick-and-mortar college, the quickest way to learn about your library options is to physically go to the library and meet with a librarian. If you are attending school mostly or completely online, look for online tutorials offered by your college library. College libraries still have print holdings that are worth checking out, but the landscape is quickly going digital. In recent years, libraries have been digitizing their print holdings and spending an increasing percentage of their budgets on acquiring better and richer academic **databases**[5] with vast holdings you can use for most of your research needs.

Within the array of online options available to you, the academic databases to which your library subscribes are generally more **authoritative**[6] because they have been edited and in many cases peer reviewed before being approved for publication. These sources often appeared in print before being collected in the database. However, databases can take you only so far in your research. If you have questions that need quick answers, especially involving facts or statistics, there's nothing wrong with using popular search engines like Google or even online encyclopedias like Wikipedia, provided you use them critically. Confirm the truth of the information you find by finding corroboration from at least two other sources, and follow up on the sources listed in the sites to which you are directed. For more on evaluating online sources, see <u>Section 7.5 "Evaluating Sources"</u>.

Along with the search engines, databases, and **directories**[7], the Internet also offers a variety of additional tools and services that are very useful to you as a researcher. Some of these options include citation builders and writing guides, dictionaries, thesauruses, encyclopedias, **RSS feeds**[8] (providing subscriptions to specific **blogs**[9]

5. An extensive collection of related information that is available digitally.

6. Describing a source that has been edited and often peer reviewed before being accepted for publication.

7. Online list of websites relating to given topics.

8. An online service that will send you information on a requested topic.

9. Online site where people share opinions in a relaxed environment.

and podcasts), collections of famous quotations, government data, stock photo collections, collaboratively produced wikis and websites, and much more. An effective research project will likely combine source material from both academic databases and more popularly available online sites.

In addition to print and online sources, you might also wish to find some **field sources**[10], such as interviewing an expert, sorting through relevant documents, making observations, or attending an event that relates to your topic. For example, if you are researching the effects of inclusion on third grade students with special needs, you could add meaningful information to your paper by speaking with a local educator who has reviewed achievement scores before and after they have received inclusion services.

KEY TAKEAWAYS

- You should use your school library services as a starting point for your research project. Your library staff can direct you to the most appropriate online databases for your project.
- The Internet includes a variety of directories, databases, and search engines that provide excellent sources for academic research.
- Some of the useful online tools for researchers include citation builders, dictionaries, thesauruses, RSS feeds, quotation sites, writing guides, government sites, stock photo collections, wikis, and blogs.
- Field sources, such as interviews, documents, observations, and events, often provide meaningful information for research papers.

10. Primary source accessed in its natural setting.

EXERCISES

1. Provide contact information, including personal name(s), for school library staff you could turn to for help when you start a research project.
2. Using an annotated bibliography format, list five academic library databases and the URLs for five nonacademic sites that you could use to locate sources for a research paper. For each address, provide a paragraph explaining what the source offers.

   3. Once you've gotten to know more about your library's online databases, use what you already know about popular search engines to decide which would be an easier method of finding reliable, trustworthy sources for the following information: an academic database or a popular search engine?

      a. rates of military service in the United States since World War II
      b. arguments in favor of and against the existence of climate change
      c. studies on the effects of television viewing on infants
      d. average age of first marriage among men and women every year since 1960
      e. proposed solutions to unemployment
      f. the highest grossing films of the last twenty years

4. Indicate three research topics of interest to you. Then describe a field source for each topic that you could use as a resource.

7.3 Choosing Search Terms

LEARNING OBJECTIVES

1. Understand how to use synonyms and topic components to expand a search.
2. Know how to use multiple words, quotation marks, asterisks, question marks, and parentheses to improve your search results.
3. Recognize how to use "AND," "OR," and "NOT" to strengthen a keyword search.

Whether you are searching research databases or conducting general online searches, the search terms and phrases you use will determine what information you find. Following some basic search term guidelines can make the process go smoothly.

When searching for articles within a database, start by using **keywords**[11] that relate to your topic.

Example: alternative energy

To expand your search, use synonyms or components of the initial search terms.

Synonym Example: renewable energy

Components Example: algae energy, wind energy, biofuel

Another technique you can use is to refine the presentation of your search terms using suggestions in the following table.

Use multiple words.	Use multiple words to more narrowly define your search.	renewable energy instead of energy
Use quotation marks.	Place quotation marks around two or more words that you want to search for only in combination, never individually.	"renewable energy"

11. Main term relating to a topic.

Use "AND" to connect words.	Use "AND" between words when you want to retrieve only articles that include **both** words.	algae AND energy
Use "OR" to choose one or the other.	Use "OR" to find information relating to one of two options but not both. This option works well when you have two terms that mean the same thing and you want to find articles regardless of which term has been chosen for use.	ethanol OR ethyl alcohol
Use "NOT" to eliminate likely options.	Use "NOT" to eliminate one category of ideas you know a search term will likely generate.	algae NOT food
Use "*" or "?" to include alternate word endings.	Use "*" or "?" to include a variety of word endings. This process is often called using a "wildcard."	alternate* energy
		alternate? energy
Use parentheses to combine multiple searches.	Use parentheses to combine multiple related terms into one single search using the different options presented in this table.	(renewable OR algae OR biofuel OR solar) AND energy

When you find a helpful article or Internet site, look for additional search terms and sources that you can follow up on. If you don't have time to follow up on them all when you find them, include them in your research log for later follow-up. When possible, copy and paste terms and links into your log. When you have to retype, take great care with spelling, spacing, and most of all, attributing direct quotations to their original source.

The aforementioned tips are general ideas for keyword searching. When you are searching within a database or a certain **search engine**[12], pay attention to any search tips or help screens that present methods that work well with the specific database or search engine. For example, you may have the option to narrow your search to "full text" entries only or to refine it to texts published within a certain time frame.

12. A computer program that searches on the World Wide Web.

KEY TAKEAWAYS

- A quick and easy way to increase your search results is to try synonyms of your initial search term, such as "ethanol" for "ethyl alcohol." A similar step is to try components of an idea, such as "wood," "ethanol," and "algae" when you are searching for biofuel.
- You can use special techniques to more accurately target your search. Using multiple words will typically narrow your search more specifically to the information you want. For example, "ethyl alcohol" will bring up a wide range of uses of ethyl alcohol, such as fuel, drinking alcohol, chemistry, and lotions. A search for "ethyl alcohol as fuel" will limit the results to only the use of ethyl alcohol as fuel. Similarly, the use of quotation marks will limit search results to a complete term rather than to individual parts of a term. For example, within quotations, "algae energy" returns only results that include both words. Following a word with an asterisk or a question mark invites results including alternate endings of the word. And using parentheses allows you to combine multiple searches.
- Using "AND" allows you to make sure a search includes identified words. Inserting "OR" between two words lets you conduct two individual searches at once. Placing "NOT" between two words excludes all results including the second word.

EXERCISES

1. Write a search term you could use if you wanted to search for sites about the Eisenhower family, but not about Dwight Eisenhower.
2. Write a search term that would work to find sites about athlete graduation rates but not about nonathlete graduation rates or other information about athletes.
3. Brainstorm a list of search terms to use when researching the topic "television violence." Include all the techniques from this section at least once. After finding at least ten sources, work with your writing group to develop at least three different statements of purpose (specifying your desired voice, audience, message, tone, attitude, and reception) for possible research projects of eight to ten pages. Discuss how the sources you found in each case affected your decisions about purpose.

7.4 Conducting Research

When you are researching for an essay, your attitude and stamina are key to your success. If you let either of these issues get out of hand, you can seriously weaken your project. Before you begin what is essentially a month-long relationship with a topic, you should choose something that interests you, something about which you have an opinion. Even when it is on a topic you care deeply about, researching is often tedious and demands stamina. Assume from the beginning that the project will be time consuming and sometimes exhausting, so make sure to allot the needed time and energy to complete it.

If you feel strongly about a topic, you might find it a challenge to keep your attitude in check and to read your sources with an open mind. It is critical not to let your personal opinions drive the information you choose to include. Try to create a well-rounded paper. If all the sources you find appear to agree with your viewpoints, actively search out a different viewpoint to strengthen your paper. Or consider changing your path entirely because if there really isn't a range of sources out there, you're probably not working with an arguable topic. (See Chapter 6 "Drafting", Section 6.2 "Testing a Thesis" for more on how to test a thesis or topic for whether it is arguable.)

Along with keeping an open mind (attitude) and keeping to a schedule (stamina), you should, of course, read critically, using some of the guidelines discussed in Chapter 2 "Becoming a Critical Reader". In other words, you should evaluate the arguments and assumptions authors make and, when appropriate, present your evaluations within your paper. You can include biased information if you choose, but be certain to note the bias. This move might be appropriate in a persuasive essay if you are taking issue with a source with which you disagree. But be careful not to settle for too easy a target in such an essay. Don't pick on a fringe voice in the opposing camp when there's a more reasonable argument that needs to be dealt with fairly. If a source is simply too biased to be useful even as an opposing

argument, then you may choose not to include it as part of your essay. Your basic principle of selection for a source, regardless of whether you agree with it as a matter of opinion, should be based on whether you think the information includes sound assumptions, meaningful evidence, and logical conclusions.

You also need to pose productive questions throughout the process, using some of the guidelines in <u>Chapter 1 "Writing to Think and Writing to Learn"</u>. If you are writing on a topic about which you already have a very clear stance, consider whether there is common ground you share with your ideological opponents that might lead to a more productive use of your time and theirs. In general, persuasive essays are more effective if they also solve problems instead of just staking out an inflexible position based on a core set of inflexible assumptions. It's not that you shouldn't write about abortion or capital punishment if these issues mean something to you. It's just that you don't want to go down the same path that's been followed by millions of students who have come before you. So how do you ask fresh questions about classic topics? Often by rewinding to the causes of the effects people typically argue about or simply by pledging to report the facts of the matter in depth.

Old Question about Classic Topic	New Questions about Classic Topic
Is abortion acceptable under any circumstances?	• What forms of sexual education have been shown to be effective with teens most at risk of unplanned pregnancies? • What are some of the social and cultural causes of unplanned teen pregnancies?
Is capital punishment acceptable under any circumstances?	• What are states doing to ensure fair and thorough trials for capital crimes? • What are the results in the capital crime rate in states that have imposed moratoriums on capital punishment? • What is the relative average cost to conduct a capital prosecution and

Old Question about Classic Topic	New Questions about Classic Topic
	execution versus life imprisonment without parole?
Is censorship acceptable under any circumstances?	• What is the recent history of legislative and judicial rulings on First Amendment issues? • What are the commercial motivations of advertisers, music, television, and film producers to push the boundaries of decency?

KEY TAKEAWAYS

- Attitude and stamina are key issues when writing a research paper.
- Attitude issues include keeping an open mind, reading critically, and handling biased information.
- Stamina issues include giving the needed time and energy and thoroughly reading all relevant sources.
- Good research processes also require the ability to read critically and pose productive questions, two of the composing habits of mind from Chapter 1 "Writing to Think and Writing to Learn", Chapter 2 "Becoming a Critical Reader", Chapter 3 "Thinking through the Disciplines", and Chapter 4 "Joining the Conversation".

EXERCISES

1. Choose a persuasive research topic of interest to you about which you already have a strong opinion. Find four sources:

   a. One that agrees with your stance and presents a nonbiased view
   b. One that agrees with your stance and presents a biased view
   c. One that disagrees with your stance and presents a nonbiased view
   d. One that disagrees with your stance and presents a biased view

2. For the two biased sources from question 1, print out a copy of each source or copy and paste the text into a Word document. In the margins, either by hand or by using Insert Comment, identify moments that help show why you consider each source to be biased.

3. Using the chart in Section 7.4 "Conducting Research" come up with questions to ask for each genre of a research essay for the following topics:

   a. Policies to combat global warming
   b. Decline in the marriage rate
   c. Impact of video games on student learning
   d. Gender roles in the middle school years
   e. Counterterrorism strategies in the current administration

7.5 Evaluating Sources

LEARNING OBJECTIVES

1. Know how to ascertain if the information a source offers is relevant to your topic and current enough to use.
2. Comprehend whether information is objective, reasonable and accurate.
3. Understand how to determine if a source is credible.

Returning to Jacoba's project, we can see that each type of genre she might use to write her essay on Social Security will require different questions to ask, sources to pursue, evidence and support to use.

Genre	Informative Essays	Interpretive Essays	Persuasive Essays	Problem-Solving Essays
Questions to ask	What are the present facts about Social Security and its solvency?	What has Social Security meant to American history, culture, politics, and government?	Should Social Security be saved or phased out?	Assuming it's worth saving, how can we preserve Social Security in a way that doesn't put us in more debt?
Types of sources	Government budget figures, projections, and reports	Historical records from the 1930s forward	Editorials and position papers from policy experts and think tanks	Articles and book-length works on fiscal policy and government entitlements
Evidence and support	Demographics, actuarial tables, and economic statistics	Political speeches and advertisements, congressional and presidential records	Arguments from Social Security proponents and opponents	Policy recommendations and proposals

The more Jacoba reflects on the kind of research she wants to spend her time conducting and the kind of writing she's most comfortable doing, the better off she'll be.

When you evaluate a source, you need to consider the seven core points shown in Figure 7.2.

Figure 7.2
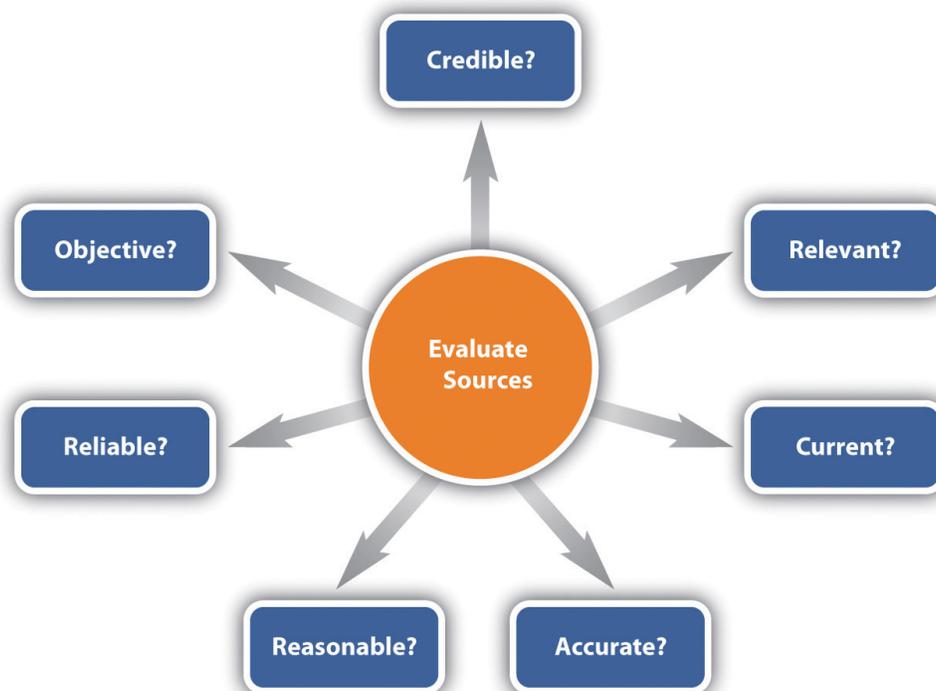
A source is **relevant** if it can contribute to your paper in a meaningful way, which might include any of the following:

- Supplies support for core argument(s)
- Adds a sense of authority to your argument(s)
- Contributes background information
- Provides other viewpoints
- Offers definitions and explanations that your audience will need for clarification

When determining if a source is **current** enough to use, a general rule of thumb is that a source must be no more than ten years old. In some situations, very few

sources exist that were published within the last ten years, so older sources can be used as long as you explain why the use of the older sources is acceptable and meaningful. Or perhaps you may be using older sources to establish a historical record of thoughts and statements on your issue in question.

Before you use a source, you need to satisfy yourself that the information is **accurate**. In print sources, you can use the author (if known) and the publisher to help you decide. If you think the author and publisher are legitimate sources, then you are probably safe in assuming that their work is accurate. In the case of online information, in addition to considering the author and publisher, you can look at how long ago the site was updated, if evidence is provided to back up statements, and if the information appears to be thorough. For either print or online sources, you can check accuracy by finding other sources that support the facts in question.

You can deem a source to be **reasonable** if it makes overall sense as you read through it. In other words, use your personal judgment to determine if you think the information the source provides sounds plausible.

Reliable sources do not show **bias**[13] or **conflict of interest**[14]. For example, don't choose a toy company's site for information about toys that are best for children. If you are unsure about the reliability of a source, check to see if it includes a list of references, and then track down a sampling of those references. Also, check the publisher. Reliable publishers rarely involve themselves with unreliable information.

A source is **objective** if it provides both sides of an argument or more than one viewpoint. Although you can use sources that do not provide more than one viewpoint, you need to balance them with sources that provide other viewpoints.

.edu	Educational
.com	Commercial, for-profit, business
.gov	Government
.mil	Military
.net	Network
.org	Not-for-profit organization

13. Prejudice or a nonobjective stance.

14. A situation where a person or organization might personally benefit from his, her, or its public actions or influence.

A **credible** source is one that has solid backing by a reputable person or organization with the authority and expertise to present the information. When you haven't heard of an author, you can often judge whether an author is credible

by reading his or her biography. If no biography is available, you can research the author yourself. You can also judge the credibility of an online source by looking at **address extension**[15]. As a rule, you need to be aware that .com sites are commercial, for-profit sites that might offer a biased viewpoint, and .org sites are likely to have an agenda. Take precautions not to be fooled by an address extension that you think would belong to a credible source. Always think and read critically so you aren't fooled.

KEY TAKEAWAYS

- A source is relevant to your topic if it supports your argument, adds a sense of authority to your argument, contributes background information, provides a different viewpoint, or offers key knowledge the audience will need. As a general rule, unless you are working with a subject that requires some historical research, a source should be no older than ten years.
- Information within a source needs to be accurate, reasonable, reliable, and objective. Accurate means that the facts are correct, reasonable means it makes basic sense to you, reliable means it is without bias or conflict of interest, and objective means it presents more than one viewpoint.
- A source is credible if the source has the expertise to present the information.

EXERCISES

1. Choose a research topic of interest to you. Find one source that is both related to the overall topic and relevant to your specific topic. Describe the relevant role the source could make (support, authority, background, viewpoints, or knowledge). Find a second source that is related to the overall topic but not as relevant to your specific topic.
2. Find a source that you think is not acceptable due to not being accurate, reasonable, reliable, or objective. Share the source with your classmates and explain why you have deemed the source as unacceptable.
3. Choose a research topic of interest to you. Find two sources with information that relate to your topic—one that is credible and one that is not credible. Explain what makes one credible and the other not credible.

15. The last three letters in an Internet address (e.g., *.com* and *.edu*).

7.6 Taking Notes

Some students view taking notes as a mindless procedure they have to go through to write a paper. Such an attitude is detrimental since good notes are a core factor that helps determine if you will write a good research project. In fact, next to building a solid research plan, the note taking process is perhaps the most critical part of your prewriting process.

Using Three Types of Note Taking

When you are completing a research paper, you will use three types of note taking: summarizing, paraphrasing, and quoting. Since, at the note taking stage, you do not know for sure how you will use the information you find, you will not know for sure which kind of notes to take for which sources. Use the following general guidelines to decide:

- Summarize lengthy information that will add to your paper without including the smaller details.
- Paraphrase information and details that will serve as significant support for your core points but that isn't so eloquently stated that you want to use the exact words. Also, paraphrase texts with vital details that are simply too lengthy to quote.
- Use **quotations**[16] to emphasize important information that will be very impressive or poignant and that will serve its purpose best if the original words are used. Keep in mind that no more than about 10 percent of your paper should be quoted text. Your paper should be in your words with a few quotations as opposed to a collection of quotations connected with your words. (For examples of each kind of use of source material, see Section 7.7 "Making Ethical and Effective Choices".)

16. Exact words spoken by another person or presented in a body of text.

You will use most of the information you find in either a summarized or paraphrased format. So use those formats as you write. Make your best guess about

how you will want to use the information. Do not ever copy and paste from a source directly into your working files unless you intend to use the information as an exact quotation. If you do intend to use an exact quotation, use the quotations when you take the initial note.

Organizing Your Notes

Traditionally, notes were taken by hand on note cards and then filed by topic until you were ready to sort them out and put them in the order you would use them. Once the note cards were in order, you could begin typing your paper and inserting the information from the cards into the correct spots. You could still use that method if you want to. But to do so would add, depending on the size of your paper, hours, days, or weeks to the process. Since you most likely are not interested in increasing the amount of time needed to write your paper, you should keep your notes in a computer file (backed up elsewhere). Doing so will allow you to use copy and paste features to assemble and rearrange your notes. The digital format also allows you to easily add information as desired.

To organize your notes as you take them, assign each subtopic to a separate section within a file or to a separate file. Sorting your notes so that like topics are grouped together will help streamline the writing process.

Backing Up Your Work

Crashing computers can cause serious loss of data, so make sure you back up your work. You can use a variety of methods of backing up your work, including the following:

- Use a conventional hard drive backup system.
- Copy your work onto a flash drive.
- Post your work to an online site, such as a wiki, so that you can access it from any computer.
- Send your work to an online e-mail address (yours or someone else's) so you can access it from any computer.

If you do not have a method of backing up your data, periodically print your work so that you won't lose as much if you have a crash. You could then probably scan the pages using a text format and have the data back in your computer quite quickly. Even if you have to rekey the information to get it back into the computer, that process will be much faster than starting completely over.

Including Your Sources

As you take notes, make sure to include the source for each piece of information. Keep the complete citation in a master reference list that is either at the end of your paper or in a separate reference file. In addition, within your notes, insert the information you need for an in-text reference. (See <u>Chapter 22 "Appendix B: A Guide to Research and Documentation"</u> for correct formatting of in-text references within the different citation styles.) Including the necessary in-text information within your notes is another way of cutting down the time needed to write your paper.

For all notes you take, record the page(s) where you found the information. Doing so will assure you have the information at hand if you need it for your reference. In addition, having the page numbers readily available will allow you to easily revisit sources. So that you do not inadvertently leave a page number where you do not want it, add bolding and color to your page numbers to make them stand out.

Taking Care Not to Plagiarize

As noted earlier, you should copy and paste only information that you intend to quote. By limiting your copying and pasting to quoted materials, you are not prone to forgetting that some text is copied and end up **plagiarizing**[17] without intending to do so. If you find it helpful, you can add a colored notation identifying each piece of information as a quotation, summary, or paraphrase. As with the page numbers, by using colored text, you can avoid copying and pasting your tags into your paper as you write. For an example of this kind of color-coding approach, see the annotated bibliography in <u>Section 7.8 "Creating an Annotated Bibliography"</u>.

Another method of inadvertent plagiarism is to paraphrase too closely. You can avoid this pitfall by reading a paragraph and then, without looking back, writing about the paragraph. Unless you have a photographic memory, this method will result in you rewording the idea. When you finish writing, look back to make sure you included all aspects of the original text and to clarify that you depicted the ideas accurately.

When you are planning to quote an author's exact words, follow these guidelines:

- If possible, copy and paste the quotation so you know you have not made any inadvertent changes.
- Be very careful not to change any word orders, word choices, spellings, or punctuations.
- Use quotations.

17. Using another's ideas without citing the source.

- If you choose to omit any words from the quotation, indicate this omission by replacing the words with ellipses (…).
- If you add additional words to the quotation, place them within square brackets ([]).

KEY TAKEAWAYS

- When you take notes, you will either summarize, paraphrase, or quote all the information. You will summarize when the small details are not important, paraphrase when the details are important but the words are not eloquent, and quote when the information is both important and eloquent.
- Organize your notes by topic either within one file or in one file for each topic. Back up your work by using a backup hard drive or a flash drive, posting it to a wiki, sending it to an online e-mail address, or printing it out.
- Create a master list of your references. Also, include in-text reference information and page numbers with each note you take. To make sure you do not plagiarize, only copy and paste when you are quoting. Paraphrase or summarize all other information. When you are paraphrasing, read the information, look away, and type it in your own words. Then check back to make sure your version is accurate. When you are quoting, take care to use the text exactly as you find it unless you use brackets to indicate additions or ellipses to indicate omissions.

EXERCISES

1. Find and print a research paper that interests you. Using three colors of highlighters, make a key identifying colors used for summaries, paraphrases, and quotations. Then read through the paper and the highlighters to identify the different types of information within the paper.
2. Explain how you would back up your work at the end of a work session on a research paper.
3. Choose a detail from this section to use as a quotation with some words added and some words left out. Write the quotation using square brackets and ellipses.

7.7 Making Ethical and Effective Choices

> **LEARNING OBJECTIVES**
>
> 1. Know how to differentiate between common knowledge and proprietary ideas.
> 2. Understand how to summarize, paraphrase, and cite sources.
> 3. Recognize whether material is available for use.

Three keys to referencing others' ideas ethically are to know the difference between common knowledge and proprietary ideas, to be aware of how to properly summarize and paraphrase, and to understand the correct methods for citing sources. In addition, you need to make sure that material is available for use at any level.

Differentiating between Common Knowledge and Proprietary Ideas

Common knowledge[18] is that bank of information that most people know. Such information does not require a citation. One way to identify such information is to note that it is presented in multiple sources without documentation. Another identification method is to realize that you, along with most people you know, are aware of the information. For example, you can write that "Cheyenne is the capital of Wyoming" without needing a reference. On the other hand, if you were to note that there is a high rate of divorce in Cheyenne, you would need to cite that detail. Data about the divorce rate in Cheyenne are **proprietary ideas**[19].

Properly Summarizing and Paraphrasing

When you **summarize**[20], you should write in your own words and the result should be substantially shorter than the original text. In addition, the sentence structure should be your original format. In other words, you should not take a sentence and replace core words with synonyms.

You should also use your words when you **paraphrase**[21]. Paraphrasing should also involve your own sentence structure. Paraphrasing might, however, be as long or even longer than the original text. When you paraphrase, you should include, in your words, all the ideas from the original text in the same order as in the original text. You should not insert any of your ideas.

18. Information that most people know and that does not require a citation.

19. Information that most people do not know and that requires a citation.

20. To use a few words or sentences to describe the key ideas of a text.

21. To use your ideas to inclusively present the ideas from a selection.

Both summaries and paraphrases should maintain the original author's intent and slant. Taking details out of context to suit your purposes is not ethical since it does not honor the original author's ideas.

Study the examples in the following table for clarification between summarizing, paraphrasing, quoting, and plagiarizing.

Original text	Some dramatic differences were obvious between online and face-to-face classrooms. For example, 73 percent of the students responded that they felt like they knew their face-to-face classmates, but only 35 percent of the subjects felt they knew their online classmates. In regards to having personal discussion with classmates, 83 percent of the subjects had such discussions in face-to-face classes, but only 32 percent in online classes. Only 52 percent of subjects said they remembered people from their online classes, whereas 94 percent remembered people from their face-to-face classes. Similarly, liking to do group projects differs from 52 percent (face-to-face) to 22 percent (online) and viewing classes as friendly, connected groups differs from 73 percent (face-to-face) to 52 percent (online). These results show that students generally feel less connected in online classes.
Summarized text	Students report a more personal connection to students in face-to-face classes than in online classes.
Paraphrased text	Study results show a clear difference between online and face-to-face classrooms. About twice as many students indicated they knew their classmates in face-to-face classes than in online classes. Students in face-to-face classes were about two-and-a-half times more likely to have discussions with classmates than were students in online classes. Students in face-to-face classes were about twice as likely to remember classmates as were students in online classes. Students in face-to-face classes viewed group projects as positive about two-and-a-half times more often than did students in online classes. Students in face-to-face classes saw class as a friendly place 73 percent of the time compared to 52 percent for online classes. Summing up these results, it is clear that students feel more connected in face-to-face classes than in online classes.
Quoted text	The study showed that personal discussions are much more likely to take place in face-to-face classes than in online classes since "83 percent of the subjects had such discussions in face-to-face classes, but only 32 percent in online classes."
Plagiarized text	Some major differences were clear between Internet and in-person classrooms. For example, 73 percent of the study

> participants felt they were acquainted with their in-person classmates, but only 35 percent of the participants indicated they knew their distance classmates.

Correctly Citing Sources

Citing sources is critical since you do not want to be guilty of stealing ideas from others, and using others' intellectual property without giving them credit is, indeed, a form of stealing. A bonus that comes with citing sources is that aligning others' ideas with your ideas adds credibility to your ideas and helps establish your **ethos**[22]. Also, when you address more than one viewpoint, you strengthen your viewpoint.

In order to know exactly how you should cite sources, you need to know the reference style you will be using. The most popular formats are American Psychological Association (APA), Modern Language Association (MLA), Chicago, and Council of Science Editors (CSE). You can read more about these different styles and others in <u>Chapter 22 "Appendix B: A Guide to Research and Documentation"</u>.

Regardless of which citation style you use, you should follow the following general guidelines:

- Enclose all direct quotations in quotation marks and cite the source within the text, including page number, author, and year (if your style requires all these parts) so it is very clear where you acquired the information.
- When you summarize or paraphrase text, do not use quotations, but note the author and year (or other required information depending on the citation style) either as part of the sentence or in parentheses following the sentence to clearly note that the ideas belong to someone else.
- At the end of your paper, include a complete list of references, each properly cited using the required citation style.

Making Sure Material Is Available for Use

As you are searching for sources, be sure to determine that you can ethically use the material. As a rule, you can reference most text as long as you properly cite it. Images are another issue. When you search online for images, you will find many private and for-profit sources. You should not use these images without contacting the source and requesting permission. For example, you might find a picture of a darling little boy from someone's personal unprotected photo page or a good

22. A writer's credibility and trustworthiness, established by researchers through the responsible and ethical use of sources.

picture of an orderly closet from a company's web page. Using such photos just because you can access them is not ethical. And citing the source is not adequate in these situations. You should either obtain written permission or forgo the use of such images.

> ## KEY TAKEAWAYS
>
> - Common knowledge is information that most people know and that is available in many sources. Common knowledge does not have to be cited. Proprietary ideas are those that belong to someone else and must be cited.
> - Summarized information must be cited, should be written in your words, should be true to the author's intent, and should be much shorter than the original text. Paraphrased information should be cited, should include all the core points of the original text, should be written in your words, should be true to the author's intent, and should be about as long as the original text.
> - Take care to put exact quotations within quotation marks and to reference all borrowed ideas; use the citation style you are required to use.
> - You should determine if you can ethically use content from a source, especially in the case of images. You can usually reference text ethically by citing it correctly, but it is wise to have signed consent when using visual content.

EXERCISES

1. Consider these two sentences:

   ◦ The KOA system is a large camping organization in the United States.
   ◦ KOA campers and staff take part in many public service activities.

   Explain whether each of these statements is common knowledge or proprietary and why.

2. Online, find a source on a topic of interest to you. Copy a paragraph from the source. Summarize the paragraph. Paraphrase the paragraph. Finally, write a paragraph about the passage that includes a direct quotation from it.

7.8 Creating an Annotated Bibliography

To make the best use of your research time, thoroughly read each source that is clearly relevant and document all the pieces you might use from it so that you will have a good chance of not having to revisit it. But just in case, take care to bookmark the site (and additionally save it to a folder set up for your research project) so you can easily return to it later and collect the needed information.

Your research log should include an annotated bibliography of the sources you plan to use. Each entry should include the following elements:

- The complete citation information (in the format the assignment requires)
- A summary or paraphrase of the contents of the source in your words
- The direct quotations you may end up using (with page or paragraph numbers)
- Additional strategy notes about how you plan to use the source (For more on quoting, summarizing, and paraphrasing, see Section 7.7 "Making Ethical and Effective Choices".)

For the citation, gather the following components:

- Name of author, editor, sponsoring organization, discussion group, or list
- Title of article or subject line of discussion
- Title of journal or site that has published the article
- Version number or issue number, if applicable
- Date of publication
- Date you accessed the site

If a source does not appear to be as relevant as you initially thought it would be, document the situation in your log and move on. Don't try to jam it into the essay just because you spent time tracking it down. Good researchers and good writers know they'll encounter a few dead ends and bad leads.

Here are a couple of entries Antonio makes in his annotated bibliography for an essay he is writing on head injuries in football. Using the same search terms ("helmets," "NFL," and "head injuries"), a search of Academic Search Complete in his college library nets him entries 1, 2, and 4, and a search on Google nets him entry 3. Drawing from the color-coding suggestion in <u>Section 7.6 "Taking Notes"</u>, Antonio distinguishes between direct quotation (red), paraphrase (blue) and summary (purple), by using different font colors for each.

Figure 7.3
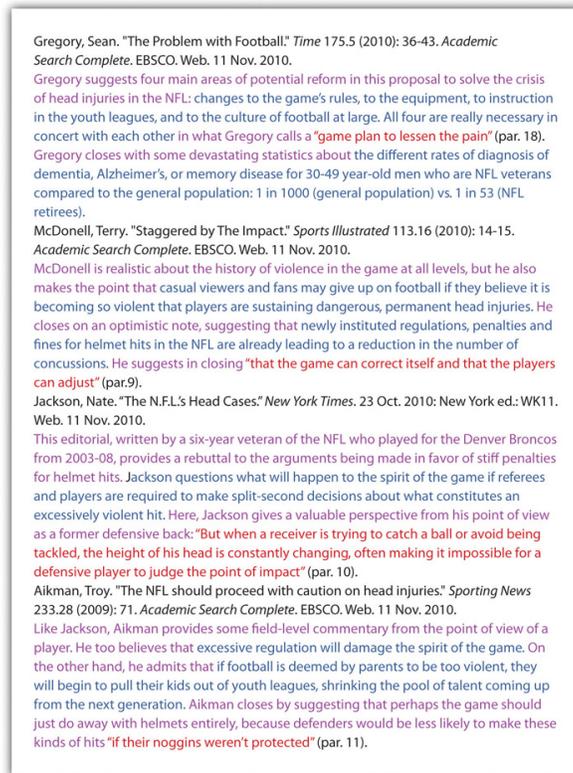
KEY TAKEAWAYS

- Create a folder and place a bookmark for each new online source in it so you can easily return to it. Also, create a citation for each source when you first encounter it.
- When citing an online source, find the following pieces of information: name of author, editor, or sponsoring organization; title of article; title of journal or site that has published the article; version or issue number; and date of publication and access date.

EXERCISES

1. Choose a research topic of interest to you. Find a related website and find the following pieces of information: name of author, editor, or sponsoring organization; title of article; title of journal or site that has published the article; version or issue number; date of publication or access date.
2. Choose a research topic of interest to you. Find a related online blog.
3. Choose a research topic of interest to you and set up a related RSS feed.
4. Choose a research topic of interest to you. Find a related government site.
5. Choose a research topic of interest to you. Online, find a related photo, video, and table.
6. With your writing group sharing a couple of computers, amass several sources for Jacoba's essay on Social Security and write up an annotated bibliography.
7. Using Antonio's essay idea on helmet hits in the NFL, draw up two statements of purpose that differ from each other in at least three of the six concerns (voice, audience, message, tone, attitude, or reception).

7.9 Managing Information

<div style="background:#ccc;padding:5px;">

LEARNING OBJECTIVES

</div>

1. Understand how to proceed once you think you are finished taking notes.
2. Know how to make an outline from your notes.
3. Recognize the process of evaluating your outline.

Pause for a few moments before beginning to amass your information into a first draft. Return to your statement(s) of purpose. Have any of the elements (voice, audience, message, tone, attitude, reception) changed as a result of your research? If so, write up an intermediate statement of purpose, and use it as a guide as you draft and as the basis for a writer's memo you may be asked to submit with your draft.

Once you think you have an ample supply of materials, read through your subtopic files and consider the order of the different pieces. Consider the points you want to make in relation to the information you have found and begin typing comments between your notes to assure you have a solid plan in place when you start to make your outline.

Create an outline that begins with your thesis (or message). Include the subtopics as key elements. Under each subtopic, list your supporting points you have researched as well as the ideas you plan to add. When you are finished, evaluate your outline by asking questions such as the following:

- Do I want to tweak my planned thesis based on the information I have found?
- Do all of my planned subtopics still seem reasonable?
- Did I find an unexpected subtopic that I want to add?
- In what order do I want to present my subtopics?
- Are my supporting points in the best possible order?
- Do I have enough support for each of my main subtopics? Will the support I have convince readers of my points?
- Do I have ample materials for the required length of the paper? If not, what angle do I want to enhance?
- Have I gathered too much information for a paper of this length? And if so, what should I get rid of?

- Did I include information in my notes that really doesn't belong and needs to be eliminated? (If so, cut it out and place it in a discard file rather than deleting it. That way, it is still available if you change your mind once you start drafting.)
- Are my planned quotations still good choices?

KEY TAKEAWAYS

- After you think you are finished taking notes, read through your notes and reorder them as needed.
- Create an outline using your thesis, subtopics, and supporting details.
- Evaluate your outline by reflecting on your thesis, adjusting the subtopics, tweaking your supporting points, considering your quantity of information, looking at the relevancy of the different details, and contemplating the effectiveness of your planned quotations.

EXERCISES

Choose the best choice for each question.

1. Once you are finished taking notes, you should

   a. start writing immediately.
   b. read through your notes and put them in an order that will work.
   c. make sure, when you write, to use all the information you have found.

2. Your outline should begin with

   a. your thesis (or message).
   b. your best quotation.
   c. your most interesting subtopic.

3. If you have notes that are relevant, but do not fit within the planned subtopics

   a. delete those notes.
   b. you know that you did unneeded research.
   c. consider adding a subtopic.

4. Once you begin to make your outline, you should

   a. tweak your thesis based on information you have learned.
   b. eliminate all information that does not directly support your thesis.
   c. use only your original ideas.