520 Educational Research | Spring 2011

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Office Hours: Wednesday 3-5pm and by appointment.

Online research guides at: http://libguides.lib.umt.edu/profile/katez

This session is designed to support the following course objectives:

- 5. Identify a research topic of interest to you, and conduct a systematic literature review on your topic.
- 12. Apply new knowledge and develop scholarship by designing a research study consisting of a problem statement, literature review, and methods sections, using APA (6th ed.) style.

Session Overview

- I. Key Library Services for Graduate Students
- II. Literature Review/Review of the Literature
- III. Research Process and Strategies
- IV. Research Resources

I. Key Library Services for Graduate Students

Interlibrary Loan http://www.lib.umt.edu/ILL
Study Carrels http://www.lib.umt.edu/forms/carrel/carrel.php
Bibliographic Management Software — EndNote Web and RefWorks Workshops http://libguides.lib.umt.edu/workshops

II. Literature Review/Review of the Literature

In reviewing the published literature, the aim is to explain what ideas and knowledge have been gained and shared to date (i.e., hypotheses tested, scientific methods used, results and conclusions), the weakness and strengths of previous works, and to identify remaining research questions: A literature review provides the context for your research, making clear why your topic deserves further investigation.

A literature review involves both the literature searching and the writing. The purpose of the literature search is to:

- "reveal existing knowledge
- identify areas of consensus and debate
- identify gaps in knowledge
- identify approaches to research design and methodology
- identify other researchers with similar interests
- clarify your future directions for research"

From: Conducting a literature search. (2003). In Library studies 301H: Information research methods and systems. Retrieved from http://bit.ly/aFt1cs

"A systematic review involves a number of discrete steps:

- question formulation;
- finding studies;
- appraisal and selection of studies;
- summary and synthesis of relevant studies; and
- determining the applicability of results."

III. Research Process and Strategies

Before you begin entering terms in a database, it can be helpful to follow the first five steps below:

- 1. Understand your research question.
- 2. Identify the major concepts in your question.
- 3. Identify potential terms that correspond to those concepts.*
- 4. Select alternative terms (narrower, broader, or related) to use if initial search is unsuccessful.
 - In ERIC and PsycINFO use the Thesaurus, in PubMed use MeSH (Medical Subject Headings)
- 5. Determine logical (Boolean) relationships between terms.**
- 6. Begin the search.
- 7. Look at a few documents.
- 8. Revise and refine search based on initial results.***

From: Walker, G., & Janes, J. (1999). Online retrieval: A dialogue of theory and practice (2nd ed.). Englewood, CO: Libraries Unlimited.

* Identify the potential terms that represent the concepts of your research question.

concept & synonyms	concept & synonyms	concept & synonyms
television TV	violence	adolescents teens youth

** Determine logical (Boolean) relationships between terms. Boolean operators include: *and*, *or* and *not*. Search: (television or TV) AND violence AND (teen* or adolescen* or youth)

Break down one of the following research questions into key concepts and synonyms, and determine Boolean relationships.

- --- How can Web 2.0 tools be utilized to teach high school students?
- --- What strategies are effective to reduce childhood obesity?
- --- What factors impact student motivation?
- --- How can schools work with parents to prevent bullying?

*** Revise and refine search based on initial results.

too many sources	not enough sources	sources not available at ML
		Ask your professor or librarian for assistance in locating locally available materials
		Request items via Interlibrary Loan: http://www.lib.umt.edu/ILL

IV. Research Resources

Access all library electronic resources via the library web site. First select the blue "Search Everything" tab, then either "Database A-Z list" or "Databases by Subject." *If you are off-campus, you will need to login to the library's system with your NetID and password to access these proprietary databases.* Note that there is no 1 resource that searches all the literature within a discipline; thorough research requires searching multiple resources.

Index	Strengths	Comments	Example Search
ERIC (Education Resources Information Center) Print relationships: Resources in Education (1966- 2002), Current Index to Journals in Education (1969- 2002), as well as the 13th edition of the Thesaurus of ERIC Descriptors	Coverage from 1966- present Advanced Search features; Command search; Combine searches; Thesaurus search	Over 1.3 million records Indexes articles, conferences, meetings, government documents, theses, dissertations, reports, audiovisual media, bibliographies, directories, books and monographs Updated monthly Integrated with RefWorks New areas of study will not yet have thesaurus index terms assigned	Search: Migrant students keyword AND enrollment keyword Thesaurus terms? Revised search:
Print relationships: Psychological Abstracts, and Thesaurus of Psychological Index Terms (2007)	Coverage dates: 1806- present (few records with publication dates prior to 1890) Advanced Search features; Command search; Combine searches; Thesaurus search Some cited reference data	Over 3 million records Indexes over 2,450 journals, as well as books, book chapters, dissertations, and other secondary publications (e.g., conference papers) Updated weekly Integrated with RefWorks New areas of study will not yet have thesaurus index terms assigned	Search: PTSD keyword AND high schools keyword Thesaurus terms? Revised search:
PubMed Print relationships: Index Medicus, Medical Subject Headings	Coverage dates: Mostly 1950-present Advanced Search features; Combine searches; Thesaurus search; Multiple limiting options Related articles feature	Covers over 20 million journal citations and abstracts in the fields of medicine, nursing, dentistry, veterinary medicine, the health care system, and preclinical sciences (MEDLINE), and life science journals.	Search: nutrition AND athletes MeSH terms? Revised search:

Cited Reference Search

If you want to know who has cited a specific article, you can find the information out by searching *Web of Knowledge/Web of Science* (Print equivalents are *Social Sciences Citation Index*, *Science Citation Index*, and *Arts & Humanities Citation Index*) or Google Scholar. PsycINFO and PubMed have some cited reference data, too.

Deyhle, D., & Swisher, K. (1997). Research in American Indian and Alaska native education: From assimilation to self-determination. Review of Research in Education, 22(1), 113-194.

How many times has the article been cited according to Web of Science?

How many times has the article been cited according to Google Scholar?

Journals

If you are looking for a specific article (e.g., from a reference list) or a specific journal, the first step is to find out if the library subscribes to that journal, either online via a database or in print. Use the "Journals" tab on the library homepage to search for the journal. This search will lead you to a database, University of Montana Print Holdings (where you can find a paper copy within the library), and/or indicate that the library does not subscribe to the journal. If the library subscribes to the journal, be sure to check the dates of coverage that are available: In some instances historical coverage will be in print and the past ten or so years will be online. If the library does not have a subscription to the journal, you can request specific articles from the journal via *Interlibrary Loan* (http://www.lib.umt.edu/ILL).

Arnold, B., & Gansneder, B. (1998). Importance of selected athletic trainer employment characteristics in collegiate, sports medicine clinic, and high school settings. *Journal of Athletic Training*, *33*(3), 254-258.

Can you access the article online via the library's databases?

Can you access it in print in the library?

If you want to know what journals are highly regarded in your field of study, one measure is *impact factor*. You can locate journals with high impact factors in the database *Journal Citation Reports*. You can search for a specific journal, or locate journals by publisher or subject in *JCR*. For each journal you will see how many articles were published in it, how many times articles from the journal were cited, a one-year and five-year impact factor ranking, and more.

V. Citing Your Sources

Principles of Referencing: 1. Intellectual property, 2. Access, 3. Economy, 4. Standardization, 5. Transparency.

From: Neville, C. (2007). The complete guide to referencing and avoiding plagiarism. New York: Open University Press.

"Plagiarism. Researchers do not claim the words and ideas of another as their own; they give credit where credit is due (APA Ethics Code Standard 8.11, Plagiarism)."

From: VandenBos, G. R. (Ed.). (2010). Publication manual of the American Psychological Association (6th ed.). Washington, DC: American Psychological Association.

Check out the "APA Formatting and Style Guide" from OWL (The Purdue Online Writing Lab) online at http://owl.english.purdue.edu/owl/resource/560/01/ for APA citation style guidance.