DOCUMENT RESUME

ED 316 230 IR 053 076

AUTHOR	Stebelman, Scott
TITLE	Library Research Guide. Second Edition.
INSTITUTION	George Washington Univ., Washington, D.C.
PUB DATE	89
NOTE	39p.; Some tables and illustrations may not reproduce well due to small type.
PUB TYPE	Guides - Classroom Use - Materials (For Learner) (051)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	*Academic Libraries; Government Publications; Higher Education; *Library Instruction; *Library Skills; Periodicals; *Reference Materials; *Research Tools; *Search Strategies; Student Research; Workbooks

ABSTRACT

Designed to help undergraduate students find information and materials at George Washington University's Gelman Library, this guide teaches skills and concepts necessary to complete a research paper. Further, it is intended to equip students with skills that will help them in business, legal, medical, and other professions where finding information is crucial to job performance. The guide is divided into topical sections addressing six types of research tools: encyclopedias; books; call numbers; periodicals; newspapers; statistical sources; and government documents. Students are instructed about the content and uses of these tools; however, the emphasis is on research strategies. The guide is also designed to function as a diagnostic tool to help teachers determine students' progress on research papers and whether students have retrieved sufficient information and materials to write knowledgeably about their topics. Bibliography worksheets are included, which allow teachers to monitor student progress and suggest sections of the guide for students to examine and use for locating additional information or materials. (SD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED316230

The George Washington University
WASHINGTON DC

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

[X] This document has been reproduced as received from the person or organization originating it

[ ] Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

LIBRARY RESEARCH GUIDE

By
Scott Stebelman

Second Edition
1989

IR 053074

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Scott Stebelman

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
ENCYCLOPEDIAS	6
BOOKS	10
CALL NUMBERS	12
PERIODICALS	14
NEWSPAPERS	19
STATISTICAL RESOURCES	21
GOVERNMENT DOCUMENTS	26
CONCLUSION	29

APPENDICES: WORKSHEETS

BEST COPY AVAILABLE

INTRODUCTION

The Library Research Guide is designed to help you find information and materials in the Gelman Library. Intended primarily for undergraduate students, the Guide will teach you the concepts and skills necessary to complete a research paper. Although you will learn about periodical indexes, government documents, and a variety of other information sources, the most important thing you will be learning is research strategy--what kind of information you need for your topic, and which tools will provide you with it. Unlike many programmed guides you may have used before, the Guide will not present you with questions, for which there is only one correct answer. Rather it will assume (after the proper instruction) that you will be able to decide for yourself which of the resources discussed will be the best information sources for your paper.

The Guide will be a diagnostic aid for your teacher as well as for yourself. It will enable him or her to see what progress you are making on your paper, and whether you have retrieved sufficient information and materials to write knowledgeably about your topic. TO THAT END, WE HAVE INCLUDED A WORKSHEET THAT YOU WILL NEED TO COMPLETE AND TURN IN TO YOUR INSTRUCTOR AS PART OF THIS EXERCISE. If your instructor feels that you have overlooked important sources, he or she will cite the appropriate sections of the Guide for you to examine and to use for locating more information or library materials.

The Guide is divided into six sections:

I. Encyclopedias
II. Books
III. Call Numbers
IV. Periodicals
V. Newspapers
VI. Statistical sources
VII. Government documents

Before you begin reading the different sections, we would like to emphasize the transferability of skills you will be acquiring from this Guide: it will help you do research not only for the course you are taking now, but for other classes you take which require library research. More important, the kind of skills you are going to acquire will help you in business, legal, medical, and numerous other professions, where finding information efficiently and swiftly is critical to job performance.

The nature of library research varies from discipline to discipline. Humanities scholars favor certain kinds of documents and forms of information, while social scientists and scientists prefer others. Before beginning your own library research, you will need first to decide which of these larger disciplines you are working in, then to familiarize yourself with how people do research on topics in that discipline. Once that is done, you will have a better understanding of why you are searching for some materials and not others.

PAPERS ON HUMANITIES TOPICS

The Humanities include the following disciplines: philosophy, literature, religion, art, music, architecture, and theatre. Because humanities research often involves issues and documents which are hundreds or thousands of years old, what has been written many years ago often is as pertinent as something that was published last week. For example, some of the most important research on Shakespeare's Hamlet was written in the first half of this century.

Students doing research in the humanities and who know little about their topic often begin with **ENCYCLOPEDIA** articles. Here they can find background information about a person, a political or philosophical movement, the history of a country, the structure of a sonata--anybody or anything, for that matter, that has had an impact on civilization. Encyclopedia articles are, by their very nature, general introductions to a topic and do not try to provide extensive analyses. One of their most important features, however, is the bibliography found in many articles: these direct the reader to standard books written about the subject.

As mentioned previously, older materials are very important in humanities research. For that reason, humanists rely more heavily on **BOOKS** than do researchers in other disciplines. Books permit a scholar both to review extensively what has been published on a topic and to argue a particular viewpoint in great depth. Books usually provide indexes, which allow readers detailed access to people or specialized subjects discussed by the author.

As important as books are to humanities research, they must be supplemented by **PERIODICAL ARTICLES**. Occasionally the information in books will be superseded, and when this happens, the first place this is recorded is in periodicals. Periodical articles, because of their brevity (rarely do they extend beyond 20 pages) and their narrow focus, enable a writer to analyze an aspect of a topic more fully. When deciding which would be the more useful for your research--books or journal articles--ask yourself, "How narrow is my topic?" If you are writing about Christianity in America during the eighteenth century, you will definitely want to begin with books; if your topic focuses on Southern Catholics during the colonial period, you will want to read the journal literature.

Sometimes **NEWSPAPER ARTICLES** contain information relevant to your topic, although this is generally less true for the humanities than it is for the social sciences or sciences. Newspaper articles document historical and cultural events as they are happening. In the case of some newspapers, such as The New York Times, they are the "newspaper of record," reproducing presidential speeches or important trial testimony. Whether to consult a newspaper is often a moot question in the humanities--someone writing on Plato's Republic obviously has no access to or need of newspapers. If you are interested in the public reaction to your subject, or you believe some factual information will only be found in newspapers of the period, by all means investigate their relevance.

If you are writing on a topic in the humanities, you will want to consult these sections of the Library Research Guide:

Encyclopedias
Books
Call Numbers
Periodical Articles
Newspaper Articles
Government documents

PAPERS ON SOCIAL SCIENCE TOPICS

The Social Sciences include the following disciplines: psychology, sociology, education, economics, business administration, international relations, political science, history, speech communication, journalism, anthropology, criminal justice, and geography. Unlike the humanities, which place a high value on older books and artifacts, the social sciences are concerned primarily with current events and problems. Where humanities scholars focus on imaginative products (for example, Paradise Lost) and speculative questions (such as the nature of Beauty), social

scientists are more interested in phenomena that can be measured. Given their preoccupation with social phenomena, they are particularly interested in how individuals and institutions shape human behavior.

As in the humanities, **ENCYCLOPEDIA** articles can be very valuable in social science research. They permit a researcher to trace the historical significance of a person or movement, to document how an idea originated and evolved within its culture. Even more so than in humanities research, jargon or the technical vocabulary of a discipline is critical to understanding the literature. "Anomie" is a key concept in sociology, but unless you know its meaning you will not grasp much of the contemporary research on alienation. In addition to defining concepts, encyclopedia articles also identify the most important writers on a subject. These will often be listed at the end of the article, in the "Bibliography" section.

The social sciences publish important research in **BOOKS**, which can be useful for summarizing and evaluating previous studies. In many cases, however, **PERIODICAL ARTICLES** are even more important. This is because social science research is heavily dependent upon factual and current information. For example, anyone writing on the impact of oil on the American economy cannot rely on books published even three years ago, given the frequent price fluctuations. The same can be said about computers, Nicaragua, drug abuse, and numerous other contemporary issues. Whatever your social science topic, you will want to consult periodical articles, to ensure that you have the most timely information and data on your topic.

NEWSPAPER ARTICLES are also valuable in social science research. They provide concrete information about events as they occurred; they also reflect the political and cultural biases of their times. Unlike journals or magazines, which are targeted to national audiences, or to groups having highly specialized interests (for example, scientists), newspapers almost always have a regional focus. Thus, if you were writing a paper on the movie industry, which is based in Southern California, you would want to review issues of the Los Angeles Times; if you were writing on the influence of political action committees on Congress, the Washington Post would be an important source for your research. If your topic is very controversial (for example, whether the U.S. should give aid to the Nicaraguan contras), you can enrich your paper by citing editorials from a variety of American newspapers. One important disadvantage newspapers have over other publications is their occasional inaccuracy: because they have to report events quickly, they sometimes do not have the luxury of checking every fact before it gets into print. Books and journal articles, published months or years after an event, can act as corrective checks to newspapers.

In the humanities, the text or artifact is the focus of study. The social sciences, however, have as their texts human beings--how they interact with each other, and how they are affected by their culture. Social science research involves observation that is documentable and statistically reliable. Much more so than the humanities, statistics play a critical role in this process; researchers attempt to generalize about institutions, groups, or individuals by reference to data they have collected. Anyone writing on teenage suicide, for example, would have to learn how frequently it occurs, in which socio-economic groups, whether it affects males more than females, etc. A paper exploring whether Americans are more conservative today than they were 10 years ago would have to consult opinion surveys, election returns, and legislative developments. This information could only be found in **STATISTICAL SOURCES**, some of which are published by private companies, others by the government.

The government is an excellent source not only for statistical information but for information on public policy, consumer affairs, law, foreign affairs, and government sponsored research. You will want to consult **GOVERNMENT DOCUMENTS** if the role of the U.S. government is relevant to your topic--for example, if you were writing on tax reform, it would be useful to read Congressional reports and hearings revealing why Congress, and its experts, thought such reform necessary. You could then compare the objective of the new law with actual changes that have occurred since it was passed. In addition to Congress, the Executive branch--through its departments and agencies--publishes factual and analytical reports on education, crime, and numerous other subjects. The Department of Transportation, for example, has issued important studies on the impact of deregulation on the airlines.

If you are writing on a topic in the social sciences, you will want to consult these sections of the Library Research Guide:

Encyclopedias
Books
Call numbers
Periodical articles
Newspaper articles
Statistical sources
Government documents

PAPERS ON SCIENCE TOPICS

The Sciences include the following disciplines: chemistry, biology, agriculture, engineering, physics, ecology, and computer science. More so than the humanities or social sciences, the sciences restrict themselves to what is observable and measurable. Because observations are constantly being refined or discarded, based on newer and more reliable data, historical documents and theories generally have less value to scientists than they do to researchers in other disciplines. For that reason, scientists rarely seek out information or research that is more than a few years old.

Depending on the narrowness of your topic, and how much you already know about it, you may want to begin your research consulting **ENCYCLOPEDIA** articles. Because of the technical language used in scientific literature, it is sometimes necessary to find an article that defines the most important terms associated with your topic. For example, if you were researching "nuclear reactors," you would need to understand terms such as "breeder reactor," "meltdown," etc. In the process of reading essays defining these terms, you would also obtain a valuable overview of your topic--its history, the key people relevant to it, and the most important books that have been written about it. General encyclopedias, such as the Encyclopedia Americana and the Encyclopaedia Britannica, will sometimes provide this information. However, if your topic is very technical, you may need to consult subject encyclopedias, such as The McGraw-Hill Encyclopedia of Science and Technology. Explanations on how to find and use these encyclopedias are located in the "Encyclopedia" section of this guide.

BOOKS can be useful sources of information in the sciences, especially if your topic is broad enough (for example, AIDS or solar energy) that a publication of 200-300 pages can be devoted to it. However, because of the narrow and highly focused nature of much scientific research, and because science, more than any other discipline, is dependent upon current information, books are often not the best sources for researchers. To use AIDS as an example again, any book published before 1986 would not contain information about newly discovered drugs that fight the virus. More current information would be found in **PERIODICAL ARTICLES**, which are often published weekly and announce the latest developments in an area. You will definitely want to examine the periodical literature if you are researching a scientific subject.

As a supplement to periodical articles, **NEWSPAPER ARTICLES** may be important to your research for two reasons: they can summarize and translate into non-technical language important developments on a topic; and they can reflect public concerns associated with the issue. If you were writing on acid rain, for example, you would want information on the numerous consumer groups that have lobbied the government about the problem. And with AIDS you might want access to surveys on whether people have changed their sexual behaviors as a result of the disease. Often newspapers will cite the source of their information (such as a journal article or government report), and you will want to read these original sources to ensure that all the facts reported in the newspaper are accurate (note: newspapers, summarizing lengthy reports in a few words, sometimes fail to include important qualifications about the research. Never rely exclusively on newspaper articles when investigating a scientific issue).

As with the social sciences, **STATISTICAL RESOURCES** play an important role in scientific research. Whether you are writing on space research, genetic engineering, or computer technology, you need to support every assertion and generalization about your topic with concrete, factual information. It is unacceptable to say America is spending a vast amount of money for SDI ("Star Wars") but provide no precise figures; it is also unacceptable to say that food additives are harmful to the public and not mention how many people they have injured. Statistical information will also be helpful to you in determining whether an author's claims are true or unfounded; if reports from objective sources contradict these claims, then an author's arguments are seriously undermined.

Often the most extensive statistical information is published by governmental bodies, in the form of **GOVERNMENT DOCUMENTS**. In order to legislate, Congress needs testimony from expert witnesses, be it on air pollution or swine flu fever. This expert testimony can be found in government reports and hearings; it can also be found in reports published by government agencies. Aside from the factual information contained in government documents, they are excellent tools for tracing the evolution of public policy. For example, if you were writing on anti-smoking legislation and regulations, you would want to examine government documents from the 1960's to the present.

If you are writing on a topic in the sciences, you will want to consult these sections of the Library Research Guide:

Encyclopedias
Books
Call numbers
Periodical articles
Newspapers
Statistical sources
Government documents

ENCYCLOPEDIAS

Encyclopedias are useful when you need a general introduction or broad overview of your topic. For example, if you were writing a paper on poverty and the aged, an encyclopedia could help you learn the average income level of older people, special medical problems they have, and the extent of their political power. In addition to providing you with this factual information, an encyclopedia, if it has a bibliography, can lead you to other books or articles on the topic.

There are two kinds of encyclopedias: general, and subject specific. General encyclopedias include The Encyclopaedia Britannica, Encyclopedia Americana, and Collier's Encyclopedia. Because they write on subjects in every conceivable discipline, their essays are relatively brief and have non-technical language.

Subject specific encyclopedias limit themselves to a specific area (such as Engineering). As a result, their articles are more detailed than general encyclopedias, and their language more technical. In cases where the topic is controversial, such as "Abortion," they will try to provide arguments for and against. Their bibliographies also tend to be more extensive than those found in general encyclopedias, another reason to consult them if one exists on your topic.

Some of the more popular subject specific encyclopedias are:

Encyclopedia of Bioethics (REF QH 332 .E52)
(especially good for abortion, aging, euthanasia, genetic engineering, and other contemporary issues that have a medical flavor; be aware, however, that it was published in 1978)
McGraw-Hill Encyclopedia of Science and Technology
(REF Q 121 .M3)
International Encyclopedia of the Social Sciences
(REF H 40 .A2I5) (note its publication date of 1968; some of the information may be dated, depending upon significant changes in your area)
Encyclopedia of Psychology (REF BF 31 .E52 1984)
Encyclopedia of Philosophy (REF B 51 .E3)
The New Grove Dictionary of Music and Musicians
(REF ML 100 .N48)
Encyclopedia of Educational Research
(REF L 901 .E57 1982)

If you do not find an encyclopedia listed here related to your topic, consult ARBA Guide to Subject Encyclopedias and Dictionaries (REF AE1 .A72 1986 - shelved in Ready Reference collection) for additional titles.

NOTE: SOME SUBJECT SPECIFIC ENCYCLOPEDIAS WERE PUBLISHED 10 OR 20 YEARS AGO, THUS THEIR INFORMATION IS NOT VERY CURRENT. THIS MAY NOT BE A PROBLEM IF YOUR TOPIC IS SHAKESPEARE, BUT IT CERTAINLY WOULD BE IF YOU WERE WRITING ABOUT COMPUTERS. IN THE LATTER CASE, YOU DEFINITELY WOULD WANT TO CONSULT BOOKS AND ESPECIALLY PERIODICAL INDEXES FOR MORE CURRENT INFORMATION.

Articles relevant to your subject can be found in two ways--through the volume containing the relevant part of the alphabet (for example, the Ns for "nuclear energy") and through the index volume, which is the last volume of the set. Below are illustrations of how the volumes can be used:

NUBIAN DESERT 14:278
  map (20° 30'N 33° 0'E) 18:320
NUCKOLLS (county in Nebraska)
  map (40° 10'N 98° 0'W) 14:70
NUCLA (Colorado)
  map (38° 16'N 108° 33'W) 5:116
NUCLEAR CHEMISTRY
  chemistry 4:523
NUCLEAR ENERGY 14:278–284
    bibliog., illus., table
  atomic bomb 2:307–308
  Bacher, Robert Fox 3:11
  Bhabha, Homi Jehangir 3:233
  consumption
    fuel 8:353 *table*
  energy sources 7:175 *table*
  environmental health 7:212
  fallout 8:14
  fission, nuclear 8:129
  fuel 8:352; 14:278
  fusion, nuclear 8:381–382
  fusion energy 8:382–383
  history 14:279
  hydrogen bomb 18:339–340
  International Atomic Energy Agency
    11:218–219
  isotope 11:301
  major generating stations, U.S.
    15:482 *map*
  Nuclear Regulatory Commission
    14:287–288
  plutonium 15:373
  pollution, environmental 15:411–414
  proton-proton reaction 15:378–379
  research institutions
    Lawrence Berkeley and Lawrence Livermore laboratories 12:251
    Los Alamos National Scientific Laboratory 12:416
  rockets and missiles 16:260
  role of 14:283–284
  scientific basis 14:278–279
  ship 17:275
    icebreaker 11:16
    Nautilus 14:52
    submarine 18:314–316 *illus.*
  SNAP 17:383–384
  technology, history of 19:68–69
  tokamak 19:223
  uranium 19:477
  uranium minerals 19:478
  waste disposal
    Nevada 14:113
    nuclear waste disposal 14:282
NUCLEAR ENERGY REACTOR *see* NUCLEAR REACTOR
NUCLEAR FAMILY 14:284 *bibliog.*
  adolescence 1:107
  extended family 7:341
  family 8:15–18 *illus.*
  monogamy 13:516

nuclear energy

SCIENTIFIC BASIS OF NUCLEAR ENERGY

The nucleus is the small and dense central core of the atom. It is constructed of a tightly packed array of positively charged protons and neutral, or uncharged, neutrons. The nucleus is held together by nuclear forces, which differ from such other forces as gravity or electromagnetic force in their strength and in their dependence on the arrangement of particles. To divide a nucleus into two parts requires the injection of energy, for example, by bombardment of the nucleus with another particle. Under proper conditions this bombardment will initiate an energy-producing chain reaction.

The amount of energy obtained from a nuclear reaction is calculated by use of Einstein's relativity equation, $E = mc^2$, which expresses the equivalence of mass and energy. Here the mass m is in kilograms, c is the speed of light (3.0×10^8 m/sec, or 9.8×10^8 ft/sec), and the energy E is in joules (watt-seconds). The amount of energy is often expressed in a unit known as the electron volt (eV), the amount of energy imparted to an electron by accelerating it through a potential difference of one volt. One electron volt is a small amount of energy; it takes 2.25×10^{25} eV to give 1 kilowatt hour (kW h), which is equivalent to the energy per hour of ten 100-watt light bulbs. For a typical chemical reaction, the energy released (at the molecular level) is of the order of electron volts. For example, when an electron combines with a proton to form a hydrogen atom, an energy of 13.5 eV is released. In contrast, the energy from a nuclear reaction is enormous. When a proton and a neutron combine in a fusion reaction to form the nucleus of deuterium (a form of hydrogen), the energy released is 2.2 million eV (2.2 MeV). When a heavy nucleus splits into two parts, the energy released is on the order of 200 MeV per fission.

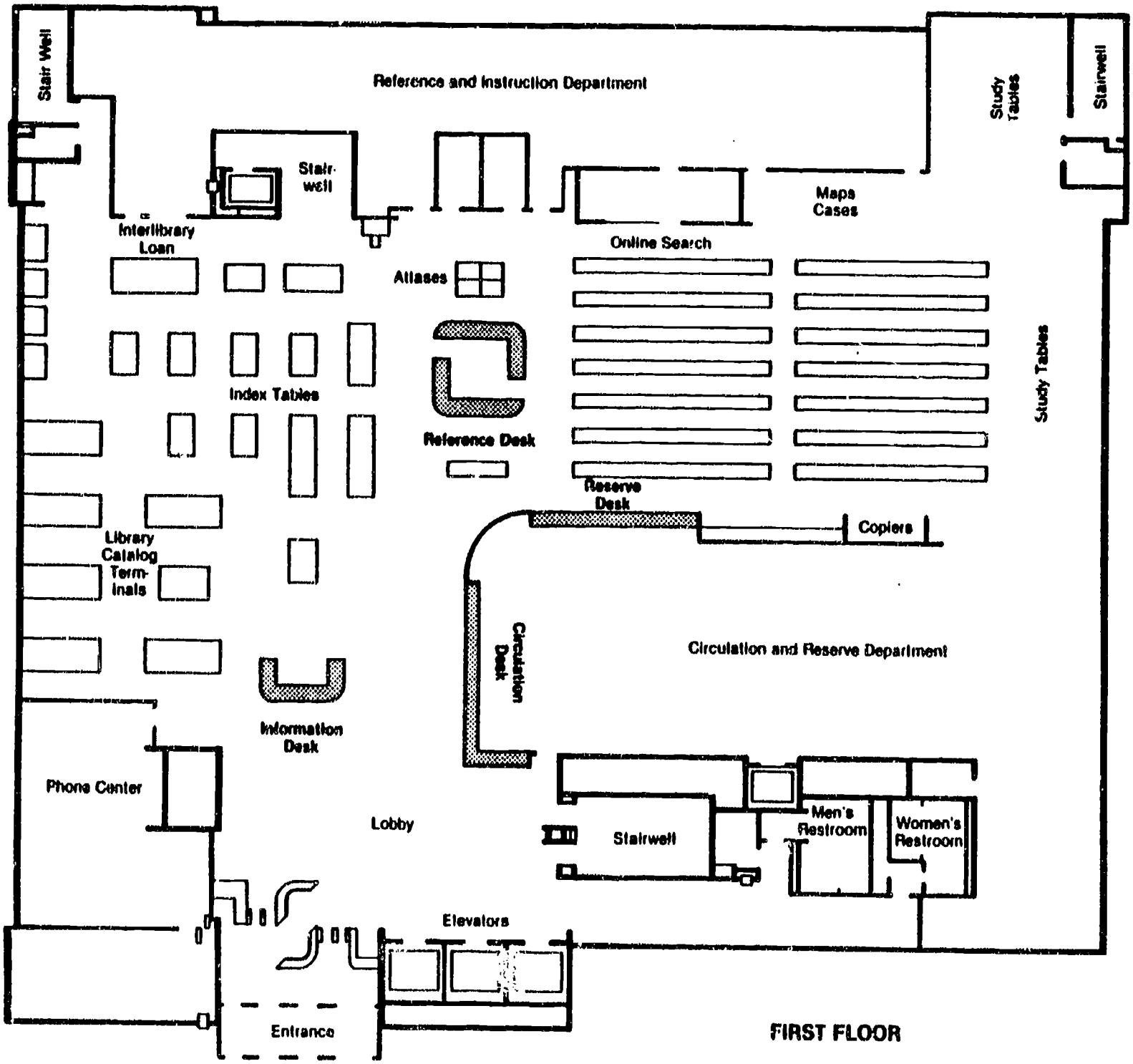
As the result of concern over nuclear safety, changes in government, or financial constraints, many countries have abandoned nuclear energy. Austria completed a nuclear power reactor, but a public referendum (1978) succeeded in closing the plant. Mexico relinquished its plans for two reactors because of the disastrous 1982 devaluation of the peso. Designs for a large-scale nuclear industry in Iran evaporated after the revolution of 1979, although the present government may be attempting to revive them. In the United States a 1983 ruling by the Supreme Court allows a state to ban future nuclear power plants on the basis of questions about their economic viability, casting further doubts on prospects for the industry. The ruling was derived from a 1976 California moratorium on nuclear-plant construction; since then, five other states—Maine, Connecticut, Massachusetts, Maryland, and Oregon—have also passed laws limiting plant development, and no new reactors at all have been ordered since 1978.

Bibliography: Asimov, Isaac, *Worlds within Worlds: The Story of Nuclear Energy* (1980); Aviel, S. D., *The Politics of Nuclear Energy* (1982); Diamant, R. M., *Atomic Energy* (1982); Falk, Jim, *Global Fissions: The Battle over Nuclear Power* (1983); Ford, Daniel, *Three Mile Island* (1982); Kiefer, Irene, *Nuclear Energy at the Crossroads* (1982); Medvedev, Zhores A., *Nuclear Disaster in the Urals* (1979); Pentreath, R. J., *Nuclear Power, Man and the Environment* (1981); Seaborg, Glenn T., and Corliss, W. R., *Man and Atom* (1971).

Note that the essay has a bibliography on the subject. You will want to consult the compact disc catalog for items cited in these bibliographies because the authors are usually major authorities in their fields.

General encyclopedias begin with an AE5 call number and are shelved at the beginning of the Reference Collection. Subject specific encyclopedias, which are also shelved in the Reference Collection, have unique call numbers; to determine the exact number, see the examples cited in this section, or consult the title index of the compact disk catalog.

To learn how to find books in the Gelman Library, turn to the next section.


Stair Well
Reference and Instruction Department
Study Tables
Stairwell
Stair-well
Maps Cases
Interlibrary Loan
Online Search
Atlases
Index Tables
Reference Desk
Study Tables
Reserve Desk
Copiers
Library Catalog Term-inals
Circulation Desk
Circulation and Reserve Department
Information Desk
Phone Center
Lobby
Stairwell
Men's Restroom
Women's Restroom
Elevators
Entrance
FIRST FLOOR

BOOKS

To determine whether the Gelman Library has any books on your topic, you will need to consult the compact disk catalog. Unlike conventional catalogs, which display information on printed cards, the compact disk catalog stores information on compact disks. These disks are searchable through microcomputers, most of which are located on the first floor.

The Catalog is divided into five major indexes: Author, Title, Subject, Call Number (found in the "Other" index), and Combined Index. Doing author or title searches is fairly simple. First choose the specific index you want to search (for example, title index), then type the relevant words. For example, to see if the library has William Faulkner's The Sound and the Fury, you could type:

SOUND FURY
or
FURY SOUND

You can type the words in any order and you don't need to use "and" to link words--the computer assumes you want all of them to appear in the title.

Similarly, if you wanted to search the book by author, you could switch to the author index and type:

WILLIAM FAULKNER
or
FAULKNER WILLIAM

Since Faulkner wrote several novels, you will have to scan all the works listed under Faulkner until you come to The Sound and the Fury.

Subject searches are a bit more complicated. Like searching the author or title indexes, you can search by relevant words. For example, if you wanted to find out if Gelman owned any books on "France," you could type that word. However, if you are searching a subject as broad as "France," you will retrieve too many records, many of which will not be useful for your paper. Often you will have to narrow broad topics to specific subareas, such as "France History" or "France Literature". Sometimes you may need to narrow it down to a second subarea--for example, "France History 1800-1900." The compact disk catalog will help you narrow your search by showing you all the subheadings under a particular subject.

The compact disk catalog, like many library catalogs, derives its subject terms from the Library of Congress Subject Headings. These books are located near the Reference Desk and list both the appropriate term for a topic and any related terms that might provide additional titles. In the event that you are unsure what the appropriate subject term is for your topic, the subject index can verify the correct term. A search in the subject index for "parochial schools" would yield this result:

*Parochial schools
see:
Church schools

The "see" reference directs you to the correct subject term, "Church schools."
If you were to search "Church schools," the compact disk catalog would display:

*Church schools

See also:
Church colleges.
Vacation Schools, Christian.

Note the "see also" terms--if you were to search them as well, you would find additional books on the subject of "Church schools."

Occasionally you may want to search a single word or several words in a variety of indexes. To do that, you will have to select the Combined Index. For example, to search The Sound and the Fury, you could type relevant words in the Author and Title Indexes:

TITLE:SOUND
AUTHOR: FAULKNER
SUBJECT:

Or to search "Group Leadership" (which is not a Library of Congress Subject Heading), you could type "Group" in the title index and "Leadership" (which is an LC subject heading) in the subject index

TITLE: GROUP
AUTHOR:
SUBJECT: LEADERSHIP

This section has discussed only the most basic aspects of searching the compact disk catalog. For additional information, consult the guides next to the computer terminals.

CALL NUMBERS

The books in the Gelman Library are arranged on the shelves according to a classification system created by the Library of Congress. This system is more detailed than the Dewey Decimal System typically used in high school and public libraries, and is used by most academic libraries. Because the LC system uses 21 letters of the alphabet and all 9 numbers plus 0 (zero), the call number for a book is very specific as to the book's contents and is unique to that particular book. Essentially, the call number is the book's address in the library.

The Library of Congress classification system in broad outline:

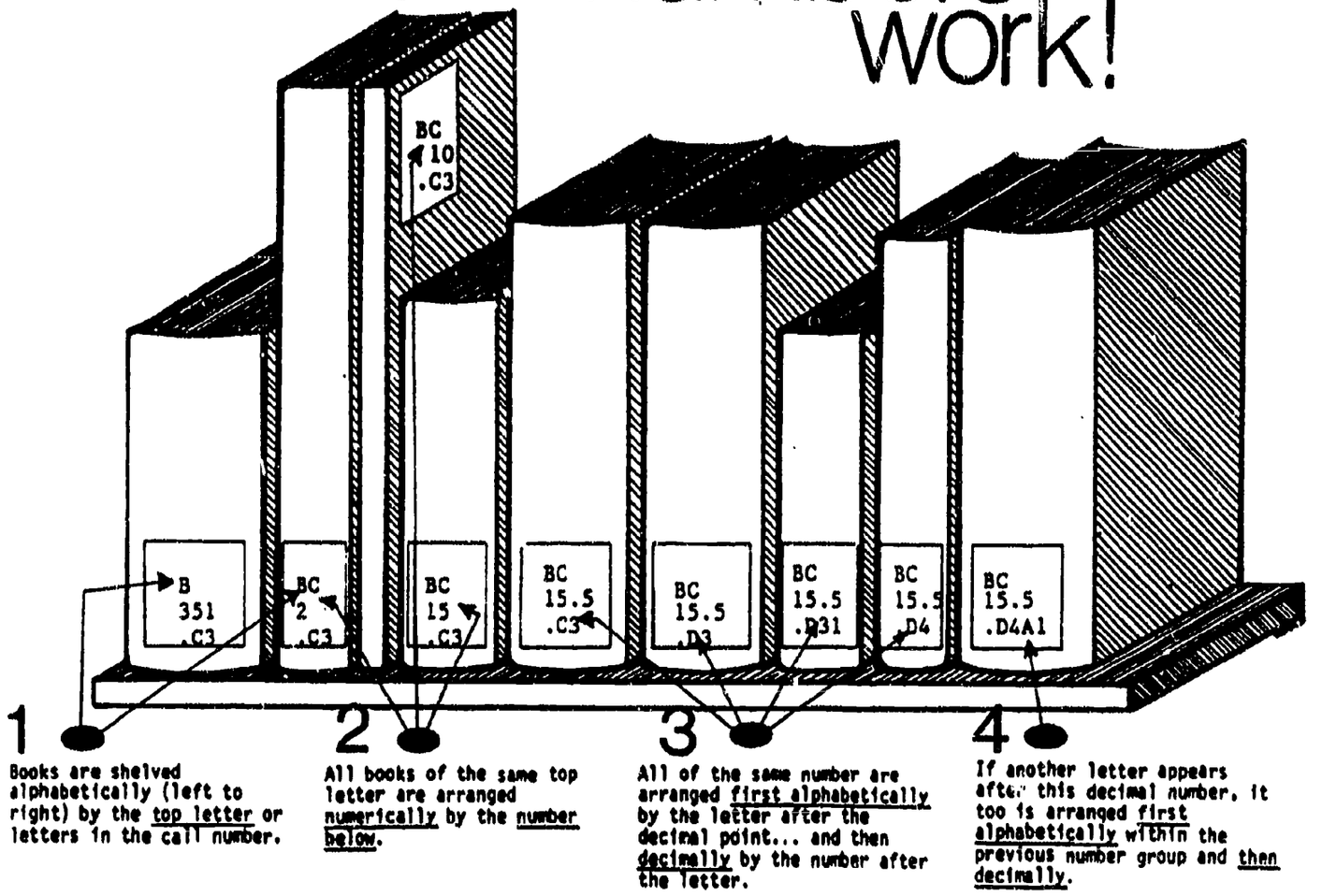
A	General Works
B	Philosophy, Psychology, Religion
C	Auxiliary Sciences of History
D	History: General and Old World
E,F	History: American (Northern Hemisphere)
G	Geography, anthropology, recreation
H	Social Sciences
J	Political Science
K	Law
L	Education
M	Music
N	Fine Arts
P	Literature
Q	Science
R	Medicine
S	Agriculture
T	Technology
U	Military Science
V	Naval Science
Z	Bibliography and Library Science

With the addition of another letter of the alphabet, the broad category can be narrowed. For example:

H	Social Sciences	Q	Science
HA	Statistics	QA	Mathematics
HB	Economics	QC	Physics
HF	Business	QD	Chemistry
HM	Sociology	QH	Natural History
HQ	Sex relations, Family, Marriage, Home	QK	Botany
HV	Social Pathology, charities, corrections	QL	Zoology
HX	Socialism, Communism, Anarchism		

Each call number has three lines. Each line provides information leading to the book's relative placement on the shelf.

how call numbers work!



POINTS TO REMEMBER

You must have the complete call number (i.e., all the letters and numbers) on order to find a book in the library. Books which can be checked out of the Gelman Library are shelved on the Fourth and Fifth floors. Books whose call numbers begin with the letters A-JV are on the Fourth Floor; JX-Z are on the Fifth Floor. Some call numbers are preceded by special prefixes or followed by alocation code. These materials are located on other floors.

Code	Location
REF	Reference Collection, First Floor
SPEC	Special Collections, Second Floor
SSIC or ISSS	Sino-Soviet Information Center, Sixth Floor
AUDIOCASSETTE SOUND RECORDING FILM STRIP VIDEO RECORDING	Media Resources, Lower Level

PERIODICALS

Periodicals are an especially important publication format. The information they contain is usually more current than that found in books or encyclopedia articles; their scope is also narrower, allowing them to cover specialized topics in greater depth. Two types of periodicals are commonly published--magazines and journals. Magazines, such as Time, McCalls, and the New Republic, are written for the general public. They are rarely footnoted, contain few technical terms, and are written by journalists rather than by scholars. Magazines are often published weekly, making them (next to newspapers) the most timely source for information.

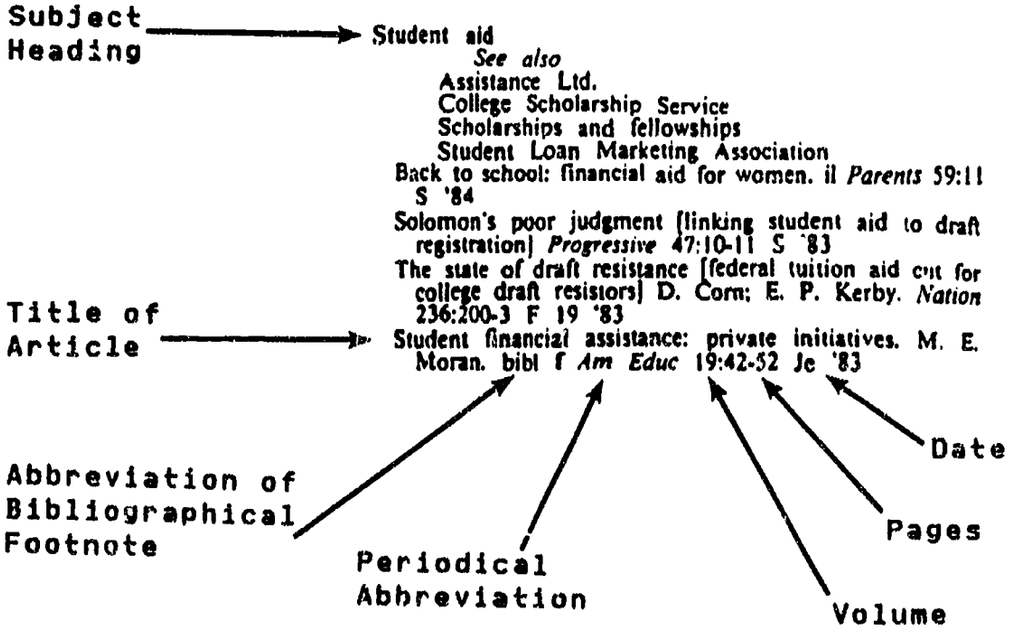
Journals, on the other hand, are published less often (usually two to four times a year) and are written by academic experts in the area. Because their audience is scholarly, journal articles are usually footnoted, providing evidence for the writer's opinion and directing the reader to further materials on the subject. In a sense, the footnotes of an article are tantamount to a bibliography you might find in a book.

Periodical indexes, like encyclopedias, can be divided into two groups: general and subject specific. The most popular general index is Readers' Guide to Periodical Literature, which indexes the contents of over 50 magazines. Subject specific indexes focus on the journals of a particular discipline, such as Sociology or Religion. Representative titles include Music Index, Art Index, Business Periodicals Index, and Applied Science and Technology Index.

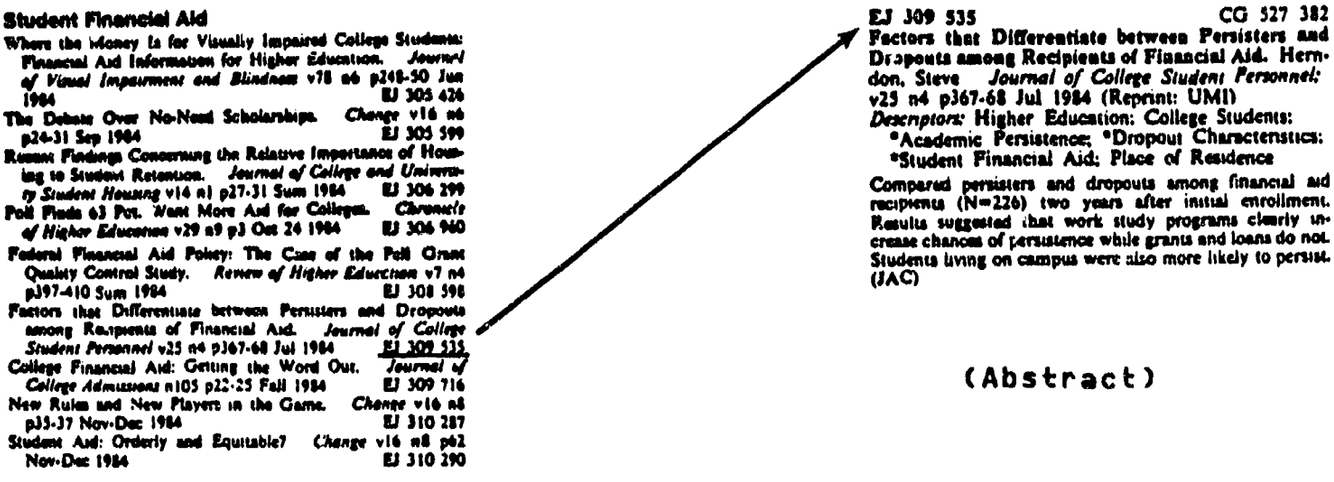
Sometimes indexes will provide a brief summary of the articles listed. In this case the index is more properly called an ABSTRACTING SERVICE and is published in two parts--Part I is usually the section containing the citations and their abstracts; Part II provides subject access to the articles in Part I.

Below are sample references excerpted from an index and abstract.

INDEX (Readers' Guide)



ABSTRACTING SERVICE (ERIC)



Student Financial Aid

Where the Money Is for Visually Impaired College Students: Financial Aid Information for Higher Education. *Journal of Visual Impairment and Blindness* v78 n6 p248-50 Jun 1984 EJ 305 426

The Debate Over No-Need Scholarships. *Change* v16 n6 p24-31 Sep 1984 EJ 305 599

Recent Findings Concerning the Relative Importance of Housing to Student Retention. *Journal of College and University Student Housing* v14 n1 p27-31 Sum 1984 EJ 306 299

Poll Finds 63 Pct. Want More Aid for Colleges. *Chronicle of Higher Education* v29 n9 p3 Oct 24 1984 EJ 306 960

Federal Financial Aid Policy: The Case of the Pell Grant Quality Control Study. *Review of Higher Education* v7 n4 p397-410 Sum 1984 EJ 308 598

Factors that Differentiate between Persisters and Dropouts among Recipients of Financial Aid. *Journal of College Student Personnel* v25 n4 p367-68 Jul 1984 EJ 309 535

College Financial Aid: Getting the Word Out. *Journal of College Admissions* n105 p22-25 Fall 1984 EJ 309 716

New Rules and New Players in the Game. *Change* v16 n8 p35-37 Nov-Dec 1984 EJ 310 287

Student Aid: Orderly and Equitable? *Change* v16 n8 p62 Nov-Dec 1984 EJ 310 290

(Index)

EJ 309 535 CG 527 382

Factors that Differentiate between Persisters and Dropouts among Recipients of Financial Aid. Herndon, Steve *Journal of College Student Personnel:* v25 n4 p367-68 Jul 1984 (Reprint: UMI)

Descriptors: Higher Education; College Students; *Academic Persistence; *Dropout Characteristics; *Student Financial Aid; Place of Residence

Compared persisters and dropouts among financial aid recipients (N=226) two years after initial enrollment. Results suggested that work study programs clearly increase chances of persistence while grants and loans do not. Students living on campus were also more likely to persist. (JAC)

(Abstract)

In many cases a periodical title will be abbreviated in these citations. Since the library lists only the full names of periodicals, you will want to consult the abbreviations section (at the beginning of the index) for the exact title. It will also spell out abbreviations for bibliographic formats, such as "bibl", (bibliography) "por" (portrait), and "il" (illustrated).

A common question students ask is, "How do I know which indexes or abstracts will cite articles on my topic?" Most libraries will provide a list, by subject, of the most frequently consulted indexes they own. At Gelman the library staff has provided a rather extensive list in the guide entitled, Selected List of Indexes and Abstracts at the Gelman Library (located at the Reference Desk). If you check the Table of Contents, you will notice that the indexes are grouped by broad disciplines, such as Literature, Medical, Political Science, and Business You will need to determine which of these broad subjects is most relevant to your topic. For example, if you were writing a paper on "Abortion," and were interested in the social aspects of the issue, you would turn to the pages listed under "Sociology" or "Social Science--General." If you wanted to read philosophical arguments in favor or against abortion, you could turn to the indexes listed under "Philosophy"; finally, if you wanted medical explanations of different abortion procedures, you would turn to the indexes listed under "Medical."

Because periodical literature provides especially current information on your topic, you are strongly encouraged to use an index or abstracting service in compiling your bibliography. One note of caution, however: if you have chosen a topic for which there is extensive research, do not limit yourself to Readers' Guide to Periodical Literature. Instead, use indexes which concentrate on scholarly journals. Conversely, if you are writing on a topic and want to know how the general public views it (as represented by popular magazines), or the event is so current that there will not be much information in journals, you will want to consult Readers' Guide for additional magazine references.

Here are some brief guidelines for determining when to consult MAGAZINES and JOURNALS:

Consult MAGAZINES when:

1. Your topic is very current.
2. You want discussions in non-technical language.

3. You are doing research on popular culture and want to gauge the values of a period (for example, the 1950's).

Consult JOURNALS when:

1. You need analysis from an expert in the area.
2. You need to cite factual or statistical information.
3. You need additional book or journal references, which will be found in footnotes.

Finally, we should like to draw attention to several indexes which have both print and computer editions. The computer editions allow you to combine subject terms, to limit your search to specific years, to search key authors, and to do numerous other things that cannot easily be matched by the print editions. The Gelman Library subscribes to the following computer indexes (published on compact disks) which are free and housed in the Reference area: PsycLIT (psychology), ERIC (education) and ABI/INFORM (business). Because these computer versions are fairly easy to use, and have instructions posted by their respective terminals, we will not repeat any of that information here.

Numerous other computer indexes, covering a variety of disciplines, are owned by private companies and can be searched (for a fee) by the student. The least expensive system is known as Knowledge Index and is available evenings by appointment. For more information, and to schedule an appointment, inquire at the Reference desk.

If you are writing on a topic covered by one of the computer indexes, we encourage you to try them and see how quickly relevant literature can be identified.

LOCATING PERIODICALS THROUGH THE SERIALS LIST

After you have used the most appropriate periodical index(es) to find articles on your topic, you will need to use the Serials List. This will tell you whether Gelman Library owns the periodicals listed in the index(es). There are five copies of the Serials List in the Reference Department, one at the Information Desk, and several on the third floor.

SERIALS LIST
SAMPLE ENTRY

Gelman has all issues of Newsweek--some in paper, some in microfiche, some in microfilm. There is a separate record for each format:

Title

Paper
Gelman has no bound back issues.

MICROFICHE
Volume number
Year.

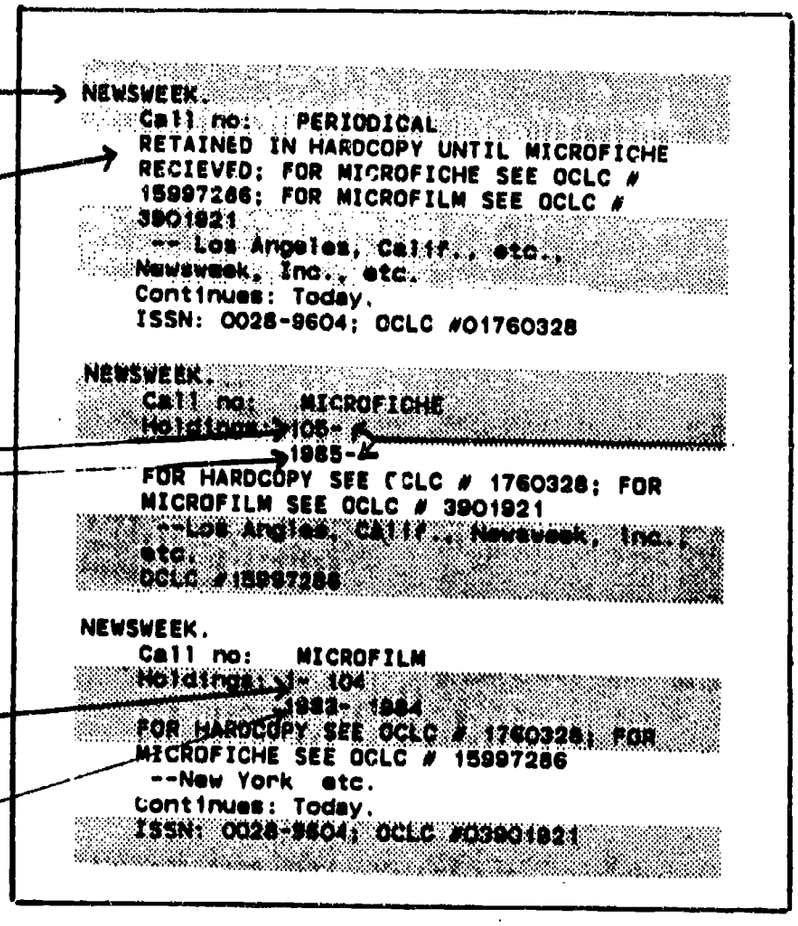
MICROFILM
These volumes are on microfilm.

They confirm these years

```
NEWSWEEK.
    Call no:   PERIODICAL
    RETAINED IN HARDCOPY UNTIL MICROFICHE
    RECIEVED; FOR MICROFICHE SEE OCLC #
    15997286; FOR MICROFILM SEE OCLC #
    3901921
     -- Los Angeles, Calif., etc.,
    Newsweek, Inc., etc.
    Continues: Today.
    ISSN: 0028-9604; OCLC #01760328

NEWSWEEK.
    Call no:   MICROFICHE
    Holdings: 105-
              1985-
    FOR HARDCOPY SEE OCLC # 1760328; FOR
    MICROFILM SEE OCLC # 3901921
     --Los Angles, Calif., Newsweek, Inc.,
    etc.
    OCLC #15997286

NEWSWEEK.
    Call no:   MICROFILM
    Holdings: 1- 104
              1982- 1984
    FOR HARDCOPY SEE OCLC # 1760328; FOR
    MICROFICHE SEE OCLC # 15997286
     --New York  etc.
    Continues: Today.
    ISSN: 0028-9604; OCLC #03901921
```



The hyphen (-) shows that the periodical is currently being received.

The CALL NUMBER tells the location. Examples:

Call Number	Location
PERIODICAL	3rd Floor
MICROFILM	3rd Floor
MICROFICHE	3rd Floor
REF QC 983 .U5	Reference Department, 1st Floor
SPEC F 731 .M62	Special Collections, 2nd Floor
SINO-SOVIET PERIODICAL	Sino-Soviet Information Center, 6th Floor
QA 3. B95	Stacks (A-JV, 4th floor; JX-Z, 5th floor)

Note: Most periodicals, whether they are published in print or microform, are housed on the third floor. Current periodicals are shelved in one section, bound (older) periodicals in another, and most microform titles in a third area. A few frequently used titles, however, are located behind the Third Floor Desk. Check with library staff if you have any questions about a specific title.

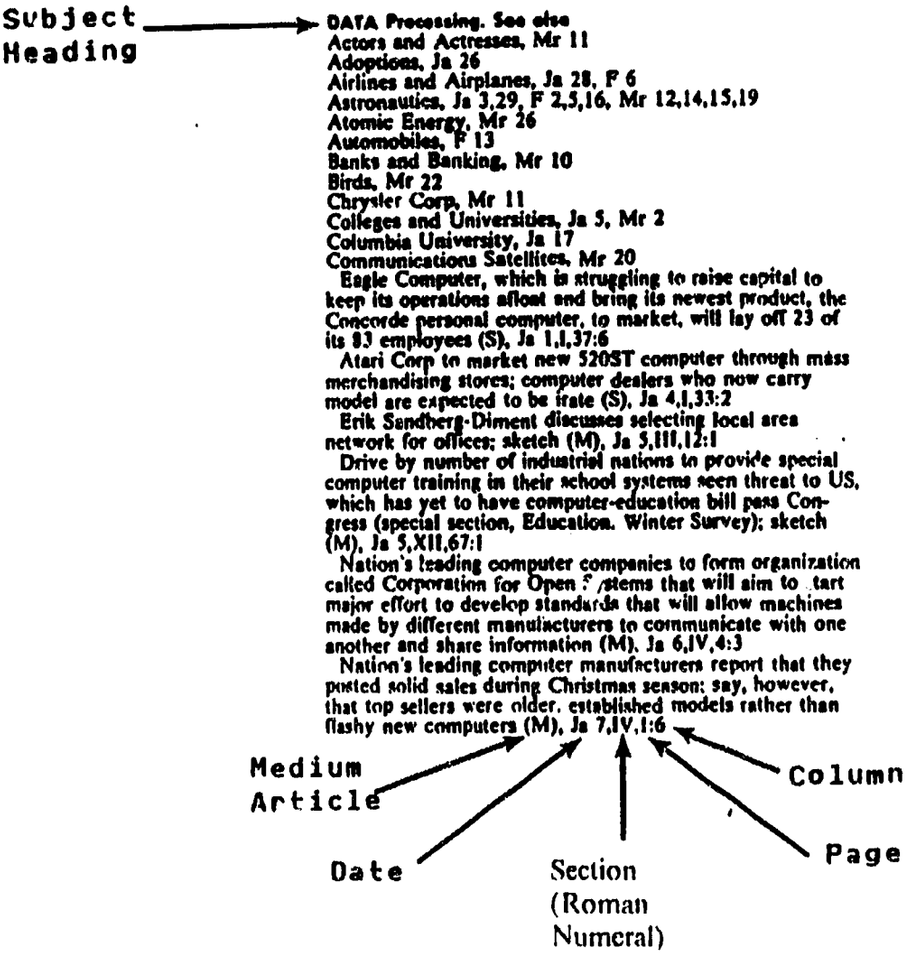
Microform Collections and Equipment
Photocopy Center
Closed Collection
Elevators
Men's Rest Room
Women's Rest Room
Stairs
Pre-Shelving
Service Desk
Newspapers
Self-Service Photo Copying Center
Study Tables
Bound Periodicals
Bound Periodicals
Current/Unbound Periodicals
Study Tables
Study Tables
Emergency Exit
Emergency Exit

THIRD FLOOR

NEWSPAPERS

Although periodicals are timely sources of information, the information they contain is not as current as that found in newspapers, which are published daily. From the nuclear disaster at Chernobyl to Congressional elections, it is newspapers that provide the swiftest and most extensive print coverage of events. Some newspapers, such as The New York Times, are newspapers of record, publishing the speeches of government officials or the texts of important court decisions. In cases where the event has regional significance and interest, local newspapers will often provide the best coverage available (an example is the Washington Post's coverage of Watergate).

Like periodicals, subject access to newspapers is best provided through indexes. To find out which newspaper indexes the library owns, turn to the "newspapers" section of Selected List of Indexes and Abstracts in the Gelman Library. A sample entry from a newspaper index appears below:



In the example above, note the "see also" references. They direct the reader to related stories in other sections of the index. Thus the January 28 article on "Airlines and Airplanes" will be found in that section. NOTE: ALL ENTRIES ARE ARRANGED CHRONOLOGICALLY UNDER EACH HEADING, SO THE JANUARY ENTRIES WILL APPEAR AT THE BEGINNING, THE JULY IN THE MIDDLE, ETC.

BEST COPY AVAILABLE

Not all indexes have the same symbols and notations, so if you do not understand how to read an entry, check the Preface or Introduction of the Index; it will explain how to interpret each part of the entry.

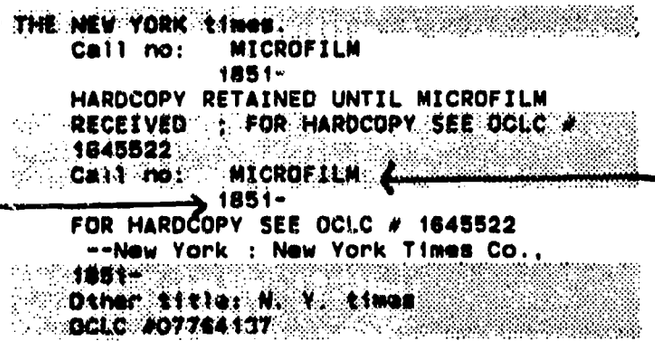
Although the newspapers mentioned above have print indexes, the library also owns the National Newspaper Index, which is published on microfilm and stored in a microfilm reader located in the Reference area. There are two advantages to using National Newspaper Index over the printed indexes: National Newspaper Index indexes five newspapers (the New York Times, the Wall Street Journal, the Los Angeles Times, the Christian Science Monitor, and the Washington Post) rather than only one; and it cumulates, in three year periods, the citations to news stories. This allows you to follow a topic over an extended period of time and compare coverage in several sources.

LOCATING NEWSPAPERS THROUGH THE SERIALS LIST

Like periodicals, newspapers are published on an ongoing basis and listed in the Serials List (located at the Reference Desk and on the Third Floor). Below is the entry for the New York Times:

Title

Located on the third floor



1851- Indicates that the library owns all issues from 1851 to the present

Back issues are on microfilm, located in the microforms room, third floor

Older issues of major newspapers are available on microfilm, which can be found in the Microforms Room on the Third Floor. Microforms can be photocopied.

Current issues of newspapers are kept in a separate section on the Third Floor. (for a map of this area, see page 18).

STATISTICAL RESOURCES

Statistical data are often very important in social science and science research. If you are going to argue that solar energy is more efficient than coal, or that single parent families are increasing, you will need to cite evidence to support your position. Much of this evidence can be found in reports published by the government, such as those by the Department of Labor or the Bureau of the Census. For data on other countries, the United Nations and its agencies are excellent sources of information. The tools that will be discussed in this section are: general almanacs, Statistical Abstract of the United States, American Statistics Index, United Nations Statistical Yearbook, United Nations Demographic Yearbook, and Europa Yearbook.

Many people use almanacs to answer simple factual questions such as "What is the capital of Iowa?," or "When was Andrew Jackson born?" Almanacs, however, are excellent sources for statistical information, and they are easy to use. The World Almanac (REF AY67 .N5 W7) and Information Please Almanac (REF AY 64 .I55) are two of the most popular almanacs published. Data are grouped into broad categories, such as "Education" or "Nations." For very narrow areas, you should consult the indexes to find the exact page where a particular statistic will be found. Below is a page from The World Almanac, showing the number of marriages and divorces in the United States:

Marine disasters 687
Maritime Day, Nat'l. 754
Market price indexes 105
Marquesas Islands (Fr.) 530, 560
Marriage—
Age, lawful, by state 85
Blood test requirements 85
Canada—
Requirements 84
Statistics 706
Number, rate 779, 784
Tax penalty 40
Wedding anniversary list 84
Mars (planet) 721, 729
Morning, evening star (1988) 733
Positions by month (1988) 717-719
Rising, setting (1988) 725
Viking I and II (1976) 484
Marshall, Thurgood (1967) 482
Marshall Islands 530, 658-659
Marshall Plan (1947) 480
Martinique 530, 560
Maryland 641

Marriages, Divorces, and Rates in the U.S.

Source: National Center for Health Statistics, Public Health Service

Data refer only to events occurring within the United States, including Alaska and Hawaii beginning with 1960. Rates per 1,000 population.

Year	Marriages[1] No.	Marriages[1] Rate	Divorces[2] No.	Divorces[2] Rate	Year	Marriages[1] No.	Marriages[1] Rate	Divorces[2] No.	Divorces[2] Rate
1890	570,000	9.0	33,461	0.5	1945	1,612,992	12.2	485,000	3.5
1895	620,000	8.9	40,387	0.6	1950	1,667,231	11.1	385,144	2.6
1900	709,000	9.3	55,751	0.7	1955	1,531,000	9.3	377,000	2.3
1905	842,000	10.0	67,976	0.8	1960	1,523,000	8.5	393,000	2.2
1910	948,166	10.3	83,045	0.9	1965	1,800,000	9.3	479,000	2.5
1915	1,007,595	10.0	104,298	1.0	1970	2,158,802	10.6	708,000	3.5
1920	1,274,476	12.0	170,505	1.6	1975	2,152,662	10.0	1,036,000	4.8
1925	1,188,334	10.3	175,449	1.5	1980	2,413,000	10.6	1,182,000	5.2
1930	1,126,856	9.2	195,961	1.6	1981	2,438,000	10.6	1,219,000	5.3
1935	1,327,000	10.4	218,000	1.7	1982	2,495,000	10.8	1,180, 00	5.1
1940	1,595,879	12.1	264,000	2.0	1983	2,444,000	10.5	1,179,000	5.0
					1984	2,487,000	10.5	1,155,000	4.9

(1) Includes estimates and marriage licenses for some states for all years. (2) Includes reported annulments. (3) Divorce rates for 1945 based on population including armed forces overseas.

Note the authoritative source for the statistics: the National Center for Health Statistics, Public Health Service. If you were to cite the table in your paper, you could cite the government agency as the source for the data and The World Almanac as your bibliographic reference.

A tool that contains even more statistical tables is the Statistical Abstract of the United States (REF HA 202--latest issue in Ready Reference). As in general almanacs, data are grouped into broad subjects, with a more specific "General Index" at the end. A sample table is "Domestic Motor Fuel Consumption, by Type of Vehicle 1970 to 1982":

NO. 1052. DOMESTIC MOTOR FUEL CONSUMPTION, BY TYPE OF VEHICLE: 1970 TO 1983

[Comprises all fuels (gas, diesel, or other fuels) used for propulsion of vehicles under State motor fuels laws. Excludes Federal purchases for military use. Minus sign (–) indicates decrease. See also *Historical Statistics, Colonial Times to 1970*, series Q 156-162]

YEAR	FUEL CONSUMPTION					AVERAGE FUEL CONSUMPTION PER VEHICLE (gal.)				AVERAGE MILEAGE PER GALLON			
	All vehicles (bil. gal.)	Avg. annual percent change [1]	Cars [2] (bil. gal.)	Buses [3] (bil. gal.)	Trucks [4] (bil. gal.)	All vehicles	Cars [2]	Buses [3]	Trucks [4]	All vehicles	Cars [2]	Buses [3]	Trucks [4]
1970	92 3	5 4	65 8	9	25.6	630	722	2,491	1,365	12.14	13.58	5.34	6 39
1971	97 6	5 7	69.5	.9	27.1	638	723	2,382	1,368	12.16	13.73	5 38	6 38
1972	105 1	6 7	73.5	.9	30.7	659	730	2,165	1,448	12.07	13.67	5 60	6 59
1973	110 5	5 2	76 0	.8	31.6	651	736	1,991	1,361	11.85	13.29	5 66	6 45
1974	106 3	- 3 8	74 2	.9	31.2	588	676	1,919	1,268	12.09	13.65	5 90	6 57
1975	109 0	2 5	76.5	.9	31.6	790	685	1,837	1,227	12.20	13.74	5 75	6 68
1976	115 7	6 2	78.8	1.0	35.9	807	685	2,015	1,292	12.20	13.93	5 98	6.58
1977	119 6	3 4	80 7	1 0	38.0	804	680	2,002	1,284	12.34	14.15	5 98	6 68
1978	125 1	4 6	83 8	1.0	40.3	813	688	2,041	1,270	12.38	14.29	5 96	6 64
1979	122 1	- 2 4	80.2	1.0	40.9	765	638	1,966	1,225	12.52	14.49	5.97	6 62
1980	115 0	5 8	73.7	1 1	40.1	711	579	2,034	1,194	13.23	15.32	5 95	9 58
1981	114 5	- 4	71.7	1.1	41.6	697	565	2,019	1,208	13.60	15.68	5.92	10 21
1982	113 4	- 9	72.8	1.1	39.4	686	563	2,003	1,122	14.05	16.25	5.93	10 00
1983	115 4	1 8	73.4	1.1	40.9	681	555	1,946	1,118	14.29	16.70	5.92	10 00

[1] From prior year shown. For 1970, change from 1965. [2] Includes taxicabs and motorcycles. [3] Includes school buses [4] Includes combinations.

Source U S Federal Highway Administration, *Highway Statistics*, annual.

Although published by the U.S. Bureau of the Census, Statistical Abstract of the United States has a final chapter entitled, "Comparative International Statistics." Here you will find population, GNP, food consumption, labor, energy, agriculture, military expenditures, and other statistics for many foreign countries.

If you do not find the statistics you need from either a general almanac or Statistical Abstract of the United States, you will want to look at American Statistics Index (REF Z 5545 .U5--Table 5). ASI is the most comprehensive index to U.S. government statistical publications; it is also a little more difficult to use than the books already discussed.

ASI is published in 2 volumes, which are color coded for each year (1981 volumes are green; 1983 are blue, etc.). Part I is the "Index," which provides access to the documents in Part II. The documents in Part I are grouped by Subject and Names, by Categories (geographical, economic, and demographic breakdowns), and by Title. The "Subject and Names" section is most frequently consulted by students. A typical search of this index might be to see how many other countries use mini and microcomputers. Below is the page for Computer Industry and Products:

Compulsory military service
see **Selective service**
Computer data file guides
Fed Govt standards for data recording, processing, and transfer, and for purchase and use of computer systems, series. (4)(5) 2216-2
Computer industry and products
County Business Patterns: employment, establishments, and payroll, by SIC 2- to 4-digit industry and county, 1984, annual State rpt series, (4)(5) 2326-6
Fed Govt computer systems and equipment, by manufacturer, type, and agency, 2nd half FY85, semiannual listing, (6) 9452-9
Fed Govt info and telecommunication technology use and policy issues, series, (6) 26356-4
→ Foreign market and trade for mini and micro computers and equipment, and user industry operations and demand, country market research rpts, (5) 2045-18
Intl competition in manufacturing, impacts on US construction industry, background data with detail for 5 industries and foreign comparisons, 1950s-84, (6) 2048-117

To find the full entry for "foreign market and trade for mini and micro-computers..." you would need to consult Part II, "Abstracts," for the same year; the abstracts are arranged by ASI number, which in the case of our document was 2045-18.

2045-18 **MINI AND MICRO COMPUTER SYSTEMS: Country Market Survey**
•Item 231-G-1.
† Market Research Div; Pub Sales Branch, Rm 1617, Commerce Dept; single copy $10.00. For individual bibliographic data, see below.
CMS/CMM/(nos./yr.)
'C61.9:CMM/(nos./yr.)

Series of reports analyzing the market potential for U.S. mini and micro computer systems and peripheral equipment in individual countries.

Coverage includes minicomputers; microcomputers for business, professional, and home use; and peripherals, including auxiliary storage, input-output, and data communications equipment.

For description of series format, see Note preceding 2045-1 in ASI 1985 Annual.

Reports are listed below in order of receipt.

The title of the document is "Mini and Micro Computer Systems: Country Market Survey," published by the Department of Commerce. The abstract below the entry describes the contents of this particular document.

To find out if Gelman owns the title, you should first consult the compact disk catalog (title index). If the catalog tells you there is no print copy, you should then check the ASI Microfiche Collection (housed in Reference), to see if the title is part of that microfiche collection. ASI titles are grouped by year within the collection, then arranged by ASI number within the year.

If you also need international statistics for your paper, there are a number of titles that will be helpful. One of the most popular is Europa Yearbook (REF JN 1 .E85--most recent edition in Ready Reference). It provides a wealth of data about countries on every continent. Sample tables include agriculture, population, industries, trade, and education. Additional factual information is provided on the country's government, religion, press, finance, and transport systems.

Comparative country data on a wide variety of subjects can be found in U.N. Statistical Yearbook (REF AZ 361 .U45, latest edition in Ready Reference). Published by UNESCO, an agency of the United Nations, the information is disseminated in three languages: English, French, and Spanish. There is no detailed subject index, so you will need to consult the appropriate broad category in the "Table of Contents" for the statistic you need.

Below is the number of television receivers, by continent:

64. Television broadcasting : number of receivers and receivers per 1 000 inhabitants
Télévision : nombre de postes récepteurs et récepteurs par 1 000 habitants

Country or area Pays ou zone	Code	Television receivers Postes récepteurs de télévision							
		Number (thousand units) Nombre (milliers d'unités)				Per 1 000 inhabitants Par 1 000 habitants			
		1970	1975	1980	1982	1970	1975	1980	1982
AFRICA – AFRIQUE									
Algeria – Algérie	R	...	500.0	975.0	1 320.0	...	30.0	52.0	65.0
Angola	R	...	...	30.0	32.0	...	...	4.2	4.3
Benin – Bénin	R	...	...	5.0	10.0	...	...	1.4	2.8
Burkina Faso	R	6.0	6.0	10.3	19.0	1.1	1.2	1.5	3.0
Central African Rep. – Rép. centrafricaine	R	...	...	0.7	1.2	...	...	0.3	0.5
Congo	R	1.8	2.7	3.5	4.0	1.5	2.0	2.3	2.5
Djibouti	R	1.0	3.1	5.0	5.4	11.0	29.0	42.0	...
Egypt – Egypte	R	529.0	620.0	1 400.0	1 850.0	16.0	17.0	33.0	41.0
Equatorial Guinea – Guinée équatoriale	R	...	0.5	1.1	1.2	...	1.5	2.8	3.1
Ethiopia – Ethiopie	R	8.0	20.0	30.0	40.0	0.5	0.8	1.0	1.2
Gabon	R	1.2	...	9.0	15.0	2.4	...	16.0	27.0
Ghana	R	16.0	33.0	57.0	73.0	1.9	3.3	5.0	6.0
Guinea – Guinée	R	...	...	6.0	8.0	...	...	1.2	1.4
Ivory Coast – Côte d'Ivoire	R	...	110.0	300.0	350.0	...	16.0	38.0	41.0
Kenya	R	16.0	38.0	65.0	72.0	1.4	2.8	4.0	4.1
Liberia – Libéria	R	7.0	9.0	21.0	23.0	4.9	6.0	11.0	11.0
AMERICA, NORTH – AMERIQUE DU NORD									
Antigua and Barbuda – Antigua-et-Barbuda	R	...	15.0	16.0	18.0	...	211.0	218.0	234.0
Bahamas	R	...	...	31.0	34.0	...	...	132.0	156.0
Barbados – Barbade	R	16.0	46.0	50.0	54.0	67.0	189.0	198.0	201.0
Bermuda – Bermudes	R	17.0	20.0	30.0	37.0	327.0	357.0	500.0	673.0
British Virgin Isids – Iles Vierges brit.	R	...	...	2.2	2.4	...	...	169.0	200.0

Often statistical tables will provide information "in thousands" or "in millions." In the case of Kenya, for example, you have to multiply each figure given in the table by a thousand, so the number of transmitters in 1975 was 38,000.

Demographic Yearbook (REF HA 17 D45--latest issue in Ready Reference Collection) is also published by the United Nations and similarly formatted. Instead of statistics about things or commodities, it provides statistics about people, according to the countries in which they live. Here you will find population, birth, death, infant mortality, marriage, divorce, and educational statistics for various countries.

SUMMARY: when you need statistical data on your topic, ask yourself how general are the data, and whether they are for the United States or other countries. The following is a chart indicating the scope of the titles previously discussed:

GEOGRAPHICAL SCOPE	SPECIAL FEATURES
All Countries	
The World Almanac Information Please Almanac	Provides most frequently consulted statistics, such as birth rate, death rate, literacy, traffic fatalities, form of government, historical dates, etc.
United States	
Statistical Abstract of the U.S.	Tables from a wide variety of government agencies are reproduced. Most exhaustive compendium of statistics.
American Statistics Index	Published in two parts: Index and Abstract. Most exhaustive listing of statistical reports published by the U.S. government.
International	
Statistical Abstract of the United States	(see above)
Europa Yearbook	Brief introduction to government, financial, and social characteristics of each country. Statistical data especially good for agricultural, industrial, and economic issues.
U.N. Statistical Yearbook	Strong on comparative educational and commodity data for each country.
Demographic Yearbook	Strong on comparative population, marital, and ethnic data for each country.

GOVERNMENT DOCUMENTS

Government documents often include statistical, political, and research information unavailable elsewhere. Any time you are writing about a new law, a consumer product, minorities, or other subjects in which the government has a vital interest, you should always investigate whether government reports exist providing you with data or analyses essential to your research. In this section we will examine two sources of government documents: the U.S. Monthly Catalog and C.I.S.

The Monthly Catalog groups government documents according to issuing agency--that is, all the publications of the Labor Department, the Transportation Department, the Defense Department, etc. are found in their respective sections. Each document has a unique accession number, which distinguishes it from other documents published by the same agency. Indexes are issued with each month's issue of the catalog, and cumulated twice a year. For your purposes, the most important indexes are author, title, subject, and title keyword indexes. The subject index uses Library of Congress subject headings, the same headings used to provide access to books by subject.

If you were researching "Medical Care of the Aged" and you went to the subject index of the Monthly Catalog, you would find an entry like this:

Aged -- Medical Care -- United States
A profile of functionally impaired elderly persons living in the community/ Macken, Candace L. (HE 22.18/a:E] 4), 87-3636

Where to turn for help for older persons: a guide for action on behalf of older persons / (HE 23.3008.0] 1/2), 87. 2.37

The second citation is to a document published by the Health Care Financing Administration. To find complete information about the document, you need to consult the Monthly Catalog issue including the document number 87-3636. Here is what the full entry looks like:

AGING ADMINISTRATION
Health and Human Services Dept.
Washington, DC 20201

87-3642
HE 23.3002:E] 2/4/abst.
Elder care share : a respite care cooperative : abstract -- [Washington, D.C.? : Administration on Aging. 1985?]
1 sheet ; 28 cm. Caption title. Distributed to depository libraries in microfiche. OItem 447-A-] (microfiche)

Because government documents are cataloged like books, you can learn whether Gelman owns this and other documents by consulting the compact disk catalog (title index).

Many government documents published after 1983 are shelved in the government documents section, located on the lower level.

IMPORTANT: IF THE COMPACT DISK RECORD DOES NOT SAY "DOC" FOR THE LOCATION, YOUR DOCUMENT WILL BE SHELVED IN ANOTHER LOCATION IN THE LIBRARY.

Another way of identifying government documents relevant to your topic is to use CIS Index (Congressional Information Service--Table 5). Unlike the Monthly Catalog, which lists most documents published by the government, CIS Index lists only those materials published by Congress, primarily hearings, reports, documents, and committee prints. As of 1984, it also contains descriptions and legislative histories of bills that have been enacted in to law.

CIS Index is published monthly and cumulated in annual volumes. It has two physical parts--abstracts, and indexes to the abstracts. Although the index volume has individual indexes for hearing, document, report and committee print numbers, most people are trying to find Congressional publications on a particular person or subject. Hence the most frequently used index is the "Subject and Names" index. If you would like to see if Congress has investigated the problem of teenage suicide, begin with the Subject and Names Index volume and look under "Suicide." Here is the entry from the January-March 1986 issue:

Subways
Washington Metropolitan Area Transit Authority programs, FY86 approp, 2 S181-9.10

Suchan, Donald G.
Idaho grasshopper infestation and control programs, 1 S311-2.2

Sugg, Norfleet L.
Farm and food policies revision, 1 H161-2.5

Suh, Nam P.
Technology transfer from Fed and univ programs to private sector, status and promotion initiatives, 1 S261-2.2

Suicide
Adolescent suicide, research and prevention programs, 1 S521-6

S521-6 **FEDERAL ROLE IN ADDRESSING THE TRAGEDY OF YOUTH SUICIDE.**
Apr. 30, 1985. 99-1.
iii+103 p. † CIS/MF/4
•Item 1042-A; 1042-B.
S. Hrg. 99-250.
'Y4.J89/2:S.hrg.99-250.
LC 85-603393.

Committee Serial No. J-99-21. Hearing before the *Subcom on Juvenile Justice* to examine the Government role in teenage suicide research and prevention programs.

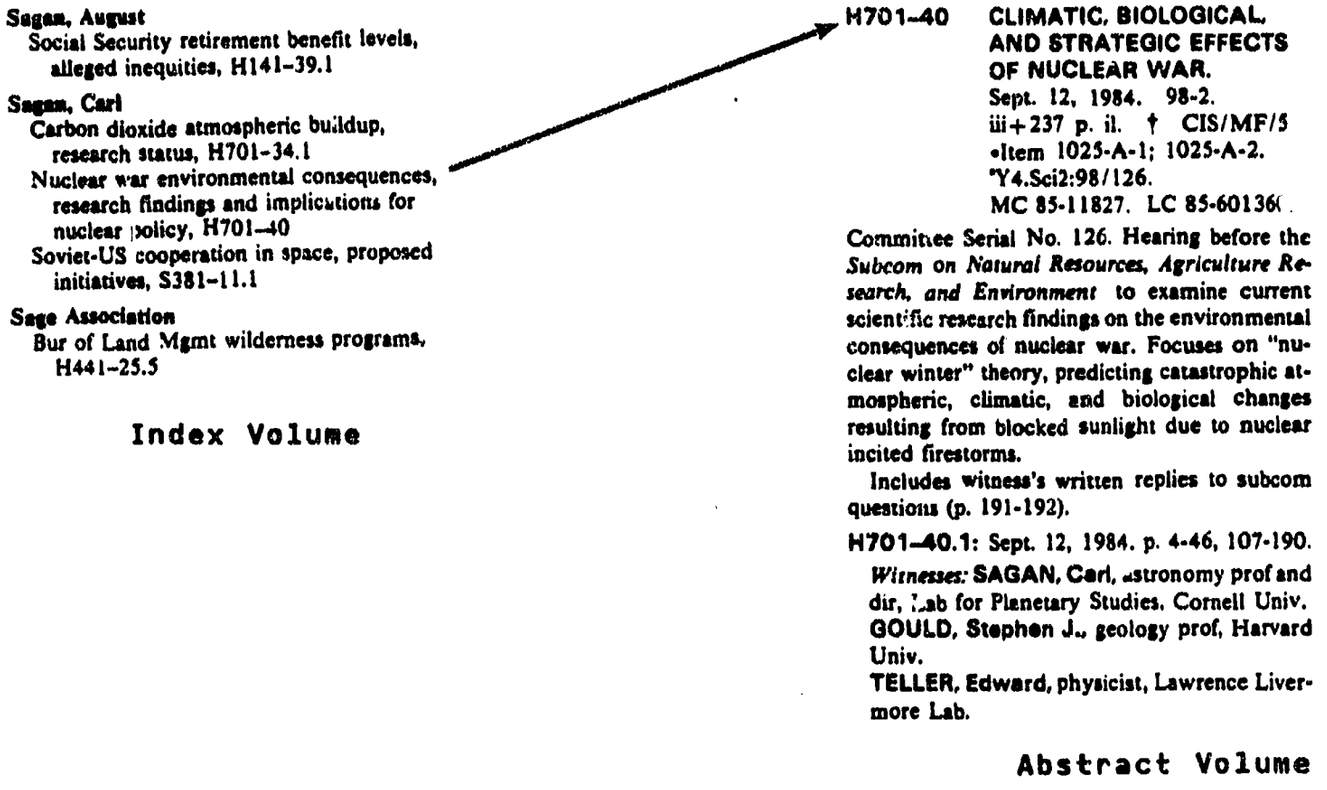
Supplementary material (p. 3-6, 75-103) includes submitted statements, correspondence, and:

a. S.J. Res. 53, to designate June 1985 as Youth Suicide Prevention Month, text (p. 5-6).

b. "Alabama Youth Emotional Guidance and Suicide Prevention Act" draft State bill, Jan. 23, 1985, text (p. 81-91).

c. Florida Task Force for Suicide Prevention, "Parental Perspectives" excerpt from State Plan for the Prevention of Youth Suicide in Fla (p. 95-103).

Searching by name is an identical process. To locate Carl Sagan's testimony about the environmental consequences of nuclear war, scan "Sagan" in the index:



As with documents found in the Monthly Catalog, to find out if Gelman owns "Climatic, Biological, and Strategic Effects of Nuclear War," check the title index of the compact disk catalog. If Gelman does not own a desired title, don't despair--the Burns Law Library subscribes to the CIS Microfiche Collection, which reproduces every publication abstracted in CIS Index. The Burns Law Library is located at 716 20th Street.

CONCLUSION

Locating library materials on your topic can be an efficient and systematic process. First determine what broad discipline your topic falls under, then decide in which format of publications (books, statistical reports, periodical articles, etc.) experts report their findings or share their opinions. Once you have made that decision, you can turn to the appropriate section of the Library Research Guide and learn how to find publications in that format.

If, after reading this Guide, you are still having difficulty finding materials, stop by the reference desk. We can schedule a Term Paper Assistance Appointment for you. These appointments last 30 minutes and enable you to meet with a Reference Librarian, who will discuss research strategy and help you identify those tools most relevant to your topic.

APPENDICES

(WORKSHEETS)

Name_____
Topic_____

BIBLIOGRAPHY WORKSHEET

The purpose of this worksheet is twofold: (1) to help you record some of the tools you have consulted, and (2) to enable your instructor to assess your thoroughness. To complete this assignment, you will need to list a minimum of ten references, using at least three of the six categories found below.

The manner in which you cite references on this worksheet may be very different from the way they appear in your final paper. To determine how your footnotes and bibliography should be formatted in your paper, check with your instructor--he or she may prefer that you use a particular style manual. If your instructor has no preference, you may want to choose from among the following popular titles: MLA Handbook for Writers of Research Papers; A Manual for Writers of Term Papers, Theses, and Dissertations; The Chicago Manual of Style; and The Publication Manual of the American Psychological Association. All of these can be found in the Reference Collection.

Note: some elements of a published work (such as title) are so standard that they must always be cited; others, such as edition or series, may not be relevant to many of your citations. These latter elements are listed as "optional" on your worksheet.

CATEGORY ONE: ENCYCLOPEDIA ARTICLES

First article: Author (if known)_____
Title of article_____
Title of encyclopedia_____
Edition number_____
Date_____
Optional: Volumes_____
Editor_____
Place of publication_____

Second article: Author (if known)_____
Title of article_____
Title of encyclopedia_____
Edition number_____
Date_____
Optional: Volumes_____
Editor_____
Place of publication_____

CATEGORY TWO: BOOKS

Subject Headings Consulted: _____
_____
_____

First Book:
Author/Editor_____
Title_____
_____
Place of publication_____
Publisher_____
Date of publication_____
Optional:
Edition_____
Volumes_____
Series_____

Second Book:
Author/Editor_____
Title_____
_____
Place of publication_____
Publisher_____
Date of publication_____
Optional:
Edition_____
Volumes_____
Series_____

Third Book:
Author/Editor_____
Title_____
_____
Place of publication_____
Publisher_____
Date of publication_____
Optional:
Edition_____
Volumes_____
Series_____

CATEGORY THREE: PERIODICAL ARTICLES

Indexes consulted: _____ Date: _____
_____ Date: _____
_____ Date: _____

First article: Author(s) _____
Title of article _____
_____
Title of periodical _____
_____
Volume number _____ Issue number _____ (if given)
Date _____ Pages _____

Second article: Author(s) _____
Title of article _____
_____
Title of periodical _____
_____
Volume number _____ Issue number _____ (if given)
Date _____ Pages _____

Third article: Author(s) _____
Title of article _____
_____
Title of periodical _____
_____
Volume number _____ Issue number _____ (if given)
Date _____ Pages _____

CATEGORY FOUR: NEWSPAPER ARTICLES

Indexes consulted: _____ Date:_____
_____ Date:_____
_____ Date:_____

First article: Author (if known)_____
Headline of article_____
_____
Title of newspaper_____
Date (a) Month_____ (b) Day____ (c)Year____
Section (if given)_____ Page_____ Column _____
Optional: Edition (if given; for example, "late ed"; "eastern ed"; etc.)_____

Second article: Author (if known)_____
Headline of article_____
_____
Title of newspaper_____
Date (a) Month_____ (b) Day____(c) Year____
Section (if given)_____ Page_____ Column_____
Optional: Edition (if given; for example, "late ed"; "eastern ed"; etc.)_____ _____

Third article: Author (if known)_____
Headline of article_____
_____
Title of newspaper_____
Date (a) Month_____ (b) Day____ Year _____
Section (if given)_____ Page_____ Column _____
Optional: Edition (if given; for example, "late ed"; "eastern ed"; etc.)_____

CATEGORY FIVE: STATISTICAL SOURCES

First source:
Author (if known)_____
Title_____
Place of publication_____
Publisher_____
Date of publication_____
Page_____
Statistical Information Found_____
_____

Optional:
Edition_____
Volume_____
Series_____

Second source:
Author (if known)_____
Title_____
Place of publication_____
Publisher_____
Date of publication_____
Page_____
Statistical Information Found_____
_____

Optional:
Edition_____
Volume_____
Series_____

Third source:
Author (if known)_____
Title_____
Place of publication_____
Publisher_____
Date of publication_____
Page_____
Statistical Information Found_____
_____

Optional:
Edition_____
Volume_____
Series_____

CATEGORY SIX: GOVERNMENT DOCUMENTS

Indexes consulted: _____ Date: _____
_____ Date: _____

First document:
Author (if known)_____
Government (for example, "United States"; "California"; "Memphis"; "United Nations")
_____
Agency_____
Place of publication_____
Publisher_____
Date_____
Optional: Volumes_____

Second document:
Author (if known)_____
Government (for example, "United States"; "California"; "Memphis"; "United Nations")
_____
Agency_____
Place of publication_____
Publisher_____
Date_____
Optional: Volumes_____

Third document:
Author (if known)_____
Government (for example, "United States"; "California"; "Memphis"; "United Nations")
_____
Agency_____
Place of publication_____
Publisher_____
Date_____
Optional: Volumes_____