

Literature searches

Citing sources

Why search (and cite) the literature of your field?

- Credibility: To be sure that your work is based on current, sound research--the best in your field.
- Focus: To be able to place your work in context.
- Efficiency: To be sure that you're not duplicating work unnecessarily.
- Professional ethics: If you don't show your awareness of current research and give appropriate citation, you risk appearing naïve or arrogant or dishonest.

Where do literature searches appear?

- Sometimes they are separate documents.
- More often, they are embedded in complex documents (proposals, reports, thesis).

Where to find literature to search?

- Start with a respected, current source, and look at that author's list of sources.
- Talk to your professor or to a professional in that field.
- Ask a reference librarian for help in searching
 - Books
 - Journal articles
 - Electronic databases
 - Conference proceedings

Where to find literature. . . ?

- Use the Internet judiciously.
 - Find out as much as you can about the site and the site manager, the date of posting, and whether or not the material was peer-reviewed.
 - If a posted article is important to your work, print the article for future documentation.
- Join a professional listserve and put out a request for information.

Other keys to searching

- Know your purpose in searching the literature.
- Narrow the scope of the material you're searching.
- Assess the author's credibility.
- Get a sense of how the piece of material relates to others.
- Write a summary of the key points of the article.

Gather bibliographical details systematically.

- Books

- Author (s) or editor's full name
- Exact title
- Publication information
 - Year of publication
 - City of publication
 - Publisher
 - Edition
 - Page numbers

- Articles

- Author (s) or editor's full name
- Exact title of article
- Publication information
 - Exact journal title
 - Volume and issue
 - Year of publication
 - Page numbers

Getting details systematically

- Electronic sources
 - All of the information for articles previously listed
 - URL of the site
 - Type of source/site
 - Date you accessed it

Retrievable vs.. non-retrievable sources

- Retrievable sources: sources that anyone could access.

These go into the list of sources cited at the end of the document, and they're noted by superscript numbers in the text.

- Non-retrievable sources: sources that are personal; sources that not every member of the public could access
 - Unpublished papers but not dissertations
 - Personal Web sites
 - E-mails and conversationsThese sources are cited in footnotes and indicated by symbol at the bottom of the page, NOT superscript numbers.

As you do the literature search, what's your purpose?

- Critical or evaluative summary of information relevant to your research
 - Not just a report but rather a critical discussion of the validity of this work and its relevance to your work.
 - Choose a method of organization that suits your purpose.
 - To trace development, organize your findings chronologically.
 - To reflect controversy, organize around the positions held.

When to cite

- You must cite a source when you use that person's ideas or specific facts.
 - Within quotation marks, if the quote is exact.
 - Without quotation marks, if you are paraphrasing or noting the key idea or fact.
- You do not have to cite ideas/facts that are common knowledge.

How to cite retrievable sources according to AIAA standards ¹

- Journals:
 - Walker, R. E., Stone, A. R., and Shandor, M., "Secondary Gas Injection in a Conical Rocket Nozzle," *AIAA Journal*, Vol. 1, No. 2, 1963, pp.334-338.
- Books:
 - Turner, M. J., Martin, H. C., and Leible, R. C., "Further Development and Applications of Stiffness Method," *Matrix Methods of Structural Analysis*, 1st ed., Vol. 1, Wiley, New York, 1963, pp. 6-210.

- Reports:

- Book, E., and Bratman, H., "Using Compilers to Build Compilers," Systems Development Corp., SP-176, Santa Monica, CA, Aug. 1960.

- Transactions/Proceedings:

- Soo, S. L., "Boundary-Layer Motion of a Gas-Solid Suspension," *Proceedings of the Symposium on Interaction Between Fluids and Particles*, Vol. 1, Inst. of Chemical Engineers, New York, 1962, pp. 50-63.

- AIAA Meeting Papers:
 - Bhutta, V. A., and Lewis, C. H., "Aerothermodynamic Performance of 3-D and Bent-Nose RVs under Hypersonic Conditions," AIAA Paper 90-3068, Aug. 1990.
- Unpublished thesis or dissertation:
 - Glazer, Frederick G., "Hierarchical Motion Detection," Ph.D. diss., University of Massachusetts, 1987.

- Web site (not a personal one)
 - Lego Mindstorms Community Page,
<http://mindstorms.lego.com/eng/community/resources/default.asp>,
Date accessed: 10/20/2002

How to cite non-retrievable sources²

- Non-retrievable sources are footnoted with symbols, not with numbers.
 - Personal conversation:
 - *E.G. Greitzer, personal communication, October, 2002.
 - E-mail:
 - **E.G. Greitzer, personal e-mail, October, 2002.

Class activity

- Study the models handed out to see how the writer moves from one piece of literature to the next.
 - Do you get an idea of how valuable this previous work is? How it relates to the writer's project?
- With your partner, list 5 places you might find sources relevant to your project and decide who will explore them.
 - Do you have some sources that are peer-reviewed (sources whose validity have been reviewed by academic colleagues)?
 - Check this list with your project advisor.

Sources cited

1. AIAA Web site: <http://www.aiaa.org/>

Date accessed, October 3, 2002.

2. Perelman, L., Paradis, J., Barrett, E., *The Mayfield Handbook of Technical & Scientific Writing*, Mayfield, CA: 1998.