How to Do Research

- Research thinking
- Finding sources
- Hierarchies and databases
- Library catalogs and indexes
- Internet resources
- Notes on bibliographies

Research Thinking

- Develop a plan.
- Develop a “research mindset.”
  - Be as objective as possible.
  - Clarify your presuppositions.
  - Be organized.
  - Practice intellectual honesty.
  - Practice humility.

Research Thinking

- Think critically.
  - Ask questions.
  - Analysis: taking a source or idea apart to see how the pieces fit together.
  - Synthesis: putting two sources or ideas together to produce a new whole.
  - Application: use results for a practical purpose.
  - Evaluation: see if something is of value, according to some standard.

Research Thinking

- Use valid reasoning.
  - Inductive reasoning: particular to general.
    - Move from data to generalities, principles.
    - Problem = insufficient data to make generalizations.
  - Deductive reasoning: general to particular.
    - Move from universal assumptions to particular data.
    - Problems = ignoring data, circular reasoning.

Finding Sources

- Types of sources:
  - Primary sources = sources that originate in the same time period you’re studying.
  - Secondary sources = Later works by researchers reflecting on earlier times; they present the results of their analysis of primary sources.
  - Tertiary sources = Reviews or analyses of the research of others. Use these to direct you to primary and secondary sources.

Finding Sources

- Use the library catalog.
- Check bibliographies in reference works:
  - General reference works (Encyclopedia Britannica)
  - Specialized reference works (Encyclopedia of Early Christianity)
Finding Sources

• Find relevant bibliographical guides.
  – General: Reader’s Guide to Periodical Literature
  – Specialized: Religion Index I
  – Online or CD-ROM: ATLA
  – Bibliographical books and research guides
  – Bibliographies & reviews of research in journals
  – Once you have a Library of Congress or Union subject heading, see if it has “bibliography” as a sub-heading.

• Theses or dissertations
  – Books in Print
  – Internet resources: primary texts, other library catalogs, research databases, useful sites, search engines.

Finding Sources

• Other possible resources:
  – Theses or dissertations
  – Books in Print
  – Internet resources: primary texts, other library catalogs, research databases, useful sites, search engines.

Hierarchies and Databases

• Questions about Badke’s chapter on information hierarchies?
  – You need to know what hierarchies your topic is in, and where it is in the hierarchy.
  – Brainstorm possible hierarchies.
  – Identify the most likely one.
  – If you don’t find information, go up to the next largest category and search again.
  – For more general books, move left.

Hierarchies and Databases

• No standards for database search engines.
  – You have to learn each one.
  – Read the on-screen instructions and help files.
• What’s the difference between a controlled vocabulary search and a keyword search?

Hierarchies and Databases

• Controlled vocabulary = predetermined subject headings, like Library of Congress.
  – Terms are decided by system designers.
  – Actual wording of title isn’t important to find it.
• Keyword search = looks for word in title, etc.
  – You decide which terms to enter.
  – Actual wording of title can be very important.
• The browse function of search engines may get you into their controlled vocabulary.

Hierarchies and Databases

• What are wildcards in database searches?
  – Usually a character like “*” or “?”.
  – Any letters (or none) can fit in the wildcard slot.
  – Mission* = mission, missions, missionary, etc.
  – Usually used at the end, sometimes at the beginning or in the middle.
Hierarchies and Databases

- What are Boolean operators in searching?
  - A and B = find sources that have both terms.
  - A or B = find sources that have either term.
  - A not B = find sources that have A but not B.
  - A B = may be the same as “A and B” or may be a string “A B.”
  - “A B” = search for string “A B.”
  - Some databases use “+” and “-”.
  - More precise than natural language searches.

Library Catalogs and Indexes

- Library catalog systems
  - AU uses Library of Congress.
  - Notice which library a book is in – and remember that the call number may be different!
- Library of Congress call number:
  - First two lines = subject heading.
  - Third line = author’s name (1st letter, last name).
  - Fourth line = date of publication.

Library Catalogs and Indexes

- Hints on finding a book:
  - Leading article (a, an, the) doesn’t count; all others do.
  - Not all books on a topic will be under the same subject heading.
  - In LC, biblical books are alphabetically arranged.

Library Catalogs and Indexes

- Once you have one source, follow its “bibliographical trail” to find others.
  - Back of title page: LC subject headings.
  - Bottom of catalog entry: subject headings.
  - Click on call number or browse the shelves.
  - Check bibliography and notes.
  - Check index for frequently used sources.
  - Stop when the resources keep repeating or become inaccessible or outdated.

Library Catalogs and Indexes

- Periodical indexes – journal articles.
  - Search by author or subject.
  - See handout for some printed indexes.
- Copy down your results or get printouts.
- Check any special collections, such as archives.

Internet Resources

- Search the Internet in two ways:
  - Start at a site you know and link to others.
  - Use a search engine: Google, Bing.
- For sites, see Badke, handout, Dr. Morton’s page.
- Use search engines as you would use any database tool.
- Check discussion groups, listservs.
Internet Resources

- Evaluate Internet information.
  - More difficult than with printed information.
  - Internet information has no “filter.”
  - Information can change hourly.
  - Check author and/or organization behind it.
  - Evaluate it for sound scholarship.
  - Is it well documented?

Notes on Bibliographies

- Maintain an annotated bibliography.
  - Take down all relevant info before you read.
  - Check title page and back of title page.
  - If some data is missing, check catalog entry.
  - Keep on “bib cards” or in computer files separate from your notes and drafts – and back it up!
  - Write publication data on photocopies.
  - Jot down brief comments on every source you examine.

Notes on Bibliographies

- Software can automate bibliographies.
  - Zotero (free Firefox and Word plugin for PC): www.zotero.org
  - Biblioscape: www.biblioscape.com
  - Endnote: www.niles.com
  - Nota Bene (ATS has site license).