

ASSESSING AN INFORMATION NEED

The first step in any search for information is a needs assessment. This small investment of time at the beginning of a search will save a great deal of time in the long run. Needs assessment is a careful consideration of the questions “What kind of information do I need?” and “Where might I find such information?” Every information need has two types of components:

- Subject components address the *topic* of the information need, such as “prevention of knee injuries in high school athletes” or “the role of patient education in preventing complications in high-risk pregnancy”.
- Format components relate to the *type* of information needed, such as review articles, books, items published within the last five years, etc. The format can be determined based on the type of information needed (such as cutting edge information or background knowledge) or by an outside factor (such as a professor requiring research articles).

Remember that there are no “right” or “wrong” ways to search, just more or less efficient. In addition to a good information needs assessment, another key to an effective search is an understanding of the available information tools. It is important to select the right tool (such as searching the library catalog to find books or searching a database to identify articles), and it is important to understand and use special features of the selected tool (such as subheadings and limits). This guide will help with these issues.

| QUESTIONS | CONSIDERATIONS & SUGGESTIONS |
|---|---|
| What information do I need? | Write down your information need in narrative form. Consider the type of information you need: background, current, statistical, etc. |
| What is the main topic? | Identify the key topic(s) of your search. |
| Can this main concept be represented by any other terms? | Generate synonyms for your key topic(s). |
| What are the supporting concepts? | Consider aspects such as therapy, diagnosis, etiology, etc. Consider also population, such as infants, baby boomers, African-Americans, women, etc. |
| Can the supporting concepts be represented by any other terms? Or by a feature of the system? | Generate synonyms for your supporting concepts. If you already have an idea of which resource you will use, consider features of that system (subheadings, limits). |
| What format is needed? Can a feature of the system represent this? | Consider internal and external determinants of the format. (See above for more information on format components.) |

Once the need has been assessed, then an appropriate information resource must be selected. The table on the top of the next page provides an overview of the types of resources that can be used to find specific kinds of information. If you need additional assistance, please contact Reference Assistance (see page 4).



| TYPE OF INFORMATION | SUGGESTED RESOURCES |
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| Background – basic knowledge | An online catalog (like UT Libraries Catalog) to identify textbooks and reference books; full-text resources like MD Consult or AccessMedicine |
| Articles (research or opinion) | A database such as MEDLINE or CINAHL (see <i>below</i>) |
| Cutting-edge research | A database (like MEDLINE or CINAHL) to identify research articles (see <i>below</i>) |
| Overview of current research | A database (like MEDLINE or CINAHL) to identify review articles (see <i>below</i>) |
| Evidence-based medicine and other clinically-focused information | Resources such as Cochrane systematic reviews, which are indexed in MEDLINE and CINAHL; clinical queries search in PubMed |
| Statistical | Print and online statistical resources; ask a reference librarian for guidance (statistical information can also be found at http://www.utoledo.edu/library/mulford/lifesciref.html#statistics) |
| Research instruments (surveys, questionnaires, etc.) | See Library's Instruction pages for information: http://www.utoledo.edu/library/mulford/education/research_instruments.html |
| Drug information | Print or online drug resources; online databases (like AHFS Drug Information through StatRef! Or Gold Standard through AccessMedicine) |

Hints for Selecting an Online Database

While there are many types of information resources available in the Mulford Library, the most commonly used resources are the online databases. Online databases cover a wide range of subjects and formats. Here is a chart to help you decide if which database is appropriate for your need. Access to these resources is available from the Library's web page. Please note that though these databases may contain citations, abstracts, and full text, not every article will be available in full text. Please see the **Online Journals** help page (http://www.utoledo.edu/library/mulford/education/online_journals.html) for information on how to find and order articles.

- AgeLine** Literature on aging and gerontology from the AARP; 1966-present
- AltHealthWatch** Literature on alternative and complementary health care and wellness
- Bio Abstracts** Biological and medical literature; there is about a 30% journal-coverage overlap with MEDLINE; indexes journal items (articles, letters, reviews, etc.) focusing on vital biological and medical research findings, pharmacological studies, and discoveries of new organisms; 1980-present

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| CANE | Literature on abuse and neglect of the elderly from the Clearinghouse on Abuse and Neglect of the Elderly |
| Child Welfare and Information Gateway | Literature on child abuse and neglect from the National Clearinghouse on Child Abuse and Neglect |
| CINAHL | Nursing and allied health information; indexes journal articles, books, book chapters, dissertations, research instruments, nurse practice acts, etc.; 1982-present |
| Cochrane | Cochrane Library; key resource in evidence-based practice; contains the full text of systematic reviews |
| Education Abstracts | Education literature, including health science education; indexes journal articles; 1985-present |
| ERIC | Education literature, including health sciences education; indexes journal articles and ERIC documents; 1966-present |
| HealthSource | HealthSource has two editions, one for consumer health and the other covering the health care literature that is especially strong in nursing and allied health |
| MEDLINE | Information on medicine, nursing, dentistry, veterinary medicine, health care administration, and the preclinical sciences; currently indexes only journal articles (prior to 1975, it also included books); 1966-present; OLDMEDLINE is also available. Note: PubMed is the version of MEDLINE made available on the Web by the National Library of Medicine. |
| PsycINFO | Psychology and mental health information; indexes journal articles, dissertations, reports, English-language book chapters and books from the literature of psychology, education, business, medicine, nursing, law, and social work; 1967-present, with a special segment covering 1887-1966 |
| SCI & SSCI | Science Citation Index and Social Science Citation Index; used for identifying articles which cite a given publication; 1980-present |

Hints for Translating an Information Need into Commands the System Can Understand

You've assessed your information need and determined that you need to use an online database to identify resources on your topic. The next step is to translate the information need into commands the online system can understand.

1. Check the Library's instruction pages (<http://www.utoledo.edu/library/mulford/education/index.html>) for help sheets for the selected resource.
2. When searching a resource that uses subject headings and a thesaurus (a tool used to help determine the official medical subject heading of a term), search for the main search topic and, using the **View Thesaurus** feature, identify an appropriate subject heading for that term. Several databases that use this feature are MEDLINE, CINAHL, and PsycInfo, just to name a few. Use subject headings whenever possible; however, some databases (Web of Science) do not have subject headings, and the primary search method for these databases is text word searching. With these databases, consider searching for concept synonyms in addition to the original terms.
3. The systems may also have other options for refining the search. Check to see if they are available in the selected system.

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| Expand/ Explode | Search subject heading, plus all narrower subject headings |
| Focus | Search subject heading as the main topic of the retrieved records |
| Subheadings | Restrict a subject heading search to one or more facets of the topic, such as diagnosis, therapy, epidemiology, analysis, economics, history, etc. |
| Limits | Limit search to age group, human, English language, journal subsets, research articles, review articles, etc. |

4. For a complex search with a number of components, search for each main component separately, then combine them using the appropriate operator. For more information on complex searching, in a particular database, please see the individual database's help sheet.

AND Use **and** to narrow the search results to just those that have the two (or more) sets in common; this is the most commonly used operator; example: *school health services and pregnancy in adolescence*

OR Use **or** to broaden the search results; this is commonly used between sets that are synonymous in terms of the search; example: *advanced practice nurses or advanced nursing practice*

Additional Resources to Help with an Information Need Assessment

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| Reference Librarians | From selecting the appropriate source to selecting appropriate terms, library staff members are available to help. Stop by the library or contact Reference Assistance at (419) 383-4218 or MulfordReference@utoledo.edu . For other help options, including instant message reference, see http://www.utoledo.edu/library/mulford/resources.html . |
| Training Sessions | The Library holds instructional sessions each term on the library systems. Contact Reference Assistance or see the Library's web page (http://www.utoledo.edu/library/mulford/education/schedule.html) for more information. |
| Help Sheets/Guides | The Library makes available a wide selection of help sheets for use with the Library systems. These help sheets highlight key features of a system. Visit the Library's instruction web pages at http://www.utoledo.edu/library/mulford/education/format.html#Help%20Sheets |
| Online Help | Most systems have online help available. |