



# Principles of Biology

Introduction to Lock Haven  
University's Library Resources

# Outline of Session

- Define Your Topic
- Choose Information Sources
- Identify Keywords
- Develop a Plan for your Search
- Evaluate the Results of your Search
- Get Your Hands on the Material

# Defining Your Topic

## What Kind of Information Do You Need?

- Overview, Introduction  
A Place to Start
- In-Depth or more Specific  
Information  
(scholarly)
- Opinion, Information  
Intended for General  
Audience
- Research Information,  
Scholarly or  
Professional  
Audience

# Sources of Background Information

- Reference Books:
  - General and Factual information on a Topic
    - Defines and Describes a topic, familiarizes you or gets you started
    - Refers to accepted and standard knowledge in a specific area
    - Additional Bibliography: leads to other sources of information on your topic

# Sources of Background Information

- Circulating books: Books that you check out of the library
- Books in which the subject is either broad or narrow and are useful for detailed, factual and specific information on a topic
- Example - a general book on heart disease or a specific book on heart disease in women

# Database Searching: Finding Information

A database is an organized collection of information:

- Library Catalog, EbscoHost, Newsbank
- How do you find information that you want for your *Principles of Biology* topic?

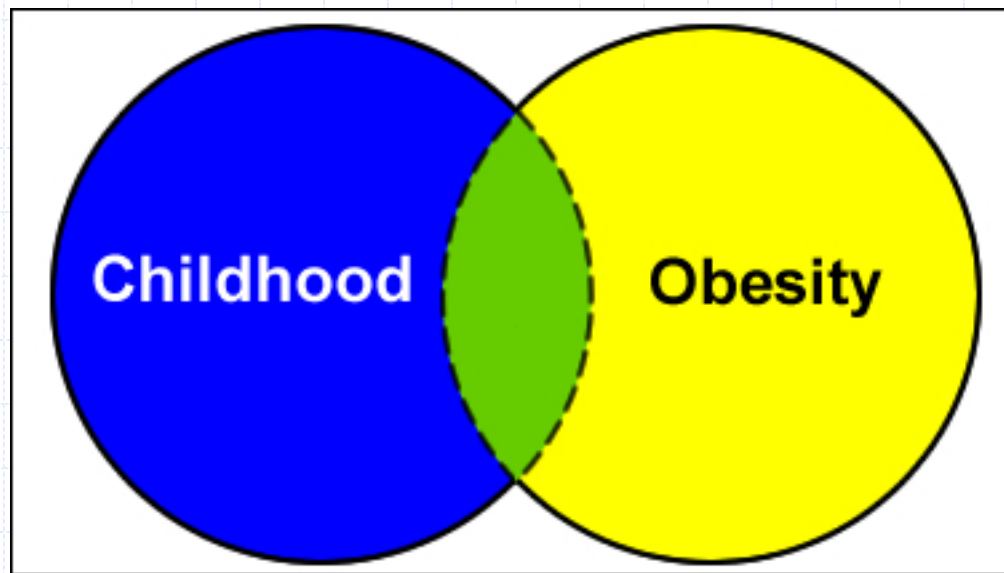
# Database Strategy: Keywords

- There are many ways to describe a topic: the first term you try *might not always* work, or be the most efficient
- Databases are inflexible
- Develop a ***Search Strategy: A Plan***

# Identifying Keywords for Database Searching

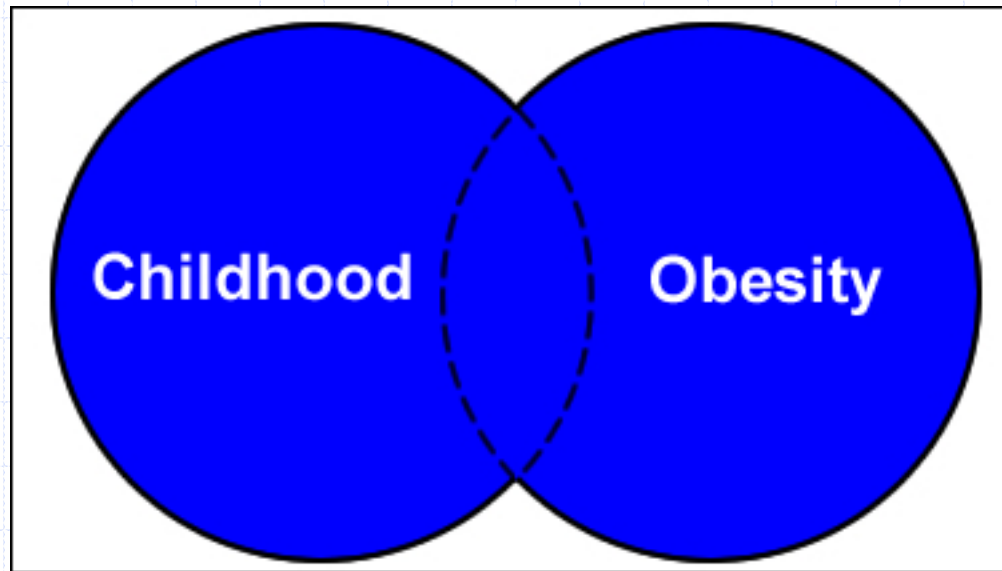
1. Analyze the research question for *Concepts* and *Ideas* associated with your topic
2. Get *Background Information* on your topic
3. Match your topic to the *Resources* listed for you on the Stevenson Library Webpage

# Boolean Strategy: AND



**AND** Limits/Narrows : combines two or more keywords

# Boolean Strategy: OR



**OR** Expands the search by including related keywords or similar terms

# Search Strategy: Root Words (Truncation)

- Using a “\*” or “?” will pick up the Alternate endings to root words, and it is done to EXPAND a search:

Gas\*

picks up gaseous, gasoline, gases

Cell?

picks up cellular, cells, cellulose

# Searching the Library Catalog Database using your Keywords

- Database for Books (both Reference and Circulating) and other Materials owned by Stevenson Library.

# Searching the Library Catalog

[Go Online: Stevenson  
Library Homepage](#)

# Journals, Magazines and Newspapers

- Characteristics of Journals
  - “AIMRAD”: Abstract, Introduction & Literature review, Materials & Methods, Results & Discussion
  - Footnotes, references, bibliography
  - Editorial Board and Peer Review

# Characteristics of Magazines

- General Audience: Non-specialists
- Advertisements are prominent: Marketing strategy
- Represents a “Point of View” or Opinion
- Articles are written by staffers
- Currency: Issues of interest

# Characteristics of Newspapers, Newswires, News Sources

- Who, What, When, Why
- New York Times, Christian Science Monitor, Washington Post: noted for checking sources
- Opinion, opinion, opinion!
- Breaking news

# Finding Current Research: Searching EBSCOhost

- EBSCOhost
- Location of Newsbank

[Go Online: Stevenson Library Homepage](#)

Table 3: Search strategy and results using **EBSCOHOST** for articles.

Database:	What Keywords did you use and how did you combine them?	Results (# of hits, or titles retrieved)	Explain WHY this information was or was not useful to you in understanding more about your topic. Really evaluate the source and information. Then, based on these results, explain what you did next.
Academic Search Complete	Bird evolution	180	My topic is included, but results too broad. I need to use Darwin's Finches to narrow it.
Academic Search Complete	Darwin's Finches	87	Relevant and closer to my subject. I need to use the term , beak, (my instructor's suggestion) to narrow the topic more
Academic Search Complete	Darwin's Finches AND Beak	24	Relevant and articles that are specific to my topic. Finished

# Evaluating Information on the World Wide Web

**Authority:** Is this Site Reliable?

**Content and Accuracy:** Does the site provide reputable information?

**Currency and Coverage:** Timeliness, Completeness of information

**Disclosure:** Intentions of the page owner

# Searching the Web

## Search Engines



Google Scholar  
Yahoo!

*Use Results  
Carefully*

# Evaluating the Relevancy of Your Results

- Does the information you found answer the research question you posed at the beginning of your search?

# Evaluating...Continued

- **Evaluate Keywords:** were the terms/concepts adequate in retrieving information relevant to your search?
  - Keep track of the terms you do try in an informal log in your notebook
  - Note Boolean combinations that work well
  - **AND** = combines and limits the number of hits
  - **OR** = expands the number of hits
  - **Root Words/Truncation** = expands the term

# Research is an inexact science...

- Be flexible in your approach, try alternatives, including different databases, new keywords, consulting background information
- Evaluate for *Relevancy*
- Ask a Librarian for Help!

# Librarians

Brian Ardan

Brenda Corman

Carl DiNardo

Cathy Weglarz

Elsa Winch

Rick Lilla

Chulapol Thanomsing (Arm)

Librarians

Media