

Appendix A: Basic Library Research

This appendix includes:

- **Basic Library Research**
- **Creating a Search Strategy**
- **Searching Data Bases**

This appendix is based on research guides originally developed by Bernetta Robinson Doane, Coordinator of Bibliographic Instruction and Martha Lyle, Serials Librarian, both of the Connelly Library, La Salle University, Philadelphia, PA. We are grateful for their permission to adapt their materials for use in this book.

Basic Library Research

What are the facts? That question is central in analyzing most disputes. This page provides is a "quick and dirty" four step process for doing library research. Accompanying pages provide more details about:

- **Creating a Search Strategy**

- **Searching Data Bases**

and

- **Using Periodicals**

1. Use **Dictionaries, Encyclopedias, Textbooks** and other general works to provide background information on your topic. These sources may also include Bibliographies that will lead you to additional information on your topic. (There are specialized Bibliographies listed in the central catalogue and a librarian can help you find those that are relevant.) Here is how to use these general works.
 - Choose a topic of interest
 - Determine the purpose of your research (to establish facts, to inform, to persuade, etc.)
 - Select key words that will help you identify relevant information
 - Broaden or narrow your topic to make it more manageable
2. Use the **on-line (or card) catalog** to find **books** on your topic.
3. Use **Periodical Indexes** and **Data Bases** (print, CD-ROM and On Line) to find **articles** in journals, magazines, and newspapers that relate to your topic. Periodical indexes come in a variety of subject areas. Select the index most appropriate for your topic. (For details see "How to Create a Search Strategy in this same section.")
4. Ask a **Reference Librarian** to help you find specialized sources and other materials that may be helpful. In larger libraries you can find a Reference Librarian at the **Information** or **Reference Desk**.

Creating A Search Strategy

Creating a Search Strategy involves “mapping out” the key components of a library research topic. Here is the basic process.

1. Formulate a Topic

Selecting a topic is the most important component of a successful search. State your topic in the form of a question, a phrase, or the title of an article or book on the subject.

Sample topic: Can playing the violin cause repetitive stress injury to wrist and arms?

On the line below, write the subject you are looking for. Use the sample topic as a guide.

Topic: _____

2. Analyze the Topic

Scrutinize the topic and identify KEYWORDS or PHRASES. If necessary, consult specialized dictionaries, encyclopedias, controlled vocabulary lists, and thesauri for more terms

3. Divide the KEYWORDS or PHRASES into Concepts

	Sample	Your KEYWORDS or PHRASES
Concept 1	violin	_____
Concept 2	repetitive stress injury	_____
Concept 3	wrists	_____
Concept 4	arms	_____

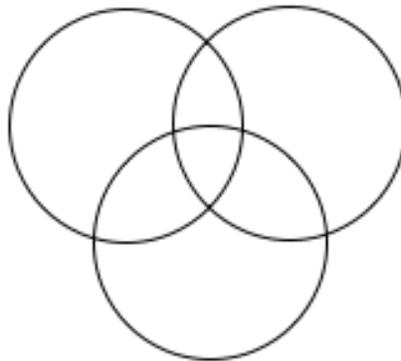
4. Set up a Search Strategy using Boolean Operators

A "Boolean Operator" refers to the logical use of algebraic terms involving two or more values. Boolean Operators are used in computer database searching to connect research concepts. Boolean Operators use only three words: **AND**, **OR**, and **NOT**. Here is how they work.

AND (narrows the search topic because both concepts must be in each record)

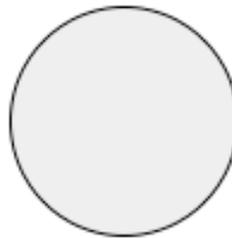
Concept 1 AND Concept 2 AND Concept 3

If we specify violin **and** repetitive stress injury **and** wrists the database will give us a list of sources in which all three concepts are mentioned. This is indicated by the crosshatching in the accompanying Venn diagram.



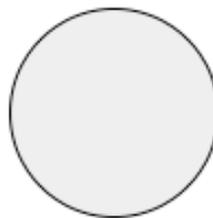
OR broadens the search topic because all records containing one or both of the terms are included. If you need to broaden your topic, add synonyms or other phrases to the search strategy.

Concept 1 violins **or** CONCEPT 2 stringed instruments



NOT eliminates unrelated records containing the concept.

Concept 1 **NOT** Concept 2 repetitive stress injury **not** carpal tunnel syndrome



5. Choose a Database

Choosing the right database is important because publishers construct their indexes (databases) for various subjects. Librarians are trained to help you select the database that best answers your research question.

Examples of pertinent databases for the sample topic:

CINAHL	(Nursing)
Expanded Academic Index (General)	
MEDLINE	(Medical)

6. Execute the Search Strategy

This simply means typing the search strategy into the database system. Watch your spelling; most databases look for keywords or phrases in strict alphabetical order.

Because each database service is slightly different, make sure that you read the HELP screens for detailed instructions on how to effectively use the service.

7. Examine the Bibliographic Citation/Record

Look at each bibliographic citation/record found. Locate keywords and phrases. See how the concepts of the topic are arranged throughout the record. This will help you determine which records are actually relevant to the research.

8. Print

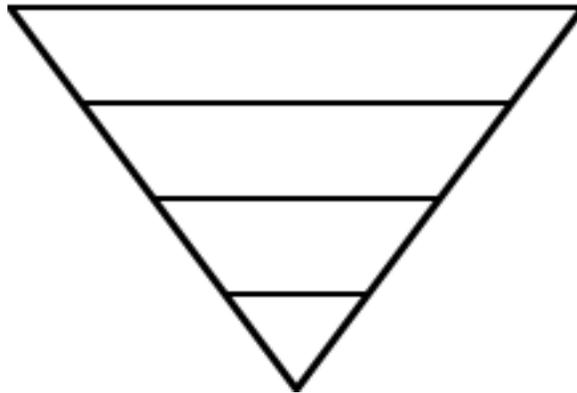
Print the bibliographic citations related to the research. Remember printing features may vary from one database to the next. Be sure to read the screens.

9. Check If Citations are Available in Library.

Now that you have found citations, you need to see if it is available in the library. Use the library's on-line catalog. In many libraries this involves looking at the Main Menu, selecting P for Periodical Title, and typing the full name of the journal, magazine, or newspaper.

Searching Databases

Structure of a Database



Search Limitations

Here are common limits on a search.

- Subjects covered
- Dates covered
- Frequency of updates
- Currency of information

Selecting a Database

The database you select affects the amount and quality of information retrieved.

- Determine which database best answers your information needs by asking your instructor and/or a librarian.

Access to Database Information

Databases are available in different formats--on-line, CD-ROM, and print. Sometimes the same database is even available in multiple formats. This is important because information that is free for you in one format may not be free in another.

Setting up a Search strategy

- Brainstorm--talk with instructors and librarians
- Consult reference sources: dictionaries, encyclopedias and thesauri
- Develop a list of keywords or phrases
- Connect the keywords or phrases using Boolean operators: AND, OR, NOT
- Type the search strategy into the database system

Looking at the Search Results

Use what you see on the screen to help you interpret and/or revise your search strategy. Look for:

- Number of hits (records found)
- Are there too many or too few?
- Can you find your keywords or phrases anywhere in the record?

How to Change Search Results

Most databases have help screens and guides to assist you in your searching. Some have common commands, for example:

- Type help or ?
- Function keys (F1 is generally very helpful)

Limit the search by using different combinations of Boolean operators

How to Interpret Search Results

- Look at each record for information that is relevant to the topic, i.e., keywords, phrases.
- Identify any labels (often abbreviated) used in the record.

Finding the Information in the Library

- Look in the catalog to see if the items retrieved from the search are available in the library.
- To find a periodical article, press P for periodical title and type in the full name of the periodical, i.e., *Time*, *Newsweek*. (This procedure is not standard on all library catalogs. Check with librarian.)
- To find a book, press T for title or A for the author's name.
- If the item is not available in the library, come to the information desk and ask about the Interlibrary Loan Service.