1.4.1. The Modern Academic Library

The library will generally be your most reliable guide as you conduct research for papers that draw on the published work of experts. Librarians evaluate resources for authority and quality before acquiring them for use in research. You should therefore become thoroughly acquainted with the libraries available to you and take full advantage of the resources and services they provide on-site and over the Internet.

Resources and Services

The modern academic library typically offers resources in print and electronic forms and in other nonprint media (e.g., films, sound recordings), as well as computer services, such as word processing, high-quality printers, and access to the Internet. Whereas some important resources are available only in the library building (e.g., most books and other publications solely in print form, microfilm materials, special collections), your library probably provides a number of electronic resources, such as bibliographic and full-text databases, that are accessible not only through computer terminals in the library but also from outside through the library's Web site.

Orientation and Instruction

Most academic libraries have programs of orientation and instruction to meet the needs of all students, from beginning researchers to graduate students. Ask about introductory pamphlets or handbooks and guided tours as well as lectures and classes on using the library and on related subjects like developing research strategies and searching the World Wide Web. The library's Web site likely contains scheduling information on such classes as well as descriptions of available resources and services. The site may also offer online tutorials.

Professional Reference Librarians

Nearly all public and academic libraries have desks staffed by professional reference librarians who can tell you about available instructional programs and help you locate sources. Specialist librarians often prepare and distribute, in print and electronic forms, research

guides to specific fields of study. Consulting a librarian at key points in your research may save you considerable time and effort. Librarians may be available in person or by telephone, e-mail, or instant messaging.

1.4.2. Library Research Sources

Touring or reading about your library will reveal the many important sources of information it makes available to researchers. Information sources fall into four general categories.

Electronic Sources

Your library probably offers reference works in electronic form (see 1.4.4) and full-text databases (see 1.4.6) and may also recommend useful Web sites (see 1.4.8). Your library likely subscribes to journals available in electronic form.

Books and Similar Publications

The library typically houses a vast number of books as well as similar publications such as pamphlets and perhaps dissertations. Books are essential sources for many projects, and some instructors require that students use books—in addition to articles, Web sites, and other materials—during research. You can usually borrow most books from the library. A common exception is the library's collection of reference works in print (see 1.4.4). Although reference works usually cannot be borrowed, many important ones are likely available to you through the library's Web site.

Articles and Other Publications in Print Periodicals

The library gives access to numerous articles and similar writings (e.g., reviews, editorials) published in print periodicals such as scholarly journals, newspapers, and magazines.

Additional Sources

Most libraries provide nonprint sources such as sound recordings and video recordings and possibly also unpublished writings (e.g., manuscripts or private letters in special collections).

1.4.3. The Central Information System

Most academic libraries provide an online central information system to guide students and faculty members to research sources. The system ordinarily includes

- **the library's catalog of holdings** (books, periodicals, electronic sources, audiovisual materials, etc.; see 1.4.5)
- **bibliographic databases,** such as the *MLA International Bibliography* and *Science Direct*
- **other electronic resources,** including reference works (see 1.4.4), full-text databases to which the library subscribes (see 1.4.6), and recommended Web sites to which the library provides links (see 1.4.8)
- **other information about the library,** such as its location, hours, and policies

If your campus library does not hold a work you seek, consult *World-Cat,* on the Web. This database lists the holdings of over ten thousand libraries and can help you find a copy in a nearby library.

1.4.4. Reference Works

A useful way to begin a research project is to consult relevant reference works. Some reference works, like indexes and bibliographies, categorize research materials by subject and provide data that permit you to locate sources—author, title, date of publication, and so forth. Other reference works, like encyclopedias, dictionaries, and biographical sources, give basic information about subjects. This section provides a brief introduction to the kinds of general and specialized reference works you should know about. Your library probably has reference works in print and electronic forms.

- **Print.** Print works may be located in a reference room. General reference books, like dictionaries, encyclopedias, biographical sources, yearbooks, atlases, and gazetteers, may all be shelved together in one place, while specialized reference books may be grouped according to subject area—biology, business, literature, psychology, and so forth. The volumes of reference works published annually—indexes, bibliographies, and abstracts collections—are likely lined up in chronological order.

- **Electronic.** Reference works available as electronic databases are usually online or on CD-ROM or DVD-ROM. Searching and drawing material from the library's databases can be done in the library building and probably from outside as well, over the Internet. In some electronic environments, you can search several kinds of works in a single query. *Reference Universe*, for example, allows you to search the indexes of more than ten thousand reference works.

The electronic medium has obvious advantages for the researcher, such as currency, broad coverage, ease of downloading and printing, hypertextual links to other works, and sophisticated search capabilities. But do not ignore printed reference works, for many valuable works exist only in print. Sometimes when a work is available in both media the electronic version is partial, and so the print version provides better coverage. For example, some longstanding reference publications, such as indexes, bibliographies, and encyclopedias, have parts available in print that have not been converted for electronic publication. You will want to consider the scope of coverage in electronic versions you consult.

a. Reference Works That Provide Data about Research Materials

Indexes and bibliographies are lists of publications usually classified by subject. Depending on the scope of coverage, they may guide you to material in newspapers, magazines, and journals as well as to writings in books and on Web sites.

- *The New York Times Index* covers all articles published in the newspaper. For a research paper on the military draft in New York City during the Civil War, you can use this index to locate relevant articles in 1860–65.
- *Readers' Guide to Periodical Literature* indexes the contents of widely circulated periodicals. If you are writing about American women's fashion during the 1970s, you can identify magazine articles on the topic here.
- Most subject areas and scholarly disciplines have their own specialized bibliographies. You can use *The Philosopher's Index*, for example, to create a list of scholarly-journal articles about Immanuel Kant's ethical theory published since 1995.
- Some publishers combine several indexes in one electronic environment. Using *Wilson OmniFile Full Text*, you can search six indexes,

covering education, science, business, the humanities, social science, and journalism, with one query. For a research project in an area that crosses disciplines, such as ethnic studies, a search here will yield a useful variety of results.

- *Bibliographic Index* cites bibliographies that are published as books or pamphlets, as parts of books, or in periodicals.

Collections of abstracts present summaries of journal articles and other literature. Abstracts help you screen out works irrelevant to your research, so that you look for and read only the most promising sources.

- *Newspaper Abstracts* covers over fifty major newspapers in the United States.
- *Periodical Abstracts* treats a wide range of English-language academic journals and newsmagazines. It also indexes transcripts from about eighty television and radio programs that present news and other information.
- An entry in *Book Review Digest* provides an abstract of a book, excerpts of reviews it received in major publications, and bibliographic data for the reviews. This resource can help you understand how a book was evaluated when it was first published.
- Many collections of abstracts focus on a specific discipline or subject. *Biological Abstracts* covers over 3,700 journals in the life sciences from around the world. The index goes back to publications from 1926, illuminating the history of biology as well as contemporary research.
- Summaries of doctoral dissertations are available in *Dissertation Abstracts International*.

Guides to research seek to direct you to the most important sources of information and scholarship in the area you are researching. Unlike indexes, bibliographies, and collections of abstracts, which tend to strive for comprehensiveness and objectivity in presenting information, guides to research are usually selective and evaluative.

- Some research guides cover entire fields, such as *Literary Research Guide: An Annotated Listing of Reference Sources in English Literary Studies* and *Philosophy: A Guide to the Reference Literature*.
- Some guides to research are devoted to specific subjects within fields (e.g., *Reference Guide to Mystery and Detective Fiction*).

To learn of any guides that might be useful to your project, consult the latest edition of the American Library Association's *Guide to Reference Books*, your instructor, or a librarian.

b. Reference Works That Give Basic Information about Subjects

Dictionaries provide information, usually concise definitions, about words or topics.

- Among the most authoritative dictionaries for English words are *Webster's Third New International Dictionary of the English Language* and, especially for the history of a word's meanings and usages, *The Oxford English Dictionary*.
- More concise English-language dictionaries often recommended for student writers are *The American Heritage College Dictionary*, *Merriam-Webster's Collegiate Dictionary*, and *The New Oxford American Dictionary*.
- Dual-language dictionaries typically present words in one language followed by translations of those words into another language— for instance, *The New World Spanish-English, English-Spanish Dictionary* (also titled *El New World diccionario español-inglés, inglés-español*). Some language dictionaries in specialized fields are in a multilingual format, such as *Elsevier's Dictionary of Environment in English, French, Spanish, and Arabic*.
- A thesaurus lists groups of synonyms—words with similar meanings. It is useful for writers who wish to find the most precise word for a particular context or to vary their choice of words. Examples are *Merriam-Webster's Collegiate Thesaurus* and *Roget's International Thesaurus*.
- Major fields of study have specialized dictionaries, such as *Black's Law Dictionary*, *Dorland's Illustrated Medical Dictionary*, *The New Grove Dictionary of Music and Musicians*, and *The Penguin Dictionary of Sociology*.

Encyclopedias give introductory information about subjects.

- Popular general encyclopedias are *The Columbia Encyclopedia*, *The Encyclopedia Americana*, and *The Encyclopaedia Britannica Online*.
- Specialized encyclopedias include *The Corsini Encyclopedia of Psychology and Behavioral Science* and *Stanford Encyclopedia of Philosophy*.

1.4.8. Web Sources

a. Range of Sources

Through the World Wide Web, a researcher can read and transfer material from library catalogs and millions of other useful sites, created by professional organizations (e.g., American Chemical Society, American Philosophical Association), government agencies (e.g., Library of Congress, United States Census Bureau), commercial enterprises (e.g., publishers of encyclopedias, news organizations), educational entities (e.g., universities, libraries, academic departments, research centers, scholarly projects), and individual scholars. These sites provide access to historical papers, literary works, articles in periodicals (e.g., journals, magazines, newspapers), and audiovisual materials (e.g., photographs, paintings, sound and video recordings).

b. Using Recommended Sites

Using the Web for research requires practice and training just as using a library does. Whenever possible, follow the guidance of an instructor, an academic department, or a librarian in selecting Internet sites for research. In addition to offering online databases, your library's Web site may provide links to important Internet sources, which were likely selected after careful evaluation and consultation. A librarian might also be able to advise you about sites relevant to your research. Similarly, you may find recommended sites on Web pages for your academic departments, instructors, or courses.

c. Gateway Sites

Your librarian or instructor might direct you to a "metapage" or "gateway" that provides links to other sites. Some editors of gateway sites are broadly inclusive, while others are highly selective. Examples of such sites follow:

- *Voice of the Shuttle* (Univ. of California, Santa Barbara) offers on its home page a menu of subjects in the humanities—anthropology, archaeology, architecture, history, literary theory, philosophy, and so forth. Selecting "media studies," for example, gives you a list

of specific fields (e.g., journalism, film and video, popular music, comics, cyberculture). The choice of "media theory and theorists" presents links to numerous resources in this area: professional organizations, bibliographies, journals, articles and papers, and other related sites, including many created and maintained by scholars in media studies. The home page also provides general links to libraries and museums, reference works, journals, publishers and booksellers, e-mail discussions and news groups, conferences, and travel resources.

- *Crossroads* (Amer. Studies Assn.) is a comprehensive resource for research and teaching in American studies. A section of the site, "American Studies Web," provides annotated listings of Web sites by subject category. Under the topic "Nature and the Environment," for example, you will find links to over seventy sites relating to environmental issues in the United States.
- *Intute* (Intute Consortium) is published by a consortium of seven universities. The consortium says that "all material is evaluated and selected by a network of subject specialists." The site has four main areas: science and technology, arts and humanities, social sciences, and health and life sciences.

d. Searching the Web

Search tools. Whether you are developing a research topic or looking for research sources, use the tools for locating Internet materials. You have probably used Internet search engines such as *Google*, *Windows Live*, and *Yahoo!* to find all sorts of information, but you may not have explored all the ways of searching provided by these services. Most search engines offer help pages that explain strategies for basic and advanced searching. You may be able to define the scope of your search, limiting it, for example, to images or to books. Consider the criteria the search engine uses to sort results and how those criteria relate to your research. A search engine that weights results by commercial sponsorship, for example, may provide useful information if you are looking to purchase a product, but the results may prove less useful for scholarly research. Similarly, a search may lead you to the most visited site on a topic, but the site's popularity is no guarantee of its authority or accuracy.

If you know at the outset the exact topic you wish to research, you can perform a keyword search, which produces a listing of sites containing the word or words you specify. To avoid long lists containing many irrelevant sites, be as specific as possible in your terms—thus,