

Goal • Find and evaluate information from various sources.

Think About It

Everyone needs to be able to seek out and evaluate reliable information. Whether you are buying a car or writing an essay, the quality of your research will decide whether or not your project will be a success. This means that you must be able to locate and evaluate sources of information.

In general, research requires the following steps:

1. Choose a topic.
2. Create keywords.
3. Locate relevant readings.
4. Cite your readings.
5. Read, take notes, and evaluate your information.
6. Refine your topic.
7. Read additional materials.
8. Write your report.

What to Do

Here are more detailed tips for following the eight steps.

1. Choose a topic.

This includes deciding how much and what type of information is required. Consider the purpose of your research. Write a brief description of the topic that you are going to research, including an impression of the scope of your research.

2. Create keywords.

Identify several keywords or synonyms that you can use to search an index or a database to find information about your topic.



3. Locate relevant readings.

Locate several readings that relate to your research topic. Remember that you are finding more *general* readings at this step. After you have done some readings, you can refine your topic and choose readings with a narrower scope.

Ask your librarian about an index or database that may have information relating to your topic. Use the index or database, and your keywords, to find three articles or books that relate to your topic. Be sure that the library owns or has access to the journals or books that contain the articles.

4. Cite your readings.

Obtain some index cards. Use one card for each reading. On the card, write the name of the article or book, the name of the author(s), the name of the publisher, and the date of publication. For articles from magazines or journals, write the name, volume, issue, and page numbers. For Internet articles, list the web address. You will use this information to create the bibliography of your research. Many articles include an *abstract*, which gives an overview of the article. The abstract can help you decide whether it is worthwhile for you to read the complete article.

5. Read, take notes, and evaluate your information.

These articles will provide you with general information about your research topic. They will provide you with some sense of the breadth of the topic and will help you decide whether enough information likely exists for you to complete your research. Moreover, they will help you refine your research topic to make it more manageable.

Read all the articles you chose, and make notes on each article. These are included on the index card.

Evaluating each article is important, as it will make you aware of its credibility and quality. Starting below your notes (if necessary, continue on the back of the index card), write answers to the following questions:

- (a) What was the intent of the article or book? For example, is the purpose of the article or book to explain how to do something, to entertain, to provide information, to prove something, or to provide an overview? Was it written using research (is there a bibliography), or was it based on the author's opinions?
- (b) Does the author (or authors) have a bias? If so, what is the bias likely to be? (This may not be obvious when you read the article.) What information about the author is provided? Is the author a researcher, a professor, or a professional? Who is the author's employer? What background does the author have that may affect his or her credibility?
- (c) Was the publisher an educational institution, a commercial company, a government, a professional association, or the author? Does the publisher have a bias? If so, what is the bias likely to be?
- (d) Is the article or book relevant to your topic? Was it clearly written? Is the information at a level that is useful to your research? Does it argue for or against your position? Did it change your perception of your topic?



6. Refine your topic.

Now that you have some general information about your original research topic, you can refine the scope and direction of your research. You may have found that there was insufficient information about the original topic. In any case, you are now in a position to make a more informed choice about the research that you need to do. Your refined topic will usually have a much more limited scope than the original topic. This step is sometimes called *narrowing* your topic.

Write a statement about your refined topic, and add any new keywords that you will use to search the index or database.

7. Read additional materials.

Once you have refined your topic, you can then proceed to complete your research. You may need more than three new articles or books to get a comprehensive view of the refined topic. Repeat steps 3 to 6 for each new reading you locate. After you have read several articles, you will discover that many ideas are supported by more than one of the readings.

8. Write your report.

Prepare your research report. If you use any information or ideas from any readings, you will need to give the authors credit. That is, you must acknowledge *any* contribution that your sources made to your report. Check with your teacher or librarian for the format you should use to do this. As well, you will need to list the articles or books you read in your bibliography. Again, check with your teacher or librarian for the format for this.

Keep in mind the audience for whom your report is written.



Other Sources of Information

Clearly, you will not find all the information you need in books or magazines/journals. Other obvious sources include the Internet and interviews. Both of these sources are valuable, but they may have several pitfalls.

The Internet

Anyone can put information on a web site. Thus, evaluating the reliability and accuracy of information you find on the Internet can be challenging. If you are not sure of the validity of the information on a web site, then do not use it.

The criteria for evaluating the credibility of information on a web site is similar to the criteria for all other media. Ask yourself the following questions:

- Is the sponsor of the web site an individual, a university or other educational institution, a government agency, a business, a professional association, or a news agency or other agency? What is the bias of the sponsor or author of the web site? Does the sponsor or author have credibility in the field?
- What is the purpose of posting the information on the web site? Is the purpose to explain how to do something, to entertain, to provide information, to prove something, or to provide an overview?
- What is the date when the information on the web page was produced?
- What is the form of the information on the web site? Is it a reproduction of an article from a reputable journal or book? Is the information the result of research done by an author at an educational institution or government agency, or an independent investigator? Is it well organized, clearly written, and relevant?

Interviews

Before you go into an interview, there are several things you need to do:

- Interviews are rarely the first line of research information. You need to do considerable reading on the topic, so that you have a base of information you can use to create relevant questions.
- The background information you gather before the interview will also be essential for evaluating the information from the interview.
- Research the background of the person you are planning to interview. This kind of information makes a good icebreaker and lets the interviewee know that you have done your homework before coming to the interview.
- Prepared questions are very important to your interview. Good questions mean that the interview will be a good use of both your and the interviewee's time and effort. They indicate what you know about the topic and allow the interviewee to give much more relevant and detailed answers.
- Do not overload your subject with questions, however. Be selective and choose questions that relate most to your topic.
- Take careful notes or record the interview using a tape recorder or video camera. Do not hesitate to ask for clarification if something is unclear.
- After the interview, send a thank-you note to show you appreciate your subject's help.

