

## SEARCH TECHNIQUES: BASIC AND ADVANCED

<b>L. No.</b>	<b>Title of the Lesson</b>	<b>Skills</b>	<b>Activity</b>
17B	Search Techniques: Basic and Advanced	Information literacy, Knowledge and Ability to find Sources, Simplicity, Patience, Organisation, ICT skills, and Decision Making	Planning, Searching retrieval tools, Applying Boolean Logic, Evaluating and making available Information

### **Summary**

Effective information search will ensure retrieval of information that will be accurate, timely and relevant. This leads to making well -informed decisions by all concerned.

In the age of information overload and technological advancements, learning how to how to effectively search for information is a crucial skill to master. Therefore, applying a proper search technique or strategy helps library professionals and users to help find the best information and also saves their time.

The key to being an expert searcher is to use common search techniques that you can apply to almost any database, including article databases, online catalogues and even commercial search engines. This is important because searching library databases is different from searching Google.

Advanced search is a built-in feature of a database that allows a user to specify additional requirements for a search. When used for searching the Web, an advanced search gives additional information, which helps refine the search.

The techniques of searching to will enable you to quickly retrieve relevant information from the thousands of records in a database.

In this lesson you will learn how to search for information by selecting the most appropriate search terms, how to use those search terms to find information and how to combine search terms to carry out advanced search.

### **Principal Points**

- The standard mechanism, called information search techniques is used for retrieving information from any information system.
- The search technique is a mechanism through which, one can find relevant information from information systems. The information system may be in- house or online.
- Storage mechanism can be dictionary, numeric and classified arrangement of information.
- Search process follows a set of functions as:
  - determination of user's need of information search;
  - designing search strategy;
  - Selecting the information system to be searched and accordingly the search engine;
  - creating search query or string using keywords and operators which, represents the semantic value of the user's requirements and the syntactic format which the engine interprets;
  - conducting the search;
  - evaluation of the result. If needed, again filter or redefine or restart the search process; and
  - presentation of the search results in a user friendly format.
- Depending upon the need and purpose of the search and expertise of the searcher, the search may be conducted using the features of the search engines.
- For getting relevant and effective search results, a searcher should have knowledge of the types of searches and skills of conducting them.



### Build your Understanding

Information literacy skills include listening, speaking, reading and writing. Some more literacy skills are knowledge of vocabulary, spellings and comprehension.

What is an Advanced search? Advanced search is a full search of the entire text. It finds your term wherever it occurs in the text. This could be in the form of an entry name, part of another word's definition, in a quotation, etc.

Boolean Operators are simple words (AND, OR, NOT) used as conjunctions to combine or exclude keywords in a search, resulting in more focused and productive results. Using these operators can greatly reduce or expand the amount of retrieved records.

### What's



1. Information searching is a process which people undertake to locate or retrieve specific information to meet an information need. This is usually but not always with the aid of an information retrieval system or a search engine.
2. Being able to use search is a great way to be able to do a lot more in very short amount of time. It lets us find what is required immediately. It allows us to understand things better, seek best information, make quality decisions about various activities.
3. Information retrieval tools aid the library users to locate, retrieve and use the needed information in various formats for various purposes.
4. Information retrieval provides a means to get at the information that already exists in any format- print or electronic.



Information searching by computers was for the first time by Holmstormin 1948 on a Univac. Automated information searching and retrieval was introduced in 1950s.

In 1950, Calvin Mooers coined the term 'Information retrieval'.

Alen Kent, from 1955 onwards published several works in the field of information retrieval systems. He is famous for his works related to evaluation of IR systems and information retrieval techniques.

Frederick Wilfrid Lancaster, a British-American, Professor and Information Scientist made notable achievements in the field of library and information science from 1960s. He was expert in fields of information searching, online retrieval systems and had published several works in this area.

In 1968, Gerard Salton published works related to Automatic Information Organisation and Retrieval and in the same year J W Sammon developed models for information storage and retrieval.

From 1990s, search engines became the most common and best method seen for information retrieval.

### Extend your Horizon

1. Visit the website of Library of Congress (<https://www.loc.gov>). Look for its Online Catalogue. Search for any 7 books on the subject of COVID-19. Make a list of retrieved books.
2. Go to the website of IIT, Delhi. (<https://library.iitd.ac.in>) Search for any 10 newly added books in 2021. Write down bibliographic details of these 10 books.

### Evaluate Yourself

1. Define dictionary, numeric and classified arrangement.
2. Enumerate the steps of the search process.
3. Explain the Boolean operators and their impact while connecting two keywords 'A' and 'B'.
4. Differentiate between an advance search and a simple search?
5. What is the need of editing search result?