Writing an I-Search Paper

Chances are that the last time you were asked to write a research paper, you had a list of topics from which to choose. In this Writing Workshop, you will choose a topic that has immediate relevance to your life—a topic about which you have a genuine need or a real desire to know more. You will write a personal research paper, sometimes called an I-Search paper.

To write an I-Search paper, you pick a subject to which you have a personal connection, and write about it from a personal point of view. Your paper will consist of three major parts:

- **The story of your search** This section tells readers what you knew about your subject before you began your research, what you wanted to know, and the research steps you went through to find out what you wanted to know—including both the steps that led to useful information and the steps that turned out to be dead ends.
- **What you learned** In this section, you give readers the results of your search—both the answers you found and the answers you did not find.
- **Your reflections on the search** You use this final section to tell readers what the experience has taught you about conducting and documenting a search.

WHAT'S AHEAD?

In this workshop, you will write an I-Search paper. You will also learn how to

- **form a research question**
- **start a search journal**
- **evaluate Web sources**
- **eliminate *there is* and *there are* sentence beginnings**
- **punctuate titles**

Prewriting

Select a Topic

A Need to Know Even though an I-Search paper is usually less formal and more personal than a traditional research paper, its purpose is the

same—to find information. The difference is that the topic for an I-Search comes from a personal need to know something—that is what the "I" in I-Search represents.

It is very important, then, for you to choose a topic that you truly want to investigate. Here are a few ways to generate ideas for a topic if you do not already have one in mind.

- **Use trigger phrases.** The phrases below are called "trigger" phrases because they prompt you to think about particular subjects. To use these phrases, write them down and fill in the blanks with whatever comes to your mind.

  I always wanted to know how to ____.

  I need help with ____.

- **Take an inventory of places to which you would like to travel.**
- **Make a list of priorities**. Include the factors that have the greatest impact on your life, including family, health, economics, education, law, and so forth.

Remember, your goal is to find a topic you want to know something about—one that is driven by a real desire or need in your life. For example, one student who discovered that he had asthma felt he needed to know everything he could about the disease and its possible effects on his life.

Brainstorm a list of several topics. Then, circle the one you want to research.

TIP When you select a topic, be sure that it is a suitable one. It should be not only interesting and informative, but also lend itself to research. In other words, you should be able to locate adequate information on your topic from a variety of outside sources. If the information on your topic comes only from your knowledge and experience, there is no need for a search.

Form a Research Question

In a Nutshell To avoid gathering information that you cannot use in your I-Search paper, you must focus as tightly as you can on one key aspect of your topic. **The best way to achieve a tight focus is to form a research question**—a question that asks exactly what you want to find out from your research.

KEY CONCEPT

Keep in mind that you should not be able to answer your research question with a single word. Ideally, it should be a question that gives rise to several more detailed questions. To get started, ask yourself the following questions. One writer's responses are shown as an example.

—**What is my topic?** My topic is asthma.

—**Why am I interested in this topic?** I have asthma, but I want to live an active, full life.

—**What do I hope to learn from my research?** Basically, I want to learn whether I can keep my asthma from interfering with my life. If I can, I need to know how.

—**Research Question:** Can I manage my asthma so that I can lead a full, active life?

Once he had developed a research question, the writer then divided his initial question into several more detailed questions, all having a direct bearing on how he could manage his asthma so that he could live normally.

—What can I do to keep playing sports and doing other physically demanding activities?

—Are there certain foods or plants I should avoid?

—How do different environmental conditions affect my asthma?

—What are the effects of pets on asthma?

—What kinds of medications are available for people suffering from asthma?

—Is there some kind of physical conditioning I could do to lessen the effects of asthma?

After forming his research question and subdividing it, this writer has a specific goal for his research. Focusing his question allows him to gather relevant information and dismiss any information that has nothing to do with his specific topic—managing asthma.

TIP Once you begin to search for answers to your research question, step back from the question every so often and ask yourself if you need to revise your question slightly or come up with a completely new one. Such changes are a natural part of the research process.

Share Your Research Question

Two (or More) Heads Are Better . . . To get your search off to a good start, spend some time in small groups discussing each other's research questions. Your group can discuss ways to improve your research questions and to find information. One of your group members might know an expert in the very topic you have decided to research. Another might suggest a better way to focus your research question.

Identify Your Purpose, Audience, and Tone

Why Write? The **purpose** of your I-Search paper is to demonstrate to your readers that your search has had or will have an impact on your life.

Who Will Read It? Your **audience** consists of your classmates, your teacher, and anyone else with whom you wish to share your experience. Because you want your readers to understand and appreciate your experience, you should ask yourself these questions:

1. Will I need to provide my readers with more information than I knew when I started my search?
2. How can I make my dead-end searches interesting for my readers?
3. How can I be sure that I give my readers complete answers to all aspects of my research question?
4. How can I let my readers know how exciting my search was without sounding insincere?

What Tone of Voice? For an I-Search paper, you adopt a more informal **tone** than you would in some other types of research papers. However, you should not be so informal that you use slang and nonstandard English.

TIP Remember: **Voice** is the sound and rhythm of a writer's language. You should allow your own **voice** to show through your words.

Start a Search Journal

Keeping the Record Straight It is important to keep a daily record of your research process so that you will have this information when you write the story of your search. To record your daily progress, start a **search journal** in a notebook. On the first page, list the following items:

- your research question
- feedback from your group discussion (see "Share Your Research Question," page 209)
- things you already know about your research topic and things you want to learn
- your preliminary research plan—how to tackle your research question

Write in your search journal every day, starting today. Include the day's date, a brief listing of that day's research results and findings (include both successes and setbacks), and a short daily reflection on your progress. Use a chart like the following one to record your information. A record of your research process will be invaluable when you begin to write your paper. A well-kept journal can provide everything you need for the story of your search, the first section of your paper.

Date	Research Results and Findings	Thoughts on my progress
10/18	I found a Web site about asthma and downloaded information about the causes of the illness. I also visited in a chat room with another teen who has asthma.	So far, so good. Getting information has been easy. I'm finding out a lot.
10/23	I wanted to interview Dr. Anders, my asthma specialist, but she is going to be out of town for a few days.	I think I waited too long to call Dr. Anders. Now I'm not sure if I will have time to interview her and still get the paper done. Next time, I'll start the interviews early!
10/24	A packet of information that I requested from one of the online groups came in today's mail. It has a lot of information about athletes who have asthma and still play sports.	This is great information! It answers some of my research questions. Best of all, I got some tips on how to play sports and not get too short of breath.

YOUR TURN 4

Planning Your I-Search Paper, Part One

Review this list of prewriting steps before you start to research for your I-Search paper. Make sure to

- select a topic
- form a research question
- share your research question
- identify your audience, purpose, and tone
- start your search journal

Go to the Chapter Menu for an interactive activity.

Find Sources

A Wealth of Information As you conduct your research, you will be looking at two basic sources of information—**primary** and **secondary**. **Primary sources include legal documents, letters, diaries, eyewitness accounts, and surveys. Secondary sources are interpretations of primary materials written by other authors.** For example, if a historian studied diaries, letters, official military records, and eyewitness accounts to write a biography of a famous general, he would be using primary sources. If that same historian consulted material from other biographies of the same

KEY CONCEPT

general or from history books that included material about the general, he would be using secondary sources.

The first place to begin your search is your school library, but you should also consider your community library and any college or university libraries in your area. Although your search might start at the library, it certainly should not end there. Check out community resources, including the World Wide Web, and do not forget the various government agencies—local, state, and national—that might be valuable sources. The charts below list resources that may be available in your area libraries and in your community, along with the sources or types of information they provide.

Library Resources

Resource	Source or Information
Card catalog or online catalog	books listed by title, author, and subject; in some libraries this catalog also lists audiovisual materials—videotapes, records, CDs, audiotapes, filmstrips, and films.
Readers' Guide to Periodical Literature	articles in magazines and journals
Microfilm or microfiche or online databases	indexes to major newspapers such as *The New York Times,* back issues of newspapers
General and specialized reference books and CD-ROMs	encyclopedias (electronic or print), biographical references, atlases, almanacs
Videotapes and audiotapes	movies, documentaries, instructional tapes, audiotapes of books
Librarian/media specialist	help in using reference materials and finding sources, including audiovisual materials

Community Resources

Resource	Source or Information
World Wide Web and online services	articles, interviews, bibliographies, pictures, videos, sound recordings; access to the Library of Congress and other libraries
Local government agencies	facts and statistics on various subjects, policies, experts on local government
Local offices of state and federal government officials	voting records, recent or pending legislation, experts on state and federal government
Local newspaper offices	accounts of events of local interest, historical information on city or area
Museums, historical societies, service groups	historical events, scientific achievements, art and artists, special exhibits, and experts on these subjects

Schools and colleges	print and nonprint sources in libraries, experts on various subjects
Video stores	documentary and instructional videotapes and audiotapes
Hospitals, medical offices	brochures, pamphlets, doctors, and other medical experts

Evaluate Your Sources

A Source to Trust? Just as members of a jury have to decide which witnesses are credible, or believable, and which are not, you have to determine the extent to which you can trust your sources of information. Here are some questions you can use to put your sources to the test.

1. **Is the information up-to-date?** Information is generated so quickly now that it is easy to find current material. If information on your topic is constantly changing, be sure that you are as up-to-date as possible. For example, a report on asthma medications from 1975 would not reflect current research and might be incorrect according to today's medical standards.
2. **Does the information seem factual?** Check the information against your own knowledge and against other sources. If you find an inconsistency between two sources, check a third source to determine which information is accurate.
3. **Does the source seem objective and logical?** Some sources may be biased, or slanted, toward one point of view. Others may use poor logic. You would not, for example, expect an objective assessment of one political party's platform from the leader of the opposing political party.

TIP You should always consider interviewing experts in the subject area you are researching. Experts can be valuable primary sources, and often they can direct you to other valuable sources. For more on **conducting interviews,** see page 854 in the Quick Reference Handbook.

Prepare Source Cards

Keeping Track of Everything Since you will use more than one source for your paper, you will need a way to keep track of all of your information. One method is to write each source on a 3- x 5-inch index card (sometimes called a bibliography card) and number the source. If you are keeping your sources on a computer, create a separate file or record for each. Choose the method that works best for you. If you use the guidelines given on the next page to record the information, you will have a head start on your final list of sources.

Reference Note

For more on **punctuating titles,** see page 234.

Guidelines for Recording Source Information

1. **Book with One Author.** Write author's last name, then first name; book title (underlined); place of publication; name of publishing company; year of publication.

   Weinstein, Allan M., M.D. Asthma: The Complete Guide to Self-Management of Asthma and Allergies for Patients and Their Families. New York: McGraw-Hill, 1987.

2. **Book with More Than One Author.** Write first author, last name first. Other authors, first name first. Record other information as for a book with one author. (See source card #1 on page 215.)

3. **Magazine Article.** Write author's last name, then first name; article title; magazine name; day (if given), month, and year of publication; beginning and ending page numbers. If no author, start with the article title. (See source card #5 on page 215.)

4. **Newspaper Article.** Write author's last name, then first name; article title; newspaper name; day, month, and year of publication; section number (if there is one) and page number. If the newspaper has both morning and afternoon editions, write the edition and ed. before the page number. If no author is listed, start with the article title.

   Goode, Erica. "Can an Essay a Day Keep Asthma or Arthritis at Bay?" New York Times 14 April 1999. natl.ed.: A19.

5. **Encyclopedia Article.** Write author's last name, then first name; article title; encyclopedia name; edition number, followed by the abbreviation *ed.*; date of publication. If no author is listed, start with article title.

   Gallagher, Joan S. "Asthma." The World Book Encyclopedia. 1995 ed.

6. **Radio or Television Program.** Write episode or segment title (if any); program name, series title (if any); network name; local station call letters and city (if any); and day, month, and year of broadcast.

   "Stress and Kids' Asthma." Rpt. Michelle Trudeau. All Things Considered. National Public Radio. KUT-FM, Austin, Texas. 30 April 1997.

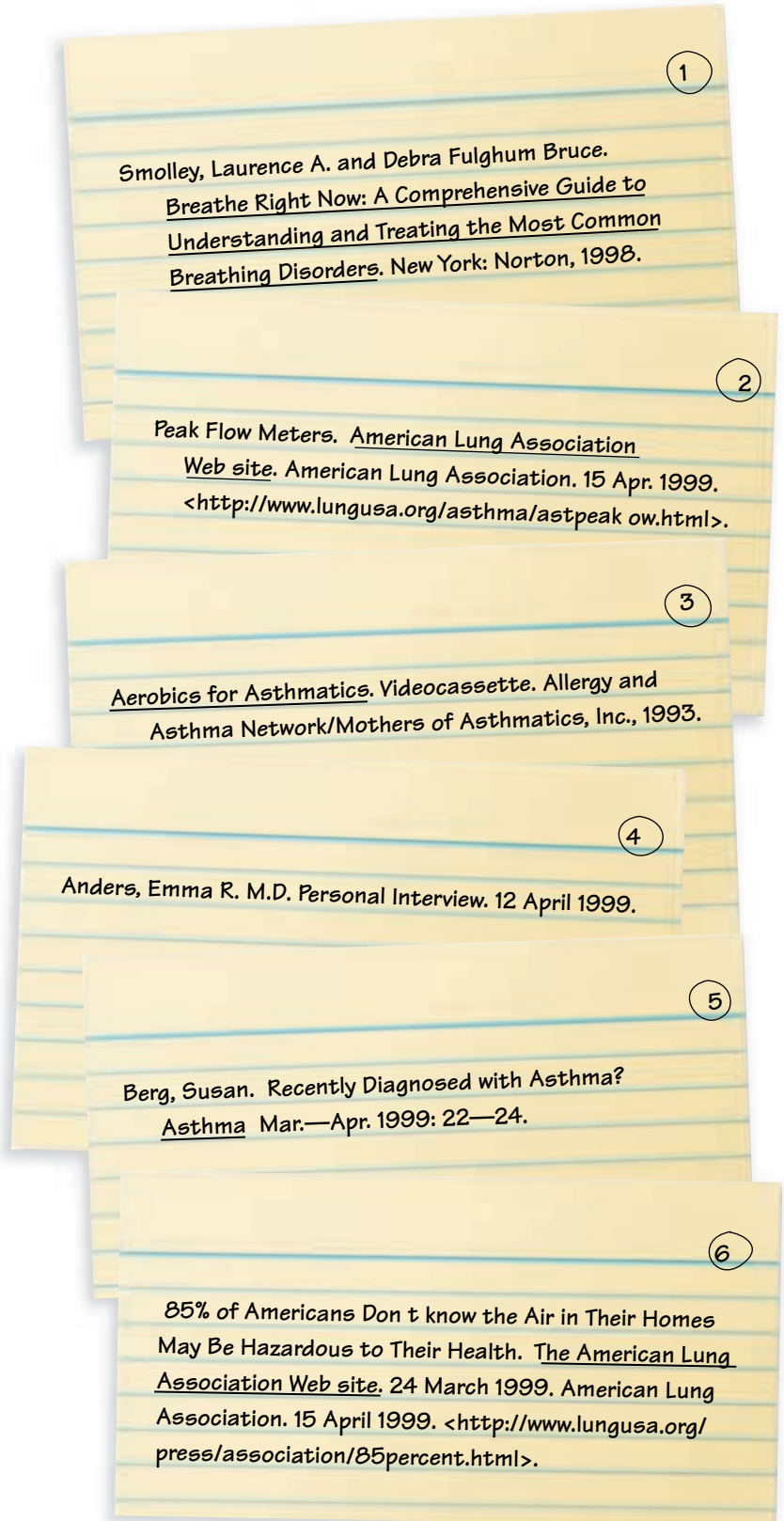
7. **Film or Video.** Write title; director or producer; medium (for video recordings); distributor; and year of release. (See source card #3 on page 215.)

8. **Personal or Telephone Interview.** Write interviewee's name; interview type (personal or telephone); and day, month, and year of interview. (See source card #4 on page 215.)

9. **Online Sources.** Write author's last name, then first name (if listed); title of document; underscored title of database or site; date of electronic publication; name of sponsoring institution; date information was accessed; <URL> [or] name of online service. (See source card #2 on page 215.)

10. **Portable Databases.** Write author's last name, then first name; title of document, article, or part of work; title of work; database title; edition, release, or version; publication medium (use the term *CD-ROM, Diskette,* or *Magnetic tape*); city of electronic publication, electronic publisher, and electronic publication date. (See source card #6 on page 215.)

In the following sample source cards, the writer used standard Modern Language Association (MLA) format. Notice that he gave each source a **source number,** which he wrote on the source card.



Source Number

Book with more than one author

Online Source

Video recording

Personal interview

Magazine article

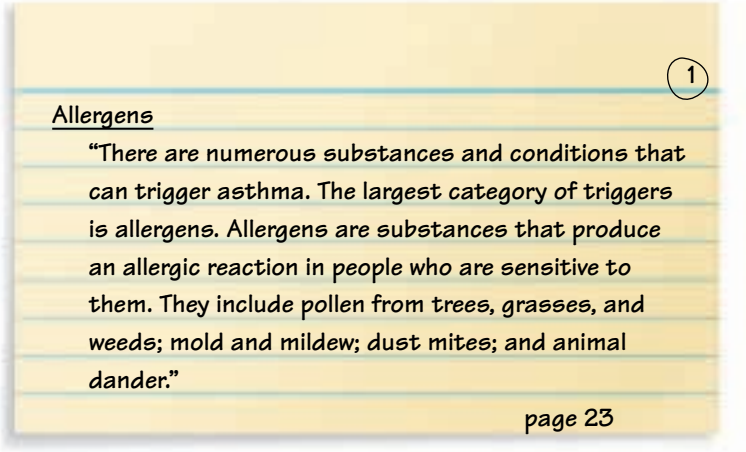
Portable database

Take Notes from Your Sources

The Researcher's Best Friend Unless you are one of those fortunate people who has a photographic memory, good notes are invaluable. If you take good notes, you will have a record of the important information you will need when it is time to sit down and draft your paper. When you take notes you can **quote directly, summarize,** or **paraphrase.** Below are examples of each of these methods used to record notes on the same passage. Notice that each card has the number 1 written in the upper right-hand corner. This number matches the number on the source card identifying the source of the information in the note.

TIP **Plagiarism** is presenting someone else's words or ideas as your own. Be sure to cite the sources of words and ideas you obtain from any outside sources. Always use quotation marks if you repeat someone's exact words.

Direct Quotation If the author of a source has a particularly effective or memorable way of saying something, you may want to quote him or her. Be sure to copy the passage you intend to quote exactly as it is in your source. To avoid accidental plagiarism, put clearly visible quotation marks at the beginning and end of quoted passages.


1

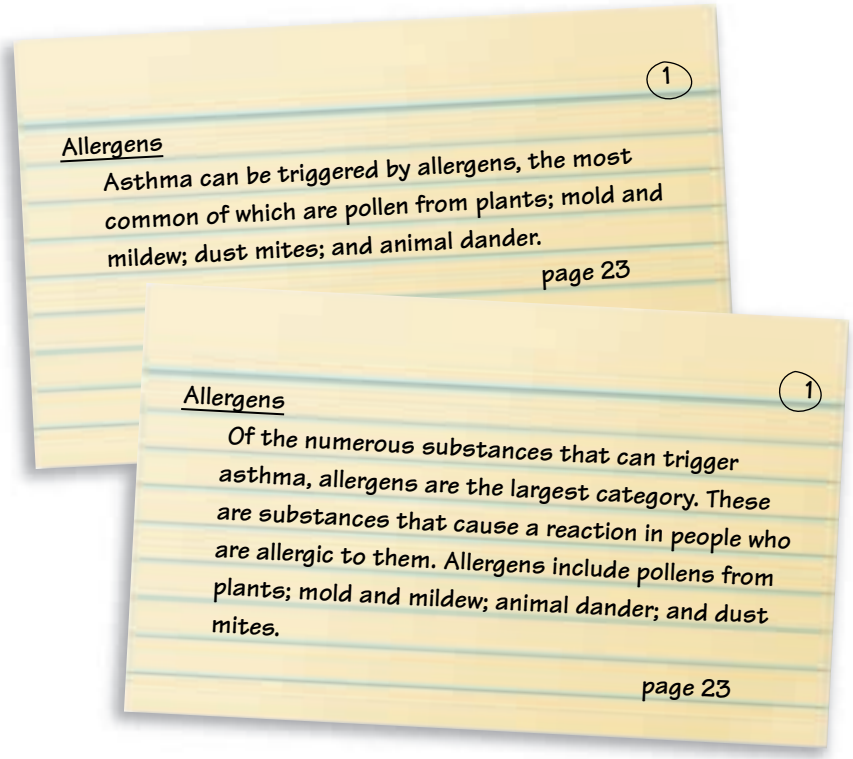
Allergens

"There are numerous substances and conditions that can trigger asthma. The largest category of triggers is allergens. Allergens are substances that produce an allergic reaction in people who are sensitive to them. They include pollen from trees, grasses, and weeds; mold and mildew; dust mites; and animal dander."

page 23

Summary A **summary note** includes only the main idea and the most important supporting details of a passage. It allows you to save space because it is shorter than the original material. Write the note using your own words and sentence structure. Most of the notes you take will be summary notes. (For more information on summarizing, see page 864 in the Quick Reference Handbook.)

Paraphrase A **paraphrase note** includes most of the author's ideas, not just the main ones. Like the summary note, it is written in your own words. You paraphrase to simplify the material you have read. (For more information on paraphrasing, see page 834 in the Quick Reference Handbook.)



Source number

Summary

Source number

Paraphrase

THINKING IT THROUGH

Taking Notes from Sources

To avoid getting lost in the information you gather, follow these steps for taking your notes and keeping them organized.

- **STEP 1 Record your notes on something easy to retrieve.** Use 3- x 5-inch cards, 8-1/2- x 11-inch paper folded in half, or computer files or individual records in a computer database.
- **STEP 2 Use a separate note card, computer file, or database record for each item of information and for each source.**
- **STEP 3 Put a subject heading consisting of a key word or phrase in the upper left-hand corner above each note.**
- **STEP 4 Write the source number in the upper right-hand corner of each note; write the number of the page on which the information was found at the bottom of the note.**
- **STEP 5 Keep computer printouts in a folder. Highlight key words and make notes in the margin.**

TIP Remember to keep a daily record of your **research progress** in your search journal. These notes will not be about the content of your research. Instead, they will be about your reactions and experiences as you do the research. Be sure to record your failures as well as your successes. This record will be the basis for the story of your search and will also help you reflect on your experience.

Write Your Thesis Statement

The Bottom Line Your **thesis** is the main idea of your report. It is the answer to your research question. The writer who began with the research question *Can I manage my asthma so that I can lead a full, active life?* found through research that the answer to his question was "yes." He could lead a full and active life if he carefully managed certain factors that had a direct bearing on his asthma.

KEY CONCEPT

To frame his thesis, he turned his research question into a statement and added the factors he would have to consider in order to manage his asthma. By adding these factors, he developed a short summary of the results of his research.

> I can manage my asthma so that I can lead a full, active life by following my doctor's instructions on medication, by avoiding pets, by sticking to an exercise program, and by minimizing the effects of allergens that can trigger asthma episodes.

Develop an Informal Outline

TIP Your teacher may ask you to develop a **formal outline** for your I-Search paper. For more information about formal outlines, see page 895 in the Quick Reference Handbook.

Make a Fluid Plan An outline for a writing project is like a map to a traveler. Good outlines and good maps give guidance and keep people going in the right direction but leave them free to change their plans. Outlines also guide the organization of your ideas. I-Search papers are organized into three basic divisions: the story of the search, the results of the search, and reflections on the search. Your search journal contains the information you need for the story of your search. Your research results—the answers to your research questions—are in the notecards you made from your sources. You can use your search journal and notecards to arrange the information you want in your paper in your informal outline. Here is how one writer organized an informal outline for his I-Search paper.

1. The story of my search
    - Learning of my condition
    - What I knew about asthma
    - Questions running through my head
    - Research question: *Can I manage my asthma so that I can lead a full, active life?*
    - Searching online
    - Interviewing my doctor
    - Searching the library
    - Thesis Statement

2. The results of my search

I can manage my asthma so that I can lead a full, active life if I

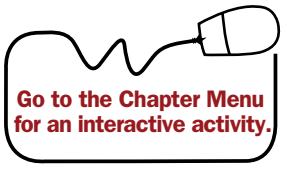
- Follow my doctor's instructions on medications—inhalers and allergy shots
- Avoid pets
- Stick to an exercise program for respiratory muscles
- Minimize environmental factors—dust, pollen, air pollution, weather

3. In the end: Reflections on my search

Made me a better planner and organizer
Helped me overcome shyness because I had to ask for help
Improved my writing skills
Improved my ability to draw conclusions
Gave me confidence that I can lead a full and active life

YOUR TURN 5 Planning Your I-Search Paper, Part Two

Review the prewriting steps that follow Your Turn 4 on page 211. Then, find and evaluate sources, prepare source cards, and take notes. Next, write your thesis, and create an informal outline for your paper.



Document Your Sources

Where Credit Is Due In an I-Search paper, you use information and ideas that you obtained from outside sources. It is very important that you give credit to these sources by citing them in the body of your paper and by listing them at the end of your finished paper.

Citing Sources in the Body When you are writing the body of your report, you must decide what to give credit for and how to give it.

- **What to Credit** If the same information can be found in several sources, it is considered common knowledge. You do not have to document it. For example, it is common knowledge that Dr. Martin Luther King, Jr., gave his "I Have a Dream" speech in Washington, D. C. in 1963. However, any information that you obtain from outside sources that is not common knowledge must be documented.
- **How to Credit** There are several ways to give credit. The two most widely used methods are **footnotes** (see the example footnote on the next page) and **parenthetical citations**. In this chapter you will see examples of the parenthetical citation format recommended by the **Modern Language Association of America (MLA).**

TIP Your teacher might ask you to use a documentation format other than the MLA. The formats suggested by the **Chicago Manual of Style** and the **American Psychological Association (APA)** are two popular alternatives to MLA. Ask your teacher or librarian where to find them.

Guidelines for Giving Credit Within the Paper

Place the source citation in parentheses at the end of the sentence in which you have used someone else's words or ideas. The following examples follow the **MLA** format.

1. **Source with One Author.** Last name of the author, followed by the page number(s) (if any) of the work being cited: (Berg 23)
2. **Source with No Author Given.** Title, or shortened form of it, followed by page number(s) (if any): ("Peak Flow Meters")
3. **Source with Two or More Authors.** All authors' last names, followed by the page number(s) (if any): (Smolley and Bruce 128)
4. **Author's Name Given in Paragraph.** Page number only. (23)

TIP If your teacher prefers a certain style of documenting sources—**footnotes** or **endnotes,** for example, follow that style exactly. Here is an example of one style of footnote for a magazine article with one author. The number 1 at the beginning of the footnote refers to a number in the report where there is information to document. The footnote gives the author's first and last names (in that order), the book's title, publication information, and a page reference.

1. Susan Berg, "Recently Diagnosed with Asthma?" Asthma March/April 1999:22.

Include a *Works Cited* List At the end of your I-Search paper, you need to include a *Works Cited* list that includes all the sources you have used in your paper. A *Works Cited* list may include both print and nonprint sources, such as films or electronic materials. If you are using only print sources in your paper, you can entitle your list of sources *Bibliography*. You provide a *Works Cited* list or a *Bibliography* for readers who are interested in learning more about your topic.

Guidelines for Preparing the List of Works Cited

1. Follow the format you used for your source cards. (See pages 214–215.)
2. List your sources in alphabetical order by the authors' last names (or, if no author is listed, by the title). Ignore *A*, *An*, and *The*, and use the first letter of the next word.
3. Begin each listing at the left margin. If the listing is longer than one line, indent the remaining lines five spaces. Double-space all entries.
4. Put your *Works Cited* list on a separate piece of paper at the end of your final I-Search paper. Center the words *Works Cited* at the top of the page.

MINI-LESSON CRITICAL THINKING

Evaluating Web Sources

One of the most important sources you can consult in researching for an I-Search paper is the World Wide Web, perhaps the richest source of information in the world. However, no system exists to ensure that what appears on the Web is accurate, reliable, and objective. You should evaluate every Web site you consider using for your paper, even those maintained by the government and educational institutions. You can evaluate Web sites by using the criteria and related questions explained below.

- **Coverage: How much information on a given topic is provided?** Is the information unique to this site, or is it available from some other source, like the library?
- **Accuracy: Is the information correct?** Remember that anyone can publish anything on the Web. Have you seen the same information in other sources? Do the authors of the Web page support their ideas with evidence?
- **Currency: What are the dates for creation, publication, and revision of the Web site?** These dates should appear at the bottom of the home page. Is the information up-to-date? When was the site last updated? Might the information have changed since then?
- **Authority: What are the qualifications of the creator and publisher of the Web site?** Sometimes authority is difficult to determine. Are the creator's qualifications shown on the Web page? If not, look for the creator's name in print bibliographies of works on the same subject as the Web page.
- **Objectivity: To what extent might the author's feelings about the topic affect the information he or she presents?** Does the Web site try to persuade you to adopt a particular point of view? Do the pages present both sides of an issue? Is the site affiliated with any major institutions or organizations?

PRACTICE

Using the information above as a reference, answer the following questions about a Web site you used in researching for your I-Search paper.

1. Is the information from the Web site available from a more accessible source? If so, name the source. If not, explain why.
2. Could you confirm the accuracy of the information by finding the same information in another source? If so, name the source. If not, explain.
3. Explain why you do or do not believe that the Web site's information is up-to-date.
4. Explain why you do or do not believe the author of the Web site to be qualified to write on the topic.
5. Does the Web site present both sides of an issue? If the Web site does not deal with an issue, what is its purpose?

Writing

I-Search Paper

Framework

The Search Story

- Hook readers immediately.
- Explain what you already knew about your topic.
- Tell what you wanted to know about your topic.
- Include a thesis statement.
- Retrace your research steps.

The Search Results

- Describe important results of your research.
- Support your findings.

Search Reflections

- Describe the significance of your research experience.
- Restate your thesis.

Directions and Explanations

Grab Your Readers' Attention Begin with an attention-getting statement about your topic, and explain why it was important for you to find out more about it.

Tell What You Knew Briefly mention the most important information and ideas you already knew about your topic.

Tell What You Wanted To Learn and Why Let readers know what you wanted to find out about your topic and the reasons motivating your search.

State Your Thesis Turn your research question into a statement and add the factors that complete the statement.

Retrace Your Steps Describe the sources you began with and the ones you found later. Discuss successes and setbacks and any changes to your original research question.

Discuss Your Results and Give Support Devote at least a paragraph to each important research result. Support your findings with direct quotations, paraphrases, and summaries of information from your sources.

Reflect on Your Search Describe what you learned from your research experience. Discuss how your experience and your new knowledge might affect your future. Remind readers of your thesis statement.

Go to the Chapter Menu for an interactive activity.

YOUR TURN 6 **Writing a First Draft**

Using the Framework above, write the first draft of your I-Search paper.

A Writer's Model

The I-Search paper below, which is a final draft, closely follows the framework on the previous page.

Living with Asthma

The Story of My Search

"Well, Matt, it looks like you have asthma," the doctor told me. What a shock it was to hear those words. I thought I just had a stubborn cold. As I listened to the doctor explain my condition, questions started going through my head: Wasn't I too old to get asthma now? How could I stay on the basketball team? What about my camping trips?

Attention-grabbing statement

I already knew that asthma is a chronic, or long-lasting, disease which affects the lungs and that certain medications help control the number and severity of asthma episodes (that's when the coughing and wheezing start). I did not know much more than that, though.

Background on known important facts

Since I am on the basketball team and also go on weekend camping trips with my Boy Scout troop, I wanted to find out more about the kinds of things that might trigger an asthma episode. Were there trees and plants I should avoid? Would I be able to keep up with my teammates on the basketball court? Would I still be able to get the dog my parents had finally agreed to let me have?

Brief overview of what the writer wants to learn

I made a list of all of the things I wanted to learn. From that list, I was able to form my research question: *Can I effectively manage my asthma?* Later, I was able to form an answer: I can manage my asthma and live a full, active life by following my doctor's instructions about medications, by avoiding pets, by sticking to an exercise program, and by minimizing the effects of environmental factors that can trigger asthma episodes.

Thesis statement

My search took about three weeks, and it was a new experience for me. I started by doing an online search using the keywords *asthma* and *managing*. I was surprised at the amount of information I found. There were Web sites maintained by doctors, pharmaceutical companies, and support groups. I ordered some free print materials from one of the pharmaceutical companies; unfortunately, I had my first draft finished before they arrived. However, because it turned out to be good information, I went back and reworked part of the draft.

Steps of the research process

(continued)

(continued)

The next thing I did was to call my allergy/asthma specialist, Dr. Anders. I forgot to take her busy schedule into account, and I did not know that she had planned a short vacation during the time I was doing my research. She graciously agreed to meet with me after her office hours one day. I am glad she did, because she gave me some very good advice. She also let me borrow a few videos about asthma.

During that same week I went to my school library. The librarian showed me the reference books and regular books. I went through the latest volumes of the *Readers' Guide to Periodical Literature* and found several magazine articles. By the end of the week, my head was swimming with a huge amount of information.

Description of narrowing the research topic

My original search question remained the same: *Can I manage my asthma?* However, I was able to define exactly what it was that I wanted to manage. I ended up narrowing my topic to four areas I had to deal with in order to manage my asthma: medications, pets, sports/exercise, and environmental factors.

The Results of My Search

First major finding

The first thing I found out was that certain substances can trigger an asthma attack of "coughing, wheezing, and shortness of breath" (Abramowicz). Allergens constitute the largest category of triggers. According to Susan Berg, "Allergens are substances that produce an allergic reaction in people who are sensitive to them." Common allergens are pollens from plants, animal dander, dust mites, and mold and mildew (23). My doctor said she would test me for allergies right away. If I am allergic to certain things, allergy shots help by desensitizing me to them and make them less likely to trigger an episode (Anders).

Direct quotation

Summary

Second major finding

If I find that I am allergic to certain pollens, I can reduce the chances of an asthma episode by staying indoors when those pollens are in the air. Indoors, I can reduce the risk of an episode by using the air conditioner to circulate air while keeping windows and doors closed to keep pollens out. Cleaning the air with an air cleaning device can reduce dust mites, mold spores, and other indoor allergens ("85% of Americans").

Third major finding

Several medications and devices help people with asthma. One device is called a peak flow meter. This is a tube about six inches long; its purpose is to measure your ability to

push air out of your lungs. When you blow into it, you can find out if your lungs are working at their capacity. If they are not, you know it is time to take some medication ("Peak Flow Meters"). My doctor explained how the different medications work: an inhaler sends medication right into the lungs without a lot of side effects (Anders). She showed me another type of inhaler to use when my peak flow number is low, or if I get short of breath while I am exercising. This inhaler helps me get my breath back right away.

I also found out that certain anti-inflammatory drugs are used to keep air passages open and prevent asthma episodes. One type of these is called corticosteroids. I was glad to find that these are not the same kind of steroids that cause serious side effects in athletes who take them. The risk of side effects with corticosteroids is very small ("Asthma Medicines").

Fourth major finding

Physical exercise makes an asthmatic's condition worse, or so doctors believed twenty or thirty years ago. At that time doctors believed a quiet, restful life was best. Now new research is showing that "people with breathing disorders who can maintain a regular program of exercise and activity are able to experience maximum cardiovascular fitness along with greater symptom control, or an increased ability to exercise and do the activities of daily living. Exercise trains the respiratory muscles to work more efficiently" (Smolley and Bruce 127–128). I had been worried that I would have to drop off the basketball team and miss the next Boy Scout campout we had planned. These facts, however, make me confident that I can continue to play basketball and go on camping trips.

Fifth major finding

Nancy Hogshead, a former Olympic athlete, demonstrates some exercises for asthmatics on a video called *Aerobics for Asthmatics*. I tried some of the exercises, and they are great. Nancy is quite a role model. She and other Olympic athletes (including Rob Muzzio, Jim Ryun, Jackie Joyner-Kersee, and Amy Van Dyken) have had to deal with asthma, and many of these athletes still compete (Smolley and Bruce 128).

In fact, a recent study of Olympic athletes revealed that "more than 20 percent of the American athletes who participated in the 1996 Summer Olympic games may have had asthma" ("Olympians"). I am very encouraged by this fact.

(continued)

TIP I-Search papers and their *Works Cited* lists are normally double-spaced. Because of limited space on these pages, A Writer's Model and A Student's Model are single-spaced. The *Elements of Language* Internet site provides a model of an I-Search paper in the double-spaced format. To see this interactive model, go to **go.hrw.com** and enter the keyword **EOLang 9-6.**

(continued)

Olympian Amy Van Dyken

Olympian Jackie Joyner-Kersee

Answer to the research question

After doing the research, I concluded that if I developed a plan for myself, I would be able to manage my asthma. This is my working plan:

1. Medical Treatment: Take allergy shots if it turns out I have allergies. Take my medications and monitor peak flow levels every day. Call the doctor as necessary. Go in for checkups every three months.
2. Environment: Give up going on hikes if the pollen count is very high. Avoid other allergens whenever possible.
3. Pets: Postpone a decision on pets until I find out whether I am allergic to them.
4. Sports/Exercise: Continue with all sports and activities. Use the peak flow meter before and after basketball games. Do warm-up breathing exercises. Keep an inhalator handy for emergency use.

Significance of the research experience

Reflections on My Search

Doing the research took a lot more time than I thought it would. I have learned how to plan my time more efficiently and how to organize my thoughts better. I am getting better at organizing my paperwork, too. Since I am rather shy, it was good for me to be forced to ask the doctor and librarian for assistance. My writing skills also improved. Now I am able to write a paragraph and stick to one topic. I also learned how to evaluate sources of information I find on the World Wide Web. In addition to these academic benefits, I got a lot of information that will help me lead a full and active life—in spite of my asthma.

Restatement of thesis

Works Cited

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Anders, Emma R., M.D. Personal interview. 12 Apr. 1999.

"Asthma Medicines." American Lung Association Web site. American Lung Association. 15 Apr. 1999. <http://www.lungusa.org/asthma/astasmeds2.html>.

Berg, Susan. "Recently Diagnosed with Asthma?" Asthma Mar.–Apr. 1999: 22–24.

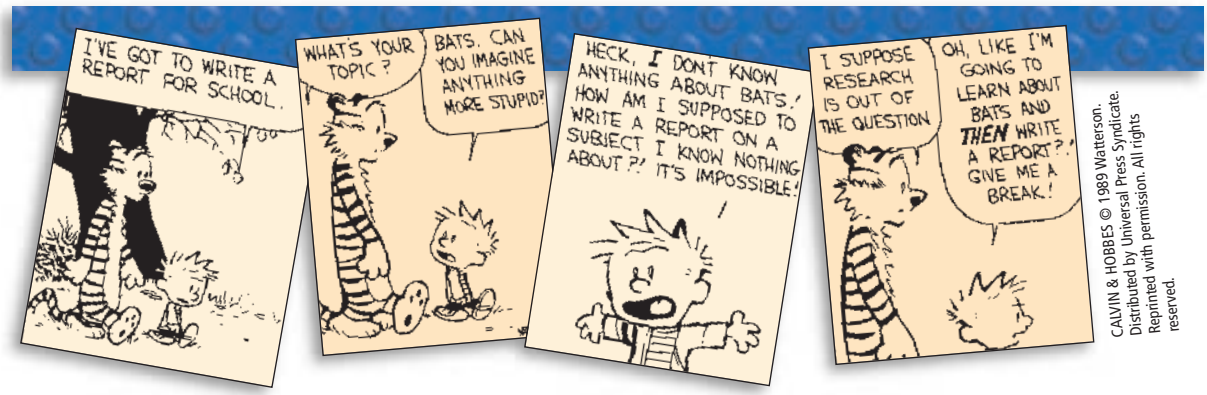
"85% of Americans Don't Know the Air in Their Homes May Be Hazardous to Their Health." American Lung Association Web site. 24 Mar. 1999. American Lung Association. 15 Apr. 1999. <http://www.lungusa.org/press/association/85percent.html>.

"Olympians Don't Let Asthma Hold Them Back." Asthma Mar.–Apr. 1999: 15.

"Peak Flow Meters." American Lung Association Web site. American Lung Association. 15 Apr. 1999. <http://www. lungusa.org/asthma/astpeakflow.html>.

Smolley, Laurence A. and Debra Fulghum Bruce. Breathe Right Now: A Comprehensive Guide to Understanding and Treating the Most Common Breathing Disorders. New York: Norton, 1998.

TIP Before you finalize your parenthetical citations or *Works Cited* list, be sure to review **Document Your Sources** on pages 219–220.



A Student's Model

The following excerpted I-Search paper was written by Amy E. Hofmann, a student at Conrad Weiser High School in Robesonia, Pennsylvania. The *Works Cited* list is not included.

The Call of the Hornet

What I Knew

Interesting opening

I have always had a fascination with the Sportwagon Hornet, or "Punchbuggy" (whatever you choose to call it). They were cute cars with an odd design that put the engine in the back. I liked their unique shape and style. Hornets seemed to have their own personality and, I thought, would be fun to drive.

Reasons for the search

I grew up on the lookout for Hornets, straining my eyes out of the school bus window searching for one. "Punchbuggy red (or blue, or black, or green) and no punch backs . . ." was a common phrase heard on the bus. The punches on the arm that followed were common, too. It was a fun way to pass the time.

I grew to love the Hornets, and last year the idea came to me that I might own one of my very own. This prospect has led to my quest for the Hornet. I hope that in one to two years, I will be able to find a "Punch-buggy" that is perfect for me. For now, though, I must satisfy my curiosity and answer the call of the Hornet.

What I Wanted to Know

Thesis statement

I decided to base my search on one simple question (though it eventually turned out to be more complex than I thought). I wanted to know where I could find my dream, an affordable vintage Hornet in fairly good condition and fairly close to home. My search begins . . .

How I Searched

The story of the search

I began with a single Web address: http://www.spwm.com, and a dream. I hardly knew where the combination would take me. Here I learned much about the new Hornet that will come out in the spring of 2004,

but that did not help me with what I wanted to know: Where can I find my dream Hornet?

Thesis reiterated in the form of a research question

From the Sportwagon Hornet Web site, I decided to try my luck with search engines. I tried only two and was swamped with all kinds of Web sites, ranging from Sportwagon restoration to shrines dedicated to Hornets to (at last!) Hornets for sale! Ha! The joke was on me, though. These Hornets, nice though they were, were all right-hand drive, British models, with their prices listed in pounds. If you are going to Europe, and would like to take a look at a few Hornets, scope it out (Euroauto).

A setback in the search

It was really touch and go at times with the search engines. I had to read through many summaries before I came to the word "sale," and even then, I found very little of what I wanted.

The search engines finally led me to the Web site that provided the best information, a site that is basically a directory of advertisements from people all across the United States, with all kinds of cars for sale (Carsite). Being the inexperienced Internet surfer that I am, I began the hard way, searching in the "used cars" section, first by region, then by state, and then by model. If there were no Hornets, I would have to start the process over again. Then, one day, I happened to come across this little finder button, and lo and behold, I could search the entire United States of America for SW Hornets at one time! Here on Carsite, I found six. I printed out the descriptions of each and decided to make my search more personal, so I e-mailed three perfect strangers who shared at least one quality with me—a love for Hornets. . . .

Citation of online source with neither author nor title

A breakthrough in the search

My search for Hornets also led me to my local newspaper, but this, too, was discouraging. Only a small block of the "automobiles for sale" classifieds is dedicated to antique cars. I found this out after days spent poring over the entire classified section before I noticed the "antique" block. In the end, I discovered only one Hornet for sale.

A modification of the search

I found the ad in a Friday newspaper. It read: "1966 SW Hornet—67,000 orig. mi., runs great, $1500"

Citation of a classified ad in a newspaper

(continued)

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("1966 SW Hornet"). On the following Monday I checked the paper again. The advertisement was gone. Needless to say, I was terribly disappointed.

What I Learned

Research results described in separate paragraphs

Unless you really know what you are doing or exactly what you are looking for, trying to make your way around the Internet can be difficult. There seemed to be no easy way to find a site advertising only SW's for sale. There were many Web pages that were dedicated as shrines for personal Hornets or sites for restoration. . . .

For the most part, I learned that there are plenty of vintage Hornets around, as vintage Hornets have the highest percentage of vehicles from their era on the road. The catch is that they are already in the hands of restorers and SW fanatics. . . .

What My Search Told Me

Reflections on the search

What did my search tell me about finding a vintage Hornet that is close to home, affordable, and in good condition? It told me that the Internet is not the only way to search for things, but it is often more helpful than traditional sources. It told me that SW Hornets are hard to find. Even if you do find one, you need to inspect it to make sure it is in good condition.

What the search means for future searches

What did my search tell me? It told me that if I am willing to do a little searching, I have a good chance of finding a Hornet in a year or two, a much better chance than I did before doing this paper. Now I know where to look. I know that all the Hornets will not disappear by then, despite the fact that my closest find was gone within days of discovery. They are out there, and there is a good possibility that mine is out there, just waiting for me to buy it. At least that is what I like to think. . . .

Revising

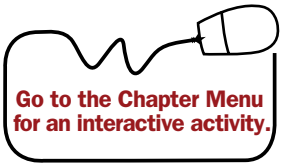
Evaluate and Revise Your Draft

Touch-Up or Major Overhaul? Did you know that many famous writers revise their works several times? Very few writers get it just right the first time. To refine your writing, read through your paper at least twice. First evaluate the content and organization, using the following guidelines. Then, use the guidelines on page 232 to revise for style.

First Reading: Content and Organization If you are one of those writers who has difficulty evaluating and revising your own writing, the following chart should help you. Ask yourself the questions in the first column. If you need help answering the questions, use the tips in the second column. Then, make the changes suggested in the last column. You may want to collaborate with a peer to work through the chart.

I-Search Paper: Content-and-Organization Guidelines for Peer and Self-Evaluation

Evaluation Questions	Tips	Revision Techniques
1 **Does the thesis statement answer the research question completely?**	**Underline** the thesis statement. **Box** the research results summarized in the thesis. If one or more results are missing, revise.	**Add** research results to the thesis statement until it is a complete answer to the research question.
2 **Is the story of the search in logical order?**	**Number** each step of the search in the order it happened. If the numbers are out of order as you read through the paper, revise.	**Rearrange** the steps of the search so that they are in logical order.
3 **Are the results of the search adequately supported by information from outside sources?**	**Circle** the major results of the search. **Underline** sentences containing information from an outside source. If you underline fewer than three sentences, revise.	**Add** information from outside sources. **Elaborate** on each major result with an interesting or surprising detail from an outside source.
4 **Are enough print and nonprint sources of information used? Are they recent, reliable and objective?**	**Highlight** information taken from the note cards. Revise if both print and nonprint sources are not used or if some sources seem dated.	Consult a library's card or online catalog and the *Readers' Guide*. **Add** information from these sources to your report.
5 **Does the conclusion describe how the research experience affected the writer?**	**Bracket** each sentence that describes the effects of the research experience on the writer.	**Add** statements that explain the effects of the research experience.



ONE WRITER'S REVISIONS Here is how one writer used the content-and-organization guidelines to revise some sentences from the I-Search paper on pages 223–227. Study the revisions and answer the questions following the paragraph.

rearrange

add

delete

I made a list of all the things I wanted to learn. From that list, I was able to form my research question: Later, I was able to form an answer: I can manage my asthma and live a full, active life by following my doctor's instructions about medications, by sticking to an exercise program, and by minimizing the effects of environmental factors that can trigger asthma episodes. ~~The question~~ *Can I effectively manage my asthma?* ~~was answered~~.

by avoiding pets,

Analyzing the Revision Process

1. Why does the writer rearrange the paragraph so that the research question comes in the second sentence?
2. Why is the information added to the paragraph important?

PEER REVIEW

Ask a classmate to read your paper and answer the following questions.

1. Can you understand the writer's desire to research this topic? Why or why not?
2. About which aspect of the topic would you have liked the writer to tell you more? Why?

YOUR TURN 7 Focusing on Content and Organization

Using the guidelines on the previous page and the example revisions shown above as a model, revise your I-Search paper.

Second Reading: Style In your second reading, look at your sentence style. Avoid beginning sentences with *there is/are* or *there was/were*. The following style guidelines will help you vary your sentence beginnings.

Style Guidelines

Evaluation Question	Tip	Revision Technique
Do sentences begin with the words *there is, there was, there are,* or *there were?*	**Highlight** each sentence that begins this way. Revise highlighted sentences that can be smoothly reworded.	**Rearrange** the sentence so that the subject comes first. Then, reword the sentence using a strong verb.

Sentences

Eliminating "There is/There are" Sentence Beginnings

Starting sentences with phrases like *there is* makes your writing sound monotonous to readers. You can more effectively present ideas by putting the subject in the place of *there* and using a lively verb. For example, instead of writing *There was the girl (or boy) of my dreams,* write *The girl (or boy) of my dreams suddenly appeared in front of me.*

ONE WRITER'S REVISIONS The writer of the model I-Search paper on pages 223–227 used the guidelines on the preceding page to revise sentence beginnings.

BEFORE REVISION

There is a video called *Aerobics for Asthmatics*, which features a former Olympic athlete named Nancy Hogshead doing aerobic exercises.

Sentence begins with *there is*.

AFTER REVISION

Nancy Hogshead, a former Olympic athlete, demonstrates some exercises for asthmatics on a video called *Aerobics for Asthmatics*.

Revise by putting subject first and using an active verb.

Analyzing the Revision Process

1. What is better about using the verb *demonstrates*?
2. How does the focus of the sentence change?

Focusing on Style

Revise the style of your I-Search paper using the guidelines on page 232.

Publishing

Proofread Your Paper

Reference Note

For more information and practice on **punctuating titles,** see page 684 and page 692.

A Fine-Toothed Comb Before you prepare a final copy of your I-Search paper, make sure that it is free of grammar, spelling, and punctuation errors. Punctuating titles correctly is particularly important in an I-Search paper, where you must refer to sources with different types of titles.

Grammar Link

Punctuating Titles

You can use the following guidelines to punctuate any titles you include in your I-Search paper.

- **Use underlining for titles of books, plays, films, periodicals, works of art, and television programs.** (In print, underlining appears as *italic* type. If you are using a computer, you can use an italic font to indicate titles.)

  Examples:
  The Red Badge of Courage (book)
  Newsweek (periodical)
  The Lion King (film)
  Biography (TV program)

- **Magazine articles, chapter headings, and titles of short poems, short stories, short musical compositions, and individual episodes of TV shows** should be placed in **quotation marks,** not italicized.

  Examples:
  "What You Need to Know about Vitamins" (magazine article)
  "The Caged Bird" (poem)
  Chapter 1, "Our Solar System" (book chapter)

- **Underline (or italicize) the title of a poem long enough to be published in a separate volume,** such as *The Rime of the Ancient Mariner.* Also, **italicize the titles of long musical compositions,** such as *1812 Overture* by Tchaikovsky.

The words *a*, *an*, and *the* before a title are italicized when they are part of the title. The article *the* before the title of a newspaper is italicized and capitalized only if it appears in the masthead of the publication.

Examples:
The House on Mango Street
A Separate Peace
the *San Francisco Examiner*

PRACTICE

Copy the following sentences onto your own paper, correctly punctuating the titles in each sentence.

1. Have you read the novel The Dolphins of Pern by Anne McCaffrey?
2. Jane asked to borrow my Time magazine.
3. Yesterday's Philadelphia Inquirer newspaper had an article on asthmatic athletes.
4. The history book chapter titled The Renaissance has some magnificent pictures.
5. How to Make a Piñata was the best article.

Publish Your Paper

Share Your Experience Here are some ways you might share your I-Search paper with a larger audience.

- **Locate a group or organization that would have a special interest in your research.** For example, the writer of the Writer's Model on pages 223–226 could share his I-Search paper with a support group for people with asthma.
- **Submit your paper to a magazine—online or print—**that publishes either articles on your topic or articles by people your age.
- **Collect other I-Search papers from your class** for a special display at your school or in your classroom.
- **Send a copy of your paper to any professional** you might have interviewed. For example, the writer of the Writer's Model might mail a copy to the doctor he interviewed.

TIP If you choose to write your paper by hand, be sure that your handwriting is **legible;** that is, neat and easy to read.

TIP If you have written your paper for a general audience and now wish to publish it for a more specific audience, you may need to refine it a bit, keeping in mind what that audience knows about your topic.

Reflect on Your Paper

PORTFOLIO

Give It Some Thought Writing short responses to the following questions will help you build on what you have learned in this workshop.

- What difficulties did you encounter while writing this paper? What might you do to avoid them next time?
- What part of the paper was the easiest to write? Why?
- What part of the paper was the hardest to write? Why?
- What discoveries did you make about yourself as a writer while completing this workshop?

YOUR TURN 9 Proofreading, Publishing, and Reflecting

Review each of the steps discussed here and on the previous page. Before you turn in your I-Search paper, be sure you

- proofread it carefully
- consider publishing options
- reflect on the effects of the I-Search experience

Designing Your Writing

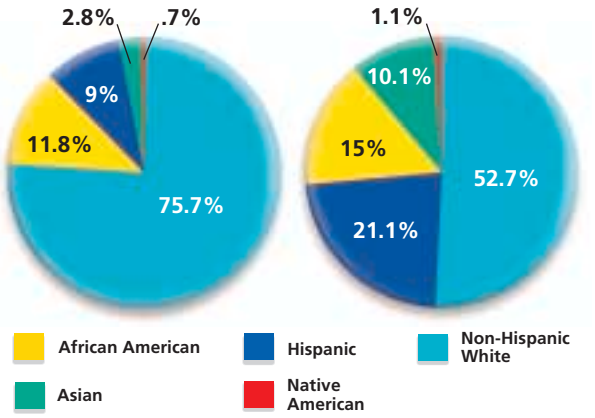
Using Graphics Effectively When you read a print document or a Web page, you usually see a combination of words and illustrations. These illustrations—photographs, line drawings, graphs, diagrams, maps, charts, and so on—are meant to increase the effectiveness of the text. Follow these guidelines if you use illustrations in your writing.

- **Think carefully about the information you want to convey to your readers.** Ask yourself which information would have a greater impact if it were presented pictorially. For example, if you are preparing a report on ethnic diversity in the United States, adding a pie chart showing the changes in ethnic distribution over a period of time might be much more effective than presenting such information using text only.

Ethnic Diversity in the United States

Racial and Ethnic Distribution of the U.S. Population: 1990

Projected Racial and Ethnic Distribution of the U.S. Population: 2050



Source: U.S. Bureau of the Census

- **Provide drawings or illustrations of things with which your readers might be unfamiliar.** The writer of "Living with Asthma" describes a device called a peak flow meter. Most of his readers probably have never seen a peak flow meter, so an illustration would have helped his readers understand the use of the device.
- **Be sure the text and the art complement one another.** If your paper describes the great beauty of one of our country's national parks, actual photographs of the park would be much more appropriate than a line drawing or computer clip art. If, on the other hand, your I-Search paper is on the ups and downs of the stock market, a graph showing the actual rise and fall of stock prices would be more appropriate than a photograph of the stock exchange.

Connections to Literature

Research for Fiction Writing

Although you might not have thought about it, research plays a part in fiction, especially **historical novels,** fictional works set in particular historical periods. Story characters can participate in historical events and move among actual historical figures, or they can be actual historical figures participating in fictionalized events. To make these fictional works seem real, writers must do the research necessary to lend a feeling of reality to their characters and details of place, time, and action.

Thorough research allows writers to assign their characters the appropriate dress, speech, hobbies, occupations, and so on. For example, a character in a story set in 1880 obviously could not work as a computer engineer—but what engineering work would such a character have been able to do in 1880? Research would answer this question.

Research Tool Time Like other researchers, fiction writers use both primary and secondary sources as tools. For example, to write a historical novel about the Vietnam War, an author might interview veterans of that war and also consult histories about the war.

Keeping It Real Imagine that you decided to write a short story about a famous unsolved crime that took place in your town during the Great Depression of the 1930s. What makes your story fictional is that your fictional hero will solve the crime.

Much of what you will need to research is obvious. You will need to learn all that you can about the people involved in the crime—victim, suspects, investigators—and the facts about the crime itself. However, you will need to research more if you want to make your story seem real. The following list of questions will give you an idea of the kinds of information you would need to make the story realistic.

- What important events were going on locally, nationally, and internationally at the time of my story which would affect my story and its characters?
- What did my town look like in the 1930s?
- How did men and women dress in the 1930s?
- What did people do for entertainment?
- What did people do to earn a living?

YOUR TURN 10 Researching for Fiction

Imagine that you and two classmates are collaborating on a story about three fifteen-year-olds growing up in a poor neighborhood in a city in the northeastern United States in 1900. Brainstorm at least five questions you would need to answer to give your story an air of reality. Then, list three or more sources you might consult to answer each question.