

Systematic Search for Literature Review

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Workshop Objectives

- What is Literature Review?
- How to Develop a Search Strategy?
- What are important Information Resources in your field?







Literature review

• Literature review is the process of searching, retrieving & analyzing what has been already known and published about a particular topic by accredited scholars and researchers.









Two Important Objectives of LR:

- 1. Information Seeking: the ability to scan the literature efficiently, using manual or computerized methods, to identify a set of useful articles and books.
- 2. Critical appraisal: the ability to apply principles of analysis to identify unbiased and valid studies.









Steps of Literature Review

- **Problem formulation & Keyword extraction:** Specify the topic or field you want to search about and extract its main concepts as keywords.
- **Literature search:** Using the keyword specified in step one, we will search all the relevant available resources.
- Paper evaluation: Appraise the found literature & select those valid ones.









Web Search Strategies











Search strategies we recommended:

- 1. Formulate the search question and its scope
- 2. Identify the important concepts within the question
- 3. Identify search terms to describe those concepts
- 4. Consider synonyms and variations of those terms
- 5. Prepare your search logic

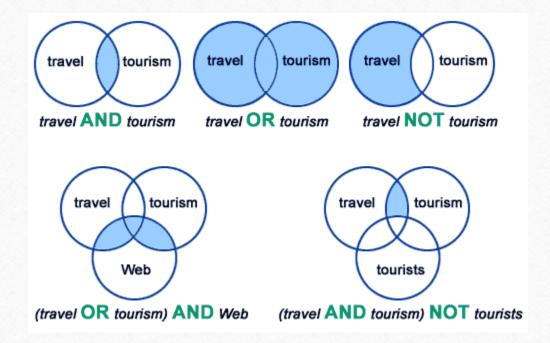








Boolean Operators











- Recommendation: Recognize and distinguish at least 2 to 3 concepts in query
- Example: "diabetes mellitus", "Sensory neuropathy", biguanide*, treatment OR therapy
- Why important: triangulating on multiple query concepts, narrows and targets results, generally by more than 100 to 1000









- Recommendation: Put each concept in a parenthesis
- Example: ("diabetes mellitus"), ("Sensory neuropathy"), (biguanide*), (treatment OR therapy)
- Why important: simple way to ensure the search engine evaluate your query the way you want, from left to right









- Recommendation: Use 6 to 8 words in query
- Example: diabetes, mellitus, Sensory, neuropathy, treatment, biguanide
- Why important: more keywords chosen at appropriate level, can reduce the universe of possible documents returned by 99%









- Recommendation: Use nouns or objects as query keywords
- Example: diabetes
- Why important: actions (verbs), modifiers (adjectives, and adverbs), and conjunctions are either "thrown away" by search engines or too variable to be useful.









- Recommendation: Try to pick up singular and pleural versions of the nons
- Example: biguanide OR biguanides
- Why important: use asterisk wildcard. The wildcard tell the search engine to match all characters after it, preserving keyword slots and increasing coverage by 50% or more.









- Recommendation: Use synonyms via the OR operator
- Example: treatment OR therapy
- Why important: Cover the likely different ways a concept can be described. Generally avoid Or in other cases









- Recommendation: Combine keywords into phrases where possible
- Example: "diabetes mellitus"
- Why important: Use quotes to denote phrases. Phrases restrict results to exact matches, narrows results by many time









- Recommendation: Link concepts with the AND operator
- Example: ("sensory neuropathy") AND ("diabetes mellitus") AND (biguanide*) AND (treatment OR therapy)
- Why important: AND glues the query together









- Recommendation: Order concepts with main subject first(Put Your Main Concept First)
- Example: ("sensory neuropathy") ("diabetes mellitus") (biguanide*) (treatment OR therapy)
- Why important: Put main subject first. Engines tend to rank documents more highly that match first terms or phrases evaluated.









- Recommendation: Refine your search if necessary
- Why important:
- Many sites offer a "Refine search" option so you can modify your search term
- Some have a "more like this" option
- Or go BACK to the search box to change your query

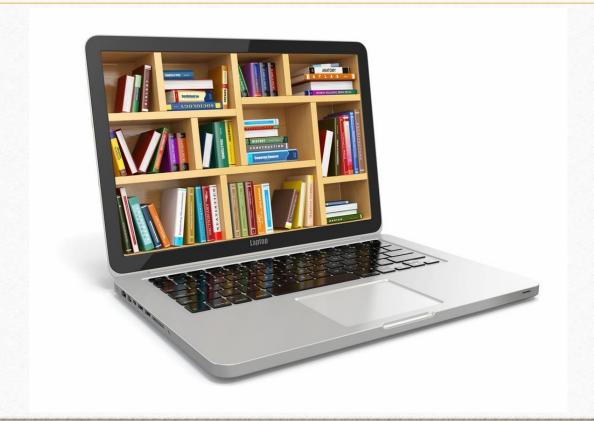








Information Resources











Electronic Journals & Collection

- Elsevier Science Direct
- Emerald
- Wiley Blackwell
- Springer
- Oxford University Press
- ProQuest
- Ebsco







Emerald

• Emerald is a global publisher linking research and practice to the benefit of society. Founded in 1967, Emerald today manages a range of digital products, a portfolio of nearly 300 journals, more than 2,500 books and over 450 teaching cases.









Emerald: Subject Catgories

- Accounting, Finance & Economics
- Business, Management & Strategy
- Education
- Engineering
- Health & Social Care
- HR, Learning & Organization Studies
- <u>Information & Knowledge</u> <u>Management</u>

- Marketing
- Library Studies
- Operations, Logistics & Quality
- Property Management & Built Environment
- Public Policy & Environmental Management
- Sociology
- Tourism & Hospitality
- <u>Transport</u>









Elsevier Science Direct

- over 3,800 journals and more than 35,000 book titles
- Activating and using remote access to sign in
- Searching for documents(Quick Search, Advanced search, Expert search)
- Signing in
- Registering with ScienceDirect
- Creating and saving alerts









Physical Sciences and Engineering	Life Sciences	Health Sciences	Social Sciences and Humanities
Chemical Engineering	Agricultural and Biological Sciences	Medicine and Dentistry	Arts and Humanities
Chemistry	Biochemistry, Genetics and Molecular Biology	Nursing and Health Professions	Business, Management and Accounting
Computer Science	Environmental Science	Pharmacology, Toxicology and Pharmaceutical Science	Decision Sciences
Earth and Planetary Sciences	Immunology and Microbiology	Veterinary Science and Veterinary Medicine	Economics, Econometrics and Finance
Energy	Neuroscience	-	Psychology
Engineering	-	-	Social Sciences
Materials Science	-	-	-
Mathematics	-	-	-
Physics and Astronomy	-	-	-









Quick Search

- You can use Quick search to search for articles, journal and book titles. Quick search is available at the top of every page that has a navigation bar.
- You can search all fields (excluding the Reference field) in a document or limit your search to author names, journal and book titles, volume, issue, or page number fields. Searchable content includes all available journals, book series, handbooks, books & Reference works.

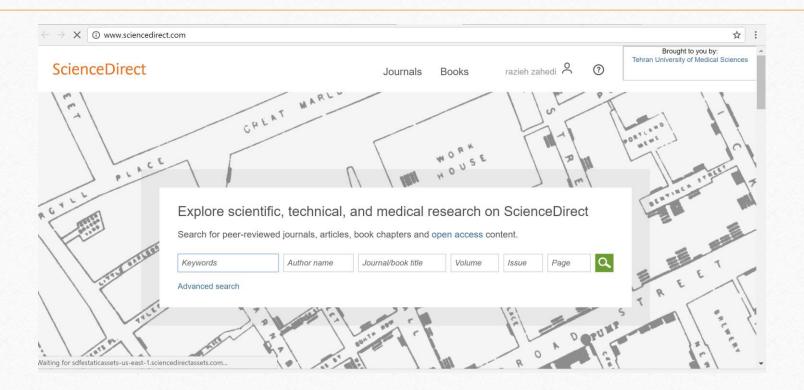








Quick Search











Advanced search

- Advanced Search forms guide you through creating a search in <u>all</u> <u>sources</u>, <u>journals</u>, <u>books</u> or <u>Reference Works</u>. Advanced search is available from the **Advanced search** link on each type of search form.
- Use Advanced search to:
- Search in a pre-selected field, such as References, Title, Reference, Keywords, or Specific Author.
- Search in two fields at the same time, such as Authors and Keywords.
- Search a specific publication type, such as journals or books.
- Limit your search by document type, date, or subject









Advanced search

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Expert search

- With the Expert search forms, you can create more complex, sophisticated searches to search <u>all sources</u>, <u>journals</u>, <u>books</u> or <u>Reference Works</u>. Expert search is available by first selecting the **Advanced search** link next to the quick search option and then selecting **Expert search**.
- Use Expert search to:
- Build searches using **Boolean syntax**, proximity operators, and wildcards
- Search multiple fields at the same time
- Prioritize your search terms









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