

Chapter-3

Reference and Information Sources

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Unit-1 : Reference and Information Sources				
Classroom or Library	Understanding the concept of Reference and Information Sources	Meaning of Reference and Information Sources.	Chart out: Reference and Information sources under various categories	Interactive Lecture: Meaning of Reference and Information Sources; Types of sources in various categories. Activity: Visit a library and prepare a list of various sources under Primary, Secondary and Tertiary types.

Location	Learning Outcome	Knowledge Evaluation	Performance Evaluation	Teaching and Training Method
Unit-2 : Categories of References and Information Sources: Description and Scope				
Classroom or Library	Understand- ing Definition, Need, Purpose- and functions of Reference- Collection.	Meaning of Reference Collection, it sneeds, purposes and functions	Chart out: Need of Reference Collection Development and its Policy, purposes and functions.	Interactive Lectures: Meaning, Definition, Need, Purposes, functions, and planning of reference collection. Activities: Visit a library and ask students to make a list on different types of Reference Resources available there.
	Understanding of scope and features of online reference sources.	Identification of different types of online available resources and process of its acquisition.	Chart out: Scope, features and availability of on line reference sources.	

Unit

1

Reference and Information Sources

3.1.0 Introduction

The source of information on any subject is the literature produced on it in any format. The term 'literature' was earlier defined as the published writings in a particular style on a particular subject. But the importance and quantum of unpublished sources produced in the area of science, technology and research has made the setting vaster. The literature is diverse, complex and multilingual in nature and becoming more interdisciplinary nowadays. The technologies to access information are also getting format and device independent.

Providing reference service to users is one of the prime objectives of any library. This is the most personalized service offered by a library, carried out with a carefully selected set of reference sources and trained reference library professionals. Dr. S. R. Ranganathan stated that 'reference service is the process of establishing contact between a reader and his documents in a personal way'.

Reference process, as stated by William A. Kats, is the process of answering questions. He listed out three basic factors which affects the process as, (i) information (ii) the user and (iii) the reference librarian.

The importance of the effective use of reference sources through a planned reference service policy was dealt in detail in the guidelines brought out in 1990 by the Reference and Adult Services Division of the American Library Association. As per the guidelines, the library "should provide users with complete, accurate answers to their information queries regardless of the complexity of those queries." And the library "should provide access to the most current reference sources available in order to assure the accuracy of information."

In the last decade, the nature of reference services and resources has changed dramatically in response to the technological advancements and innovations. Today's user can access quality informational resources those are readily available outside the bounds of the library in numerous formats and through a few devices. A reference librarian of today, as described by Meghan Harper,

is often required to become an information mediator: evaluating information on the spot, selecting the best medium for information retrieval, and choosing among a host of informational resources.

This chapter deals with the definition, need, types, characteristics and evaluation of reference and information sources. It also presents some basic ideas about the development of a reference collection.

3.1.1 Reference and Information Sources: Definition, Need

3.1.1.1 Reference Sources: Definition

Although, the materials in a reference collection vary in its format, to understand the concept historically, here we consider the definition of the term firstly with the most common format, i.e., a reference book.

The ALA Glossary of Library and Information Science (1983) offered the following definitions of a reference book.

- (i) A book designed by the arrangement and treatment of its subject matter to be consulted for definite items of information rather than to be read consecutively.
- (ii) A book whose use is restricted to the library building.

An all-inclusive definition was later given in the *Harrod's Librarians' Glossary and Reference Book* as "any material, published work, database, web site, etc. which is used to obtain authoritative information."

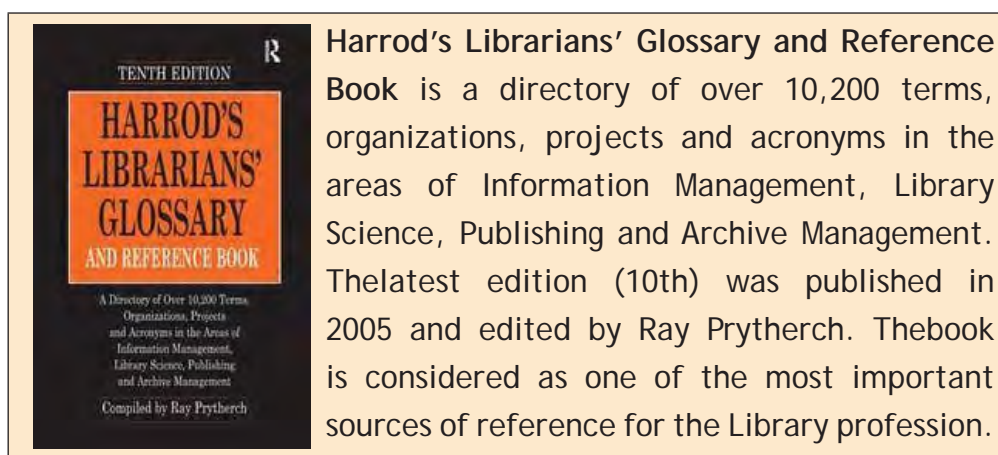


Figure 3.1 Harrod's Librarians' Glossary and Reference Book

Source: <https://www.routledge.com/> accessed on 12. 8.2021 at 12:50 hrs IST

The reference materials organized in a library shall be supplemented by additional resources available in alternative or multiple formats and also available in free or open domains or on a

virtual reference environment.

Information Sources : Definition

One of the earlier definitions for 'Information Source' was given in the Great Soviet Encyclopedia, 3rd Edition (1970-1979) as, "any system producing information or containing information intended for transmission; in information science, the conventional designation for scholarly documents or publications, which serve not only as important sources but also as the means of transmission of information in space and time."

According to Wikipedia, "an information source is a source of information for somebody, i.e. anything that might inform a person about something or provide knowledge about it. Different types of questions require different sources of information. Information sources may be observations, people, speeches, documents, pictures, organizations, websites, etc. They may be primary sources, secondary sources, tertiary sources and so on."

3.1.1.2 Need

We are living in an information society where the creation, distribution, uses, integration and manipulation of information is a significant economic, political, and cultural activity. The information becomes a resource as well as one of the most valuable commodities. Identification, gathering, organization, and utilization of the right information require the knowledge about the area of study and skills to process and retrieve it effectively. The users with varied information need and those are not conversant with searching and retrieval techniques require proper guidance to find the accurate information stored in different information sources. The need of reference sources come in the picture at this point where the reference librarian or the user him/herself turns to the organized and authentic sources of information.

When we discuss the need of reference sources from the user's perspective, some notable requirements are,

- ◆ to obtain information quickly as possible for a specific reference query.
- ◆ due to the lack of knowledge about the newly generated information.
- ◆ the absence of skills to find, evaluate and use specific information from the vast pool of unverified information.
- ◆ because of user's specialization in some restricted subject areas which are not related to the reference query.
- ◆ to obtain copies of required material or the material itself in different formats; and

- ◆ the lack of knowledge about the criteria for evaluation and selection of reference materials.

Information need

A gap in a person's knowledge that, when experienced at the conscious level as a question, gives rise to a search for an answer. If the need is urgent, the search may be pursued with diligence until the desire is fulfilled. Persons with information needs often end up at the reference desk of a library where it is the responsibility of the reference librarian to determine the precise nature of the need, usually by conducting an informal reference interview, as a basis for recommending relevant sources.

-ODLIS (Online Dictionary for Library and Information Science) by Joan

M. Reitz

Source: <http://www.abc-clio.com/ODLIS>

Accessed on 12.8.2021 at 13 Hrs IST

3.1.2 Reference and Information Sources : Types

Information sources are broadly divided into (i) Documentary sources and (ii) Non-documentary sources. Documentary sources include primary, secondary and tertiary sources which are basically 'documentary' in nature. Non-documentary sources include (i) formal and (ii) informal sources. Formal sources include research organizations, societies, universities, government departments, etc. Conversation with colleagues, visitors, attendance at professional meetings, etc. comes under the category of informal sources.

Based on the originality of the materials, information sources can be categorized into three. They are,

- (i) Primary Sources
- (ii) Secondary Sources and
- (iii) Tertiary Sources

The definition of primary and secondary sources may vary depending upon the discipline or context.

As an introduction, examine the below given image, (Figure 1), where three manifestations of the same event are represented with the three types of sources of information, primary, secondary, and tertiary.

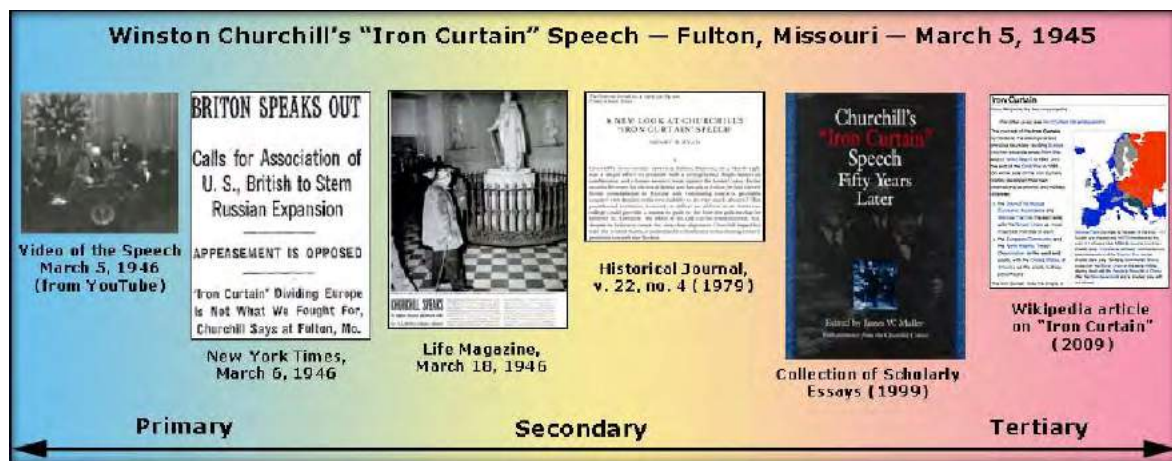


Figure 3.2: Flow from primary to secondary and tertiary resources: A time line

Source: <https://lh3.googleusercontent.com/StkJJUP8YUafrL-LG99NsmEQqRDOTWzNkp-6Lwkv8VwP3xrJDzauiJFQXcDyhI3yY4RAIEU=s170>

Accessed 12.8.2021 at 13:10 hrs IST

The characteristics of all three types of information resources are discussed with examples in the following sections.

3.1.2.1 Primary Sources

Primary Sources are original materials that were created first hand. This type of information is from the time period involved and has not been filtered through interpretation. They are usually the first formal appearance of results in physical, print or electronic format on which another research is based. They present original thinking, report a discovery, or share new information. Primary sources are unorganized sources, which are rather difficult to use by them.

Examples:

- Artefacts (e.g. coins, plant specimens, fossils, furniture, tools, clothing, all from the time under study);
- Audio recordings (e.g. radio programs)
- Diaries.
- Internet communications on email, listservs;
- Interviews (e.g., oral histories, telephone, e-mail);
- Journal articles published in peer-reviewed publications.
- Letters.
- Newspaper articles written at the time.
- Oral history (i.e. records of interview, legal proceedings)

- (j) Original Documents (i.e. birth certificate, will, marriage license, trial transcript);
- (k) Patents.
- (l) Photographs.
- (m) Proceedings of Meetings, conferences and symposia.
- (n) Records of organizations, government agencies (e.g. annual report, treaty, constitution, government document);
- (o) Speeches.
- (p) Survey Research (e.g., market surveys, public opinion polls);
- (q) Video recordings (e.g. television programs);
- (r) Works of art, architecture, literature, and music (e.g., paintings, sculptures, inscriptions on tombstones, musical scores, buildings, novels, poems).
- (s) Ephemera (e.g. brochures, pamphlets, postcards, programs, advertisements)
- (t) Web site.

3.1.2.2 Secondary Sources

Secondary sources are interpretations and evaluations of primary sources. They are not evidence, but rather commentary on and discussion of evidence. These types of information are either compiled from or refer to primary sources of information. Generally, they are accounts written after the fact with the benefit of hindsight. These are the original sources having been modified, selected or reorganized (or repackaged) so as to serve a definite purpose or group of users. Secondary sources are easily and widely available than primary sources. These also serve as bibliographical keys to primary sources. The user may consult the secondary sources first which will lead him/her to specific primary sources.

Examples:

- (a) Periodicals.
- (b) Bibliographies.
- (c) Indexing and abstracting periodicals.
- (d) Biographical works.
- (e) Commentaries, criticisms;
- (f) Dictionaries, Encyclopedias, handbooks, tables, formularies.
- (g) Histories.
- (h) Journal articles.
- (i) Magazine and newspaper articles (this distinction varies by discipline).

- (j) Monographs, other than fiction and autobiography.
- (k) Textbooks (also considered tertiary).

3.1.2.3. Tertiary Sources

Tertiary sources consist of information which is a distillation and collection of primary and secondary sources. These will aid the user of information in the use of primary and secondary sources of information. Most of the tertiary sources do not contain subject knowledge. Out of various kinds of sources, tertiary sources are the last to appear.

Examples:

- (a) Almanacs.
- (b) Bibliography of Bibliographies.
- (c) Chronologies.
- (d) Directories.
- (e) Fact books.
- (f) Guidebooks.
- (g) Indexes, abstracts, bibliographies used to locate primary and secondary sources.
- (h) Manuals.

This following vector diagram shows the relationships between different sources of information and their association to a subject.

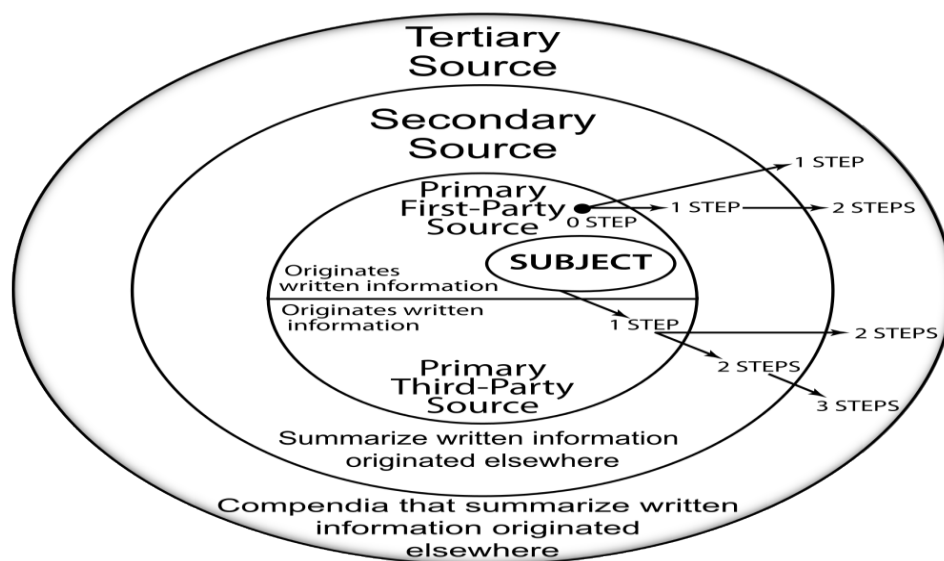


Figure 3.3: Relationships between different sources of information and their association to a subject

Source: https://lh3.googleusercontent.com/A9LznvT5kqwpOCV35Nv413JF6_hO-Jok1IjqRya_ipnPCNA6U1gTgsej-jE-03o4_igz0w=s85

Accessed 12.08.2021 at 13:15 Hrs IST

Comparison across Disciplines

As mentioned earlier, the definition of primary and secondary sources may vary depending upon the discipline or context. The example is given in the following table .

SUBJECT	PRIMARY	SECONDARY	TERTIARY
Art and Architecture	Painting by Picasso	Article critiquing art pieces	Art Stor Data base
Chemistry/Life Sciences	Einstein's diary	Monograph on Einstein's life	Dictionary on theory of relativity
Engineering/Physical Sciences	Patent	NTIS Database	Manual on using invention
Humanities	Letters by Martin Luther King	Website on Kings' writings	Encyclopedia on Civil Rights Movement
Social Sciences	Notes taken by clinical psychologist	Magazine article about the psychological condition	Textbook on clinical psychology
Performing Arts	Movie filmed in 1942	Biography of the Director	Gide to the movie

Table : Comparison of information sources across disciplines

3.1.3 Summary

To obtain information quickly as possible for a specific reference query, it is required to know about the Reference and Information sources. Information sources may be Documentary or Non-documentary. Documentary sources may be Primary Sources, Secondary Sources and Tertiary Sources. Non-documentary sources may be Formal and Informal sources. In this chapter, a comparison across disciplines on the basis of different types of documentary sources has shown.

3.1.4 Exercise

1. Define reference sources.
2. Why do users require reference sources?

3. What are the types of information sources? Give examples.
4. Differentiate primary, secondary, and tertiary sources of information
5. Compare the types of information sources across disciplines
6. What are the basic evaluation criteria for information sources?

3.1.5 References

Books

1. Bopp, Richard E., (2005), Reference and information services, 3rd ed., Englewood: Libraries Unlimited.
2. Harper, Meghan, (2011), Reference sources and services for youth, New York: Neal-Schuman Publishers, Inc.
3. Information Services for Information Consumers: Guidelines for Providers, (1990), Chicago: American Library Association.
4. Katz, William A., (1992), Introduction to reference work, 6th ed., Vol. 1, New York: McGraw-Hill International.
5. Krishan Kumar, (2001), Reference service, 5th ed., New Delhi: Vikas Publishing House Pvt Ltd.
6. Mikhailov, A. I., and R. S. (1970), Giliarevskii. Istochniki, poisk i ispol'zovanie nauchnoi informatsii. Moscow.
7. Ranganathan, S. R., (1961), Reference Services, 2nd ed., Bombay: Asia Publishing House.
8. Young, Heartsill, ed., (1983), ALA Glossary of Library and Information Science, Chicago: American Library Association.

Websites

1. <http://www.lib.umd.edu/tl/guides/primary-sources>, retrieved on 10/02/2014
2. <http://guides.library.yale.edu/content.php?pid=128822&sid=1187254>, retrieved on 10/02/2014.
3. [http://ucblibraries.colorado.edu/adminservices/manual/public/Information Services.htm](http://ucblibraries.colorado.edu/adminservices/manual/public/Information%20Services.htm), retrieved on 10/02/2014.
4. [http://www.ala.org/rusa/resources/guidelines/guidelines information](http://www.ala.org/rusa/resources/guidelines/guidelines%20information), retrieved on 10/02/2014.

5. http://www.abc-clio.com/ODLIS/odlis_about.aspx , retrieved on 10/02/2014.
6. <http://www.tri-c.edu/library/Documents/Using%20Reference%20Sources.pdf> , retrieved on 10/02/2014.
7. <http://www.ashgate.com/isbn/9780754640387> , retrieved on 10/02/2014
8. [http://encyclopedia2.thefreedictionary.com/information + source](http://encyclopedia2.thefreedictionary.com/information+source) , retrieved on 10/02/2014
9. http://en.wikipedia.org/wiki/Information_source , retrieved on 10/02/2014

Image Courtesy

Figure 1: Smith, Tim , Reference Librarian & Web Developer, Ohio University Libraries (<http://www.library.ohiou.edu/research/the-research-process/primary-secondary-sources/>).

Figure 2: [https://en.wikipedia.org/wiki/Wikipedia:Graphics_Lab/Illustration_workshop/Archive/M ar_2013](https://en.wikipedia.org/wiki/Wikipedia:Graphics_Lab/Illustration_workshop/Archive/Mar_2013)

Table 1: University Libraries, University of Maryland, <http://www.lib.umd.edu/ues/guides/primary-sources>

Unit

2

Categories of References and Information Sources: Description and Scope

3.2.0 Introduction

The quality of reference collection of a library determines the quality of reference service it provides. Selection and acquisition of reference materials depend upon the user needs and the overall objectives of the reference section or the library. A reference collection development policy has many elements. The ongoing process of maintaining the collection with proper updating or strengthening of the weaker areas, keeps the collection live and dynamic. Purpose and development of the reference collection is explained here which was followed by a brief description of important reference sources, those are normally acquired by the library to build the collection.

Reference Collection: Purpose

Michael Buckland writes that a reference collection fulfils two needs:

- (i) Looking up or verifying factual data, often referred to as “ready reference”; and
- (ii) Establishing an initial outline and context for any topic efficiently and effectively, especially determining what, where, when and who aspects of whatever is of interest.

The purpose of the collection will vary depend on the type and mission of the library, the needs of the clientele served, in addition to the philosophies and goals of the reference staff, library administration and the parent organization.

Development of a Reference Collection

The escalating cost of reference materials, growth in types of formats, emergence of new access technologies, and rigid licensing policies make the task of developing a collection of reference materials more difficult. Reference resources are available in a variety of formats and nowadays many are available in multi-formats (same content in print, online, e-book, audio book and video forms). Primary components of a core reference collection include resources in print, microform, electronic and the resources over a network (internet).

Reference Collection Development Principles: The basic principles of reference collection development, as mentioned by Meghan Harper are,

- (i) Reflect the library's mission
- (ii) Knowing the user
- (iii) Develop a budget plan
- (iv) Maintain a balance of electronic and print resources
- (v) Develop policies
- (vi) Develop staff expertise
- (vii) Solicit inputs from the user
- (viii) Preview/Review reference materials
- (ix) Evaluating the collection on a continuing and systematic basis

Reference Collection Development Policy: A collection development policy helps to streamline the process and to meet the specific objectives. Carol A. Singer states that, "a reference collection development policy serves as the basis for decision making by those who build and maintain the reference collection because it defines the purpose of the collection, and describes the content of the reference collection, both what should be included and - just as important - what should not be included".

Singer outlines the components of a reference collection development policy which include:

- ◆ Purpose of the collection development policy
- ◆ Responsibility for collection development
- ◆ Purpose of the reference collection
- ◆ Target audience(s)
- ◆ Budgeting and funding
- ◆ Selection criteria
- ◆ Selection aids
- ◆ Preferred format
- ◆ Duplicates
- ◆ Preferred language(s)
- ◆ Circulation

- ◆ Treatment of specific resource groups
- ◆ Resource sharing
- ◆ Collection maintenance
- ◆ Weeding and reviewing the collection
- ◆ Policy revision

Collection Analysis: This is the process of gathering an overall picture of the age, number of items by topic, and often types of materials within a collection through the use of individual item records. Collection analysis helps the library to make good selection decisions and prioritizing collection development and evaluation.

Collection Planning: This is the identification, comparison and selection of quality reference resources with the help of analysing user feedback and selection tools (publisher catalogues, professional journal reviews, etc.). The process includes gathering information to assist in the selection of new materials and the identification of weakness in the existing collection.

Evaluation of Reference Sources

Before including into the library's reference collection, the quality of the individual sources must be evaluated. There are many criteria that should be considered when evaluating information sources. The general criteria devised by Bopp and Smith are,

- (i) Format: print/microform/ electronic, physical makeup, illustrations
- (ii) Scope: purpose, coverage, currency
- (iii) Authority: authorship, publisher/sponsor, source of information
- (iv) Treatment: accuracy, objectivity, style/ audience.
- (v) Relation to similar works: uniqueness, new editions
- (vi) Arrangement: sequence, indexing
- (vii) Special features
- (viii) Cost: price, licensing conditions

Classification of Reference Sources

William A. Kats categorizes reference source into two types.

- (i) Control Access Directional Type: It itself does not contain the required information but directs the user to the documents which contain the information. Example: Bibliographies, Catalogue, Indexes, Abstracts etc.

- (ii) Work of Sources Type: It itself contains the information. Example: Encyclopedia, Dictionaries, Yearbooks, etc.

Categories of Reference Sources

Reference sources are designed to be consulted or referred to from time to time for a specific piece of information. Important reference sources are detailed in the following sections with their scope and main characteristics.

3.2.1. Encyclopaedia

An encyclopaedia is a compendium of knowledge. Knowledge is related to kinds of readership, which an encyclopaedia intends to serve. An encyclopaedia is regarded as one of the most reliable and used reference sources in a library. Creating a modern encyclopaedia is a huge task involving a large team of persons including editors, consultants, contributors, etc. The Oxford English dictionary has defined an encyclopaedia as "a literary work containing extensive information on all branches of knowledge usually arranged in alphabetical order". ALA Glossary of Library Terms defines encyclopaedia as "a work containing information articles on subject in every field of knowledge usually arranged in alphabetical order or a similar work limited to a special field of subject".

Scope

The types of questions answered through the use of an encyclopaedia are

- (i) ready reference information (e.g., Who invented radio?)
- (ii) general background information (e.g., How does photosynthesis work?)
- (iii) 'pre-research' information, which helps to launch a research. Encyclopaedias provide a well-organized overview of selected topics of major importance written in an objective style.

Types and features

Basically, encyclopaedias can be divided into following types.

- (i) *Encyclopaedias for adults*, containing informational articles/entries giving essential general information on subjects in various branches of knowledge, arranged alphabetically by subject and names. e.g., New Encyclopaedia Britannica, 32 vols. (2010, Chicago) Encyclopaedia Americana, 30 vols. (1984, New York), Colliers' Encyclopaedia, 24 vols (1976-, New York)
- (ii) *Encyclopedias for children and young adults* are written for young readers and tend to place more emphasis on formats, illustrations and pedagogical tools. e.g., World Book Encyclopaedia, 22 vols. (2010, Chicago), The Oxford American Children's Encyclopedia,

9 vols. (1999, New York).

- (iii) *Subject Encyclopaedias* have a broader scope and give in-depth coverage to a specific field of knowledge. E.g., McGraw Hill Encyclopaedia of Science and Technology, 20 volumes, (1992, New York), Encyclopaedia Indica (1975, New Delhi)

3.2.2 Dictionaries

Dictionaries are used to define words; to verify spelling, syllabication, or pronunciation; to check on usage; or to determine the etymological history of a word. Around 1225 A. D, English Grammarian John of Garland used the word „*dictionarius*’ as the title of a collection of Latin words arranged by subject for the use of learners.

Scope

A basic dictionary contains an alphabetical list of words with their definitions. This may be of a language or the terms of a subject or vocation arranged according to some definite order, usually alphabetical. Entries may also include inflected forms, run-on or derivative entries, etymologies or word histories, synonyms and antonyms, usage or status labels, usage notes, illustrative quotations and pictorial illustrations.

Types and features

Based on the approach of presentation, dictionaries can be of two types, (i) descriptive, recording how the language is actually used and (ii) prescriptive, advocating how it ought to be used.

The major categorization of dictionaries based on the content is as follows.

- (i) *General (Unabridged) Dictionaries* are one that derived or condensed from a larger work, attempts to include all words in a language that are in use at the time the dictionary is compiled.

Examples: The Random House Webster’s Unabridged Dictionary of the English Language (1997, New York)., Webster’s Third New International Dictionary (1961, Springfield). Hindi Shabdasagar (1967-, Varanasi).

- (ii) *Etymological Dictionaries* deals with origin and history of words and meanings in use. Example: Oxford English Dictionary (1928-, Oxford), Oxford English Dictionary in CD ROM appeared in 1992.

- (iii) *Desk Dictionaries* are abridged, or desk-sized dictionary, a selective compilation, often based on a larger dictionary and prepared for a certain level of student use. Example: Merriam Webster’s Collegiate Dictionary (2010, Mass.), The American Heritage Dictionary of the English Language (2000, Boston), Comprehensive English-Hindi Dictionary (1962-

- , Varanasi), Practical Sanskrit-English Dictionary (1957- Poona), Bharatiya byabahar kosha or Dictionary of sixteen Indian languages (1961, Bombay)
- (iv) *Subject Dictionaries* are confined to specialized subject fields, professions or occupations. Example: McGraw Hill Dictionary of scientific and technical terms, 3rd ed. (1984, New York), ALA Glossary of Library and Information Science (1983, Chicago).
 - (v) *Dictionaries of quotations* are used to identify or verify a given quotation or to select a quotation on a given topic or by a given author or for a special occasion. Examples: Barlett's Familiar Quotations (1855-, Cambridge), The oxford Dictionary of Quotations 5th ed., (1999, Oxford).
 - (vi) *Thesauri (Dictionary of Synonyms and Antonyms)* are specialized dictionaries deals with synonyms and antonyms. Example: Roget's International Thesaurus, 5th ed., (1992- New York), Webster's new Dictionary of Synonyms (1968, Springfield).
 - (vii) Dictionaries of usage contains definitions supplemented by discussions on how words should be used. Example: The New Fowler's Modern English Usage, 3rd ed., (2000, Oxford).
 - (viii) Abbreviations and Acronyms Dictionaries commonly used in every subject area. Example: Acronyms, Initialisms & Abbreviations Dictionary (1960- Farmington Hills).

3.2.3 Biographical Sources

Biographical sources contain data on people. Many biographical sources either focus on currently living persons or are retrospective, focusing on past historical figures.

Scope

Biographical sources provide information about dates of birth and death, qualifications, the positions held, the contributions made and the address of the biography. Some of these sources also provide portraits or images and with an index. These are ready reference sources which provide basic facts about the individual. The scope of a biographical source shall be broad or narrow depending on the comprehensiveness of the coverage.

Features and categories

The quality of a biographical source is determined by the accuracy and currency of the entries. There shall be a list of sources from which the information was obtained. The organization of the entries shall be with adequate access points, i.e., indexes and cross references.

Biographical sources can be divided into two,

- (i) *direct sources*, which provide factual information itself rather than referring the user (e.g. Who is who)
- (ii) *indirect sources*, lists bibliographic citations referring the user to other works that may contain the information sought (e.g.: biography Index)

Another categorization of biographical sources can be made based on time as,

- (i) *current*, those about living persons
- (ii) *retrospective*, those about persons from the past.

We may obtain biographical information from varied sources like, biographical dictionaries, almanacs, dictionaries, directories, encyclopedias, literary handbooks, manuals, obituaries in newspapers, periodical and newspaper indexes, etc.

Important biographical sources with examples are given below.

- (a) Current Biographical Dictionaries: e.g. Current biography (1940-, New York), Contemporary newsmakers (1985-, New York), India Who's who (1969-, New Delhi)
- (b) Retrospective Biographical Dictionaries: Webster's biographical dictionary (1972-, Massachusetts), Dictionary of national biography (1972-, Kolkatta), National biographical dictionary of India (1972-, Delhi), The International who's who (2000, London), Dictionary of American biography (1996-, New York)
- (c) Biographical Directories: Who's who (1849-, London), Who's who in America (1899-, Chicago), American men and women of science (1906-, New Providence, NJ)
- (d) Professional and Subject Biographical Sources: Directory of American Scholars (1974- New York), Directory of Libraries and who's who in library profession in Delhi (1964, Delhi), Who's who in Indian writers(19610, New Delhi)

3.2.4 Atlases

An atlas is a volume consisting of a collection of maps. They can be divided in to three groups, (i) current atlases are needed for p-to-date information on geographical and political changes in the world, e.g., The Times Atlas of the World. 10th ed., (1999, New York). (ii) historical atlases depicts boundary changes, military campaigns, early exploration and similar topics, e.g., The Times Atlas of World History.4th ed 91999, London) and (iii) thematic or subject, atlases, emphasize a specific subject or region. e.g., National Atlas of Canada. 5th ed (1997-, Ottawa).

3.2.5 Yearbooks

Yearbooks is known as ready reference sources which provide concise factual information about current and historical events; organizations, people, places and things; and statistical trends. These help the user to locate concise facts and summaries quickly.

Scope

The following kinds of information are normally found in yearbooks

- (i) Chronological list of the important events of the year
- (ii) Summaries of the political, social and cultural events of the year
- (iii) Major developments and trends in various fields (science and technology, economics, sports, etc.) during the year
- (iv) Short biographies and obituaries
- (v) Information about organizations, associations
- (vi) Statistical information (population, prizes, awards, sports events, etc)

A yearbook/annual is an annual compendium of the data and statistics of a given year. The basic purpose of a yearbook is to record the years' activities by country, subject or specialized area. The essential difference between a yearbook and an almanac is that the almanac will also include considerable retrospective material, material which may not be in the average yearbook. Yearbooks regularly index personal names, while almanacs, in book format, index personal names sparingly. Yearbooks contain longer descriptions of events and more analysis and evaluation, and articles are almost always signed.

Yearbooks are of two types (i) general yearbooks, which covers the past year's activities and (ii) newspaper indexes, which are most up to date with well-organized formats and the brief annotated stories (e.g. New York Times Index, National Newspaper Index).

Examples: Europa World Yearbook (1959- , London), Statesman's Yearbook, 1864- New York), India: A Reference Annual (1953-, New Delhi), Manorama Yearbook (, Kottayam), World of Learning (), Demographic Yearbook (1948- , New York), McGraw Hill Yearbook of Science and Technology (1962-, New York).

3.2.6 Directories

Directories are used to locate organizations, institutions and people and to verify the details. The ALA Glossary of Library and Information Science defines a directory as "a list of persons or organizations, systematically arranged, usually in alphabetic or classed order, giving address,

affiliations, etc., for individuals, and address, officers, functions, and similar data for organizations.”

Scope

Directories present information in an orderly, clear manner with a limited type of information. The coverage is extended to organizations of different kinds, learned bodies, scientific societies, professional bodies, trade associations, etc. with variety of factual information. Directories form a rich source of biographical information.

William A. Kats divides directories into,

- (i) *Local Directories*, issued for a particular locality (e.g., Telephone and city directories)
- (ii) *Governmental directories* are guides to government institutions (e.g., Worldwide Government Directory (2000, Washington D. C.)
- (iii) *Institutional directories* are lists of schools, colleges, universities, foundations, libraries, hospitals, museums and similar organizations. (e.g., World of Learning (1947, London), the American Library Directory (1923-, New York), Indian Library Directory (1938-, Delhi), Commonwealth universities Yearbook: A directory to the universities of the Commonwealth and the handbook of their Association (1914-, London)
- (iv) *Investment services*, gives detailed reports on public and private corporations and companies.
- (v) *Professional directories* are lists of professional organizations (e.g., Europa World Yearbook (1959-, London), Yearbook of the United Nations (1947/47-, New York), Encyclopaedia of Associations: National Organizations of the U.S. (1964-, Farmington Hills)
- (vi) *Trade and Business directories* are lists of manufacture’s information about companies, industries and services. (e.g., World Chamber of Commerce directory (2000, Loveland), Million Dollar Directory (1998-, New Jersey).

Directories of directories provide listings and descriptions of various directories (e.g., Directories in Print).

3.2.7 Bibliographical tools

The term ‘bibliography’ was first used by Louis Jacob de Saint Charles in his *Bibliographia Parisiana* (1945-’50), and derived from two Greek words, “biblion”, means “book” and “graphein”, means “to write”. A bibliography is a list of materials (not only books) used to identify sources of information on particular topics. Bibliographies may be current or be composed of past editions of published materials (retrospective).

According to D. W. Krummel, “the term bibliography can have two definitions: there is bibliography itself, an activity, and there is a bibliography, the product of this activity”.

Scope

The scope of the bibliography is related to the domain of items to be selected for inclusion.

Features and categories

Regardless of form a bibliography is used primarily for three basic purposes: (i) to identify and verify, (ii) to locate, and (iii) to select.

Bibliographies can be broadly divided into three branches,

- (i) *systematic or enumerative bibliography*, is the systematic listing of individual items with minimum details for reference and study.
- (ii) *analytical or critical bibliography*, deals with a physical description of the book like authorship, edition, date, place of printing and perfection of the copy, and
- (iii) *historical bibliography*, the study of books “as objects of art”, concerned with the art of writing, printing, illustration, and binding.

We will discuss about systematic bibliography, the most common and easiest of all, to understand the concept better. The objective of systematic bibliography is to collect and list information about individual books and related material in a logical or useful order. Such bibliography is usually enumerative in nature. Bibliographies are not necessarily limited to books. There may be list of other forms of information like images, audio, video, software, database records, websites, etc.

Following are some common types of bibliographies.

- (a) *Universal bibliography*: Universal bibliography, theoretically consists of, everything published, issued, or created in the field of communications from the beginning through the present to the future. It is not limited by time, country, language, subject, or form and may be achieved by combining all online national bibliographies, which are the exhaustive listing of information sources produced in one country.

Example: Bibliotheca universalis

- (b) *National bibliography*: Limited to materials published within a country. The scope may be enlarged to include works written about the country or in the language of the country. A national bibliography is often a product of the government and will set itself limits of time, form, and origin.

Examples: Indian national bibliography, British national bibliography

- (c) *Trade bibliography*: Produced by commercial publishers and serve to provide the information necessary to select and acquire recently published materials.

Examples: Books in Print (BIP), Cumulative Book Index, Indian Books in Print, American Book Publishing Record

- (d) *Subject bibliography*: List of materials that relate to a particular topic, intended for researchers and specialists.

Example: Guide to reference books, Information sources in science and technology, Bibliography of Indology

- (e) *List of periodicals and Newspapers*: Lists of current and retrospective periodicals and newspapers. Example: Ulrich's international periodicals directory, American Newspapers, Gale Directory of Publications and Broadcast Media

- (f) *Author bibliography*: List of materials limited to a particular author. Example:

Chaucer: A bibliographical manual

- (g) *Bibliography of Bibliographies*: A listing of bibliographies.

Example: Bibliographic Index: A Cumulative Bibliography of Bibliographies

- (h) *Library Catalogues*: Serve the users of particular library by listing the holdings and location of materials in that library, often through the Online Public Access Catalogue (OPAC).

- (i) *Union Catalogues*: Identifies the material held in the collection of more than one library, through a shared cataloguing network. Example: OCLC, RLIN

3.2.8 Summary

Each Library has to develop its reference collection. To develop the reference collection, the library has to make a policy which fulfils the needs of its user. Library has also to evaluate the reference collection/ sources on the basis of some criteria discussed in this unit.

3.2.9 Exercise

1. What do you mean by collection Analysis?
2. Discuss the reference collection development policy.
3. List five different types of Reference Sources.
4. Discuss the scope of Biographical sources.
5. Enlist the criteria devised by Bopp and Smith for evaluation of reference sources.

3.2.10 Reference

1. Benet's Reader's Encyclopedia, 4th ed. (1996), New York: HarperCollins
2. Bopp, Richard E., (2005), Reference and information services, 3rd ed., Englewood: Libraries Unlimited.
3. Bonn, George S., (1971) "Literature of Science and Technology", McGraw-Hill Encyclopedia of science and technology, New York: McGraw-Hill
4. Buckland, Michael K., (2007), "The digital difference in reference collections", Journal of Library Administration 46(88).
5. Young, Heartsill, ed., (1983), The ALA Glossary of library and Information Science, Chicago: American Library Association.
6. Nolan, Christopher W. (1999), Managing the reference collection, Chicago: American Library Association.
7. Harper, Meghan., (2011), Reference sources and services for youth, New York: Neal-Schuman Publishers, Inc.
8. Information Services for Information Consumers: Guidelines for Providers", (1990), Chicago: American library Association.
9. Katz, William A., (1992), Introduction to reference work, 6th ed., Vol. 1, New York: McGraw-Hill International.
10. Krishan Kumar., (2001), Reference service, 5th ed., New Delhi: Vikas Publishing House Pvt Ltd.
11. Krummel, D. W., (1984), Bibliographies: Their aims and methods, London: Mansell Publishing.
12. Ranganathan, S. R., (1961), Reference Services, 2nd ed., Bombay: Asia Publishing House.
13. Singer, Carol A., (2012), Fundamentals of Managing Reference Collections, Chicago: American Library Association.