

# Information Sources and Services

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## DLIS006



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# **INFORMATION SOURCES AND SERVICES**

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**EXCEL BOOKS PRIVATE LIMITED**  
A-45, Naraina, Phase-I,  
New Delhi-110028  
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Phagwara

## SYLLABUS

### Information Sources and Services

*Objectives:* To study about the information sources and services, different types of resources, different types of services which are included in the field of library and information science. Knowledge regarding all this will help the student to manage the library and information sources and services.

S. No.	Topics
1.	Documentary sources of Information; print and non -print : categories: primary, secondary and tertiary.
2.	Reference Services: Need, Types (orientation Ready & Long range reference services) Qualities of Reference Librarian.
3.	Information Services and Products : Alerting Services, Bibliographic Services.
4.	Document Delivery, Online Services, translation Services ,Reprographic Services.
5.	Reference sources and their Evaluation : Encyclopedia, Dictionaries.
6.	Reference sources and their Evaluation : Directories, Geographical Sources.
7.	Bibliographical Sources: Types and Importance, Comparative study of INB and BNB.
8.	Indexing and Abstracting Services, Need and importance.

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## Unit 1: Documentary Sources of Information

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### Objectives

After studying this unit, you will be able to:

- Define the concept of document and documentation
- Differentiate between printed and non-printed sources
- Explain the classification of documentary sources of information
- Identify primary, secondary and tertiary sources
- Explain the non-documentary Sources of Information

### Introduction

A “source” is anything that provides you with information. There are mainly two types of information sources. They are: documentary and non-documentary. The documents are physical sources of information that are fit for physical handling or they are the record in some physical form. The non-documentary sources of information are live sources that provide information instantly. The non-documentary sources of information include research organizations, societies, industries, government establishment, departments, learned and professional bodies, universities, technological institutions, etc.

Notes

## 1.1 Document

A document constitutes embodied thought which is a record of work on paper or other material fit for physical handling, transport across space and preservation through time. It may include manuscripts, handwritten and engraved materials including printed books, periodical, microform, photograph, gramophone records, tape records, etc. The recent advances in science and technology help originate another kind of document i.e. computer readable forms that includes CD, DVD, pen drive, hard disk, web resources, etc. All documents are the records of human observation and thought and in its creation direct human intervention is necessary. They provide some information to its readers or users. A library as a gateway of knowledge provides access to a variety of such documentary sources of information. It is generated out of a service to be provided to the user. It is a kind of consolidation and presentation process giving tangibility to information.



*Did u know?* The sources of documentary information can also be termed as an *information product*.

In Library and information science and in documentation science, a “document” is considered a basic theoretical construct. It is everything which may be preserved or represented in order to serve as evidence for some purpose. The classical example provided by Suzanne Briet is an antelope: “An antelope running wild on the plains of Africa should not be considered a document, she rules. But if it was to be captured, taken to a zoo and made an object of study, it has been made into a document. It has become physical evidence being used by those who study it. Indeed, scholarly articles written about the antelope are secondary documents, since the antelope itself is the primary document.” (Quoted from Buckland, 1998). (This view has been seen as an early expression of what now is known as actor–network theory). That documents cannot be defined by their transmission medium (such as paper) is evident because of the existence of electronic documents. The concept of document has been defined as “any concrete or symbolic indication, preserved or recorded, for reconstructing or for proving a phenomenon, whether physical or mental”.

A much cited article asked “what is a document” and concluded this way: “The evolving notion of “document” among (Jonathan Priest). Otlet, Briet, Schürmeyer, and the other document lists increasingly emphasized whatever functioned as a document rather than traditional physical forms of documents. The shift to digital technology would seem to make this distinction even more important. Levy’s thoughtful analyses have shown that an emphasis on the technology of digital documents has impeded our understanding of digital documents as documents (e.g., Levy, 1994). A conventional document, such as a mail message or a technical report, exists physically in digital technology as a string of bits, as does everything else in a digital environment. As an object of study, it has been made into a document. It has become physical evidence by those who study it.

### 1.1.1 Types of Documents

There are several different types of documents in the library. Each type of document has different characteristics. Each type of document may be related to other documents in the library. The following sections explain these different types of documents.

#### Original Document

Original documents are scanned images of original legal documents. These may be provincial gazettes or other printed legal documents that have been scanned, converted into Adobe Acrobat



Portable Document File (PDF) format, and uploaded to the library. A scanned image of an original legal document may contain one or many laws, orders, and regulations. Scanned images of original documents show laws in their original, officially published form, including any official signatures or stamps.



*Caution* It is usually not possible to search the text in a scanned original document image. This is because the image is like a photograph, so that the library search function cannot automatically read the text of the document.

It is possible to process scanned original document PDF files so that the text can be searched. The library will index and search such files automatically.

An original document image may be linked to one or more other documents in the library. For example, it is common for an individual law to be related (linked) to the scanned image of the original gazette in which it was first published. A piece of legal literature that discusses related issues might also be linked to an original scanned document. Links to related documents in the library are shown at the bottom of each document listing. You may click on these links to access the related document.

### Legal Document

A legal document is a single law, judicial decision, legislative record, administrative decision, financial or budgetary decision, executive order, regulation, or other document that is an official law. These legal documents normally originate from official gazettes. They can be published separately in the library and linked to the scanned original document image of the official gazette. This makes it possible to classify each law and decision separately and in a searchable form. Library users can then find these documents more quickly.

When a legal document is added to the library it is classified by jurisdiction and subject. The language of the document, date the law or decision was published, the status of the law or decision, and other information about the law or decision are also entered into the library record.

Any legal document can be related to any other legal document. For example, the amendments to a law can be related (linked) to the original law and the original law linked to the scanned image of the original gazette in which it was published. A judicial decision may also be related to a law that was the subject of the decision. An expert commentary on the law may be added to the legal literature collection of the library and linked to the law.

Links to related documents in the library are shown at the bottom of each document listing. You may click on these links to access the related document.

### Legal Literature

Legal literature is writings that cover legal topics, but do not carry the weight of a law. They include legal commentary about the law written by legal experts. These documents are normally published in the library in PDF format.

A piece of legal literature may be related to one or more legal documents or scanned original documents in the library. Links to related documents in the library are shown at the bottom of each document listing. You may click on these links to access the related document.

Documents are sometimes classified as secret, private or public. They may also be described as a draft or proof. When a document is copied, the source is referred to as the original.

**Notes**

There are accepted standards for specific applications in various fields, such as:

- *Academic*: Thesis, paper, journal
- *Business and Accounting*: Invoice, quote, RFP, Proposal, Contract, Packing slip, Manifest, Report detailed & summary, Spread sheet, MSDS, Waybill, Bill of Lading (BOL), Financial statement, Nondisclosure agreement (NDA) or sometimes referred to as; Mutual nondisclosure agreement (MNDA)
- *Law and Politics*: Summons, certificate, license, gazette
- *Government and Industry*: White paper, application forms, user-guide
- *Media and Marketing*: Brief, mock-up, script

Such standard documents can be created based on a template.

### 1.1.2 Documentation

Documentation science, documentation studies or just documentation is a field of study and a profession founded by Paul Otlet (1868–1944) and Henri La Fontaine (1854–1943). Professionals educated in this field are termed documentalists. This field generally changed its name to information science in 1968, but some uses of the term documentation still exists and there have been efforts to reintroduce the term documentation as a field of study.

“The term documentation is a neologism invented by [Paul] Otlet to designate what today we tend to call Information Storage and Retrieval. In fact it is not too much to claim the *Traité de Documentation*, 1934 as one of the first information science textbooks” (Rayward, 1994, s. 238).

Berard (2003, p. 148) writes that the concept “documentation” is still much used in the French speaking areas and that it corresponds to information science in general. One explanation of why this concept is well established in French-speaking countries is that there is a clear division of labour between libraries and documentation centres in those countries. The personal employed at those different kinds of institutions has different educational backgrounds. The differences in roles between libraries and documentation centres have, however, become less clear during recent years.

In the English-speaking world, the term “documentation” was gradually replaced by the term “information science”. The most important expression of this change of terminology was in 1968 when the American Documentation Institute (founded 1937) changed its name to American Society for Information Science (in 2000 name shift to American Society for Information Science and Technology). This name shift is not, however, a completely neutral designation, but is to some degrees associated with a corresponding shift of focus within the field from a primary interest in the content and function of scientific documentation towards the application of computers and information technology (IT).

Buckland (1991, pp. 46-48) has analysed some important aspects from the history of documentation. During the early 1900s the documentalists felt a need for a general term, which could describe the content of the documenting activity. The concept “document” has been used a designation for informative physical objects including not only texts but also natural things, artefacts and models which purpose have been to represent ideas and works of art. Buckland points out that the word originally meant tool for teaching or information, whatever a lecture, an experience, or a text was used. It is not until later in the history of the concept that it is narrowed to mean a textual object. Suzanne Briet, a major figure in the history of documentation, used an antelope to exemplify the meaning of the term. A wild specimen in Africa is not a document, but a specimen that is captured and recorded in a Zoo is in her opinion a document (cf., Briet, 1951).

When the concept of documents is generalized in this way it includes both textual publications (the primary object of libraries) non-published records (primary object of archives) and physical objects (primary object of museums). It thus includes what Hjerpe (1994) designates the activities of memory institutions.

Before 1990 – when CD-ROM-databases were introduced as tools for end-user searching – the role of documentalists was primarily to make searches in commercial online databases for end users. Those databases were mainly based on a high cost per minute of use. The documentalists were mostly associated with special departments of documentation with major research libraries such as Karolinska University Hospital and the Royal Institute of Technology in Stockholm, Sweden or Technical Knowledge Centre of Denmark and Danish National Library of Science and Medicine in Copenhagen, Denmark. With the advent of end user based systems around 1990 disappeared the most important role of documentalists and the use of the concept “documentation” declined in Scandinavia as it had earlier declined in the English-speaking world (cf., Hjørland, 2000b).



*Did u know?* Although the term “documentation” is still in use (e.g. in Journal of Documentation) the trend has been to replace it with information science (or other phrases in which the word information forms a part).

The goal of documentation is to explore the field of scholarly, scientific and professional communication as well as cultural and educational intermediating in order to optimise the tasks of the producers and users of knowledge.

## Self Assessment

State whether the following statements are true or false:

1. A library as a gateway of knowledge provides access to a variety of documentary sources of information.
2. Original documents are scanned images of original legal documents.
3. Any legal document can be related to any other document.
4. Legal literature is writings that cover legal topics and carry the weight of a law.
5. In the English-speaking world, the term “documentation” was gradually replaced by the term “information science”.

## 1.2 Printed and Non-printed Sources

The print media reigned supreme and unrivalled for about 500 years when at the 2nd half of the 20th century it faced a formidable challenge from non-print media. Now, a big question has cropped up before the world whether the print media will be able to withstand the threat from the non-print media and continue as usual in future, or it will yield to the pressure and gradually vanish from the scene.

### 1.2.1 Print Sources

Print Source is a source of information that was originally published and made available to the public by being printed on paper. This would include books, magazines, newspapers, encyclopaedias, journals, letters, etc., anything that was originally made available to the public through an ink-on-paper medium.

## Notes



*Notes* We always want our sources to be as close to first hand as possible. We also need to consider the reliability of any source we use.

Although more and more information resources are demanded and supplied electronically, we do still hold an important amount of information in print form. This includes books and print journals but also maps; photocopied articles and book chapters; theses and dissertations.

Printing involves a minimum of four different items: (i) manuscript, i.e. the piece of writing to be printed; (ii) composition of the matter either by hand or by machine; (iii) the physical medium, say, paper on which the matter is to be printed; and (iv) the ink with which the matter to be printed. For illustrations, blocks, etc., are also required. Products of printing are many and varied.



*Example:* Books, periodicals, newspapers, etc. are all products of printing and all of them represent one medium or the other. All these products taken together form the print media.

Hence, in this Unit we are using the term print media instead of print medium.

### Types of Print Media

Print media can also be categorised according to the physical formats on which the matter is printed, say paper, plastic, cloth, metal sheet, and so on. In this writing, we are confining ourselves to such items as are printed on paper such as sheets, leaflets, booklets, books, periodicals, and so on.

#### *Printed Sheets*

A sheet is a piece of paper of varying sizes on which the written or typed matter is printed. Usually the printed sheets are used for advertising, campaigning and other purposes. The details of a product, items being sold at a shop, the opening of a new shop, showroom, restaurant, stall, etc. are printed on the sheet and the same is distributed to the prospective customers. Sometimes these sheets are also pasted on the walls to attract the attention of the public. College and university students and teachers, politicians of all levels, and many others fighting some election use printed sheets for propaganda. Printing of the sheets is neither time consuming, nor costly. Moreover, they can be distributed by hand and pasted on walls, tree trunks, and other places with ease.

#### *Leaflets*

A leaflet is a small sheet of paper folded once and printed to make two or four pages. The pages follow the same sequence as those of a book. It is neither stitched nor stapled. It may be noted that in US and Canada, a leaflet or booklet is termed as a folder. At times, serials also appear in the form of leaflets. Examples: Leaflet, Department of Agriculture, Bengal; Indian Forest Leaflet, etc. These leaflets contain product information, tourist information, road maps, and so on and generally distributed free. A tourist while proceeding on a journey can conveniently carry the leaflets and use them with utmost ease whenever necessary. Neither carrying nor using creates any difficulty. Many publishers send blurbs of their publications by post or courier to prospective buyers. The approach is personalised, not costly, but quite effective and can reach even the most undeveloped and remote area of a country.

**Printed Cards****Notes**

Cards are printed to convey greetings, invite people to attend marriage and other ceremonies, and so on. During Deepavali, New Year, Christmas, etc. we purchase the greeting cards and send them to near and dear ones. At times, these cards become valuable source of information in as much as the card gives us information about somebody's date of marriage, names of the bride and bridegroom and their parents and so on. If you see the cards in the archive of a celebrity, you will know with whom he/she had connections during his/her lifetime. Pamphlets As per UNESCO's definition a pamphlet is a non-periodic printed publication of 5 to 48 pages excluding cover pages. It is stapled/stitched and cut. Pamphlets usually provide information on a topic in simple language and are meant for wide range of users. Many textbooks of kindergarten and elementary classes as well as for neoliterates are pamphlets. They are printed usually with large fonts and colourful illustrations.

**Books**

According to UNESCO, a book is a non-periodic printed publication of at least 49 pages exclusive of cover pages. A book is usually stapled/stitched along one edge and placed within protective covers to form a volume. In general libraries, the collection is predominated by books. The sizes of books vary. The size of *the New International Webster's Comprehensive Dictionary of the English Language* (Encyclopaedic ed.) is 28 x 21cm. Atlases are usually still bigger. Textbook in general is of medium size. For example, Reference Service by Krishan Kumar measures 21 x 13cm. Computer Dictionary by Ian Scales and Geof Wheelwright goes to another extreme measuring about 6 x 5cm. According to the intellectual content, books can be categorised as textbooks, monographs, treatises, reference books and so on.

**Periodicals**

You have already read about various categories of periodicals in Unit 5 of this course. The periodical is a powerful medium for the dissemination of information. Researchers all over the world publish their papers describing latest findings in primary periodicals. Secondary periodicals gather information from primary periodicals and present the same in the form of abstracts, popular articles or reviews. Going through these periodicals a researcher, teacher, student, and others keep themselves updated generally overriding the language barrier. Compared to textbooks, treatises or monographs, the information presented in periodicals is almost always more up-to-date.

**Newspapers**

For centuries newspapers have been serving human community as a powerful medium of communication. Newspapers appear from almost all parts of the world in numerous languages. In India also, newspapers appear not only in English and Hindi but also in numerous regional languages like Bengali, Marathi, Gujarati, Tamil, Telugu, Assamese, Oriya, and so on.

**1.2.2 Non-print Sources**

Non-print sources are the media where information is available in non-conventional form.



*Example:* To find out the current population of India, using a non-print tool would be best. However, to find out what a giraffe prefers to eat, you might get better information from a print source, like an encyclopaedia.

**Notes**

It may be audio-visual and varieties of microforms. Even maps, atlases and globes, etc. are sometimes included. However, no suitable definition is available to encompass precisely the term or it is difficult to provide a suitable and acceptable definition, therefore we would list the non-print media that normally include:

1. Photographs, film slides, transparencies;
2. Realia, mock-ups, models and specimens;
3. Phono-recordings, including discs;
4. Audio tapes, cassettes and cartridges;
5. Motion pictures, Video Tapes, Kinescopes;
6. Portfolio, Kits;
7. Maps, Atlases, Globes;
8. Microforms;
9. Magnetic Media; and
10. Optical Media.

Following are the difference between print and non-print sources of information:

Print Sources	Non-Print Sources
<ul style="list-style-type: none"> <li>• Dictionary (general and special)</li> <li>• Thesaurus</li> <li>• Encyclopaedia (general and special)</li> <li>• Almanac</li> <li>• Atlas</li> <li>• Books, Periodicals, Maps and Charts, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Internet website</li> <li>• Online database (subscription and Internet)</li> <li>• Video, DVD, Blu-ray, etc.</li> <li>• CD, CD-ROM, MP3, etc.</li> <li>• TV/Cable program</li> </ul>

**Self Assessment**

State whether the following statements are true or false:

6. Non Print Source is a source of information that was originally published and made available to the public by being printed on paper.
7. A sheet is a piece of paper of varying sizes on which the written or typed matter is printed.
8. A newspaper is a small sheet of paper folded once and printed to make two or four pages.
9. A book is usually stapled/stitched along one edge and placed within protective covers to form a volume.

**1.3 Categories of Documentary Sources of Information**

Different authors classified the documentary sources of information into different categories. Some popular classifications are listed below:

- (a) **C. W. Hanson Classification:** C. W. Hanson (1971) in the article “Introduction to science Information work” published in ASLIB (previously Association of Special Libraries and Information Bureau but now known as Association for Information Management) divides documentary sources of information into two categories i.e. primary and secondary.

- (i) *Primary*: The primary documents exist of their own and usually contain original information on the first formulation of any new observation, experiment, ideas, etc. Thus, according to C. W. Hanson, a monograph, an article in periodical, text book, and encyclopaedia are all primary documents. An article in encyclopaedia or text book may not contain any new information on the subject but it presents the information in the particular form for the first time. The articles concerned are not a condensation or rewriting in any way of any existing document but has been written specifically for the text book or the encyclopaedia.
- (ii) *Secondary*: All secondary publications present the contents of primary document in a condensed form or list them in a helpful way so that the existence of a primary document can be known and access to it can be made.
- (iii) *Primary/Secondary Sources of Information*: Conference proceedings, theses and dissertations, monographs, etc. have the characteristics of both primary and secondary sources of information. Those of documents representing new facts can be regarded as primary publication and those having the character of reviews can be grouped as secondary publication. As a result of such mixing of primary and secondary sources of information some expert doesn't consider this division to be much practical utility.



Example: Primary and secondary sources are:

Discipline	Primary Source	Secondary Source
Art	Original artwork	Article critiquing the piece of art
Engineering	Patent	Derwent Patents index
History	Explorer's Diary	Book about exploration
Literature	Poem	Treatise on a particular genre of poetry
Science	Original journal article	Biological Abstracts
Theatre	Videotape of a performance	Biography of a playwright

- (b) *Denis Grogan Classification*: Denis Grogan, on the basis of level of reorganization, has classified the documents into three categories. They are: primary, secondary and tertiary.
- (i) *Primary Sources*: Primary publications are those in which the author for the first time supplies evidence, describes a discovery, makes or drives a new proposition or brings forward new evidence about previous proposition. It was created at or near the time being studied, often by the people being studied. It is a fundamental, authoritative document related to a subject of inquiry, used in the preparation of a later derivative work. Thus, the primary sources of information are basic sources of new information which are not passed through any filtering mechanism like condensation, interpretation or evaluation and are the original work of the author.
- (ii) *Secondary Sources*: A document concerning a particular subject of inquiry which is derived from or based on the study and analysis of the primary source of information is called the secondary source of information. In the secondary source of information the original information is selected, modified and arranged in a suitable format for the purpose of easy location by the user. The secondary sources of information thus provide digested information and also serve as bibliographical key to primary sources of information. Secondary publication includes text book, reference book, review of the literature, etc.

**Notes**

- (iii) *Tertiary Sources*: The tertiary sources of information are last to appear and mostly do not contain subject knowledge. It is designed to provide information about information and so acts as a guide to the primary and secondary sources of information. The main function of tertiary sources is to aid the user in using primary and secondary sources of information. The tertiary sources of information are bibliography of bibliographies, guides to libraries, other organizations, indexing and abstracting periodicals, list of accession, list of research in progress, directories, etc.



*Notes* Eventually there is no rigid line of demarcation between primary, secondary and tertiary sources of information.

- (c) **S. R. Ranganathan Classification**: Based on the physical characteristics of documents S. R. Ranganathan classified documentary sources of information into four categories. These also reflect the chronological order of their development. They are:
- (i) *Conventional*: Books, periodicals, Map etc.;
  - (ii) *Neo Conventional*: Standards, specification, patent etc.;
  - (iii) *Non-Conventional*: Audio visual, microcopy etc.;
  - (iv) *Meta Document*: Direct records unmediated by human mind.

### Self Assessment

State whether the following statements are true or false:

- 10. Documents representing new facts can be regarded as primary publication and those having the character of reviews can be grouped as secondary publication.
- 11. UNESCO (1968) defines a primary publication as “original scientific paper describing new research, techniques or apparatus.”
- 12. A subject does not become a discipline in its own right when independent primary sources begin to be produced in that area.
- 13. There are certain primary sources of information, which remain unpublished.

## 1.4 Primary, Secondary and Tertiary Sources

Let us discuss the primary, secondary and tertiary sources in detail.

### 1.4.1 Primary Sources

Primary sources of information are more current and up-to-date than any other sources of information. These constitute the latest available information. Primary sources consist of new knowledge or new in of old knowledge. Much of the information published in primary sources is never re-published in other sources. These sources are also called Original sore rocs of information. Primary sources are the first published records of original research and development activities. The research findings by the researchers are recorded and published first in the primary sources such as journals. These sources are very useful for the researchers to keep them up-to-date about the latest developments in their area of research. This will also help the researchers



to avoid duplication in research. Primary sources are the original documents representing unfiltered original ideas. These are original medium of scientific communication. Primary sources consist of original theories, ideas discoveries and inventions. These sources are scattered and unorganized. The information about the development is not published earlier in other sources. The information available in the primary sources is original in the sense that this information is neither filtered nor condensed. These primary sources contain new or original ideas or new interpretations of known facts.

### Importance of Primary Sources

Primary sources of information are very important, especially for the researchers. They keep them up-to-date and well-informed in their areas of interest and about the current developments that take place in their fields. The growth or development of a discipline depends upon the amount of literature produced in the form of primary literature. A subject becomes a discipline in its own right when independent primary sources begin to be produced in that area. The rate of growth of a discipline, to a large extent, depends upon the amount of literature being produced in the field. Primary sources are very useful for the researchers.

They help the researcher to:

- Keep themselves tip-to-date and well-informed in their field of research.
- Avoid duplication in research.
- Develop them further and generate much information

### Drawbacks of Primary Sources

Some of the drawbacks of primary sources are as follows:

- They are unorganised sources and are difficult to consult. Searching of information is sometimes difficult.
- Information is scattered and widely dispersed in many sources.
- The information related to narrow field or minute topic is not available in a single primary source, The user has to search in many primary sources.
- Primary sources do not possess any orderly presentation of information.

### Characteristics of Primary Sources

The following are the characteristics of primary sources:

- Primary sources are the original sources of information on which other research is based, such as surveys, interviews, fieldwork, original articles, etc.
- They present information in its original form, not interpreted or condensed or evaluated by other writers. Primary sources contain raw, original and unevaluated information.
- They present original report on discoveries or share new information such as a report of scientific work.
- They come as first-hand information from the source or person.
- They are unfiltered through interpretation or evaluation.
- They are records of a first-hand observation of an event, original work of fiction, art etc.

Notes

**Examples of Primary Sources**

The following are examples of primary sources:

- (a) Government documents
- (b) Patents
- (c) Standards
- (d) Journal articles
- (e) Autobiographies, diaries and memoirs
- (f) Speeches
- (g) Technical reports
- (h) *Web internet*: Website that publishes the author's finding or research Internet communication on e-mail, etc.
- (i) Survey research
- (j) Proceedings of meetings, conferences and symposia
- (k) Dissertation/theses
- (l) Historical documents
- (m) Films, photographs, video recording (e.g. TV programmes)
- (n) Work of art, music, architecture, literature
- (o) Newspaper articles
- (p) Research reports, reporting results generated by experiments
- (q) Trade literature

**1.4.2 Secondary Sources**

The scattered primary information is collected and arranged in the secondary sources in a systematic way. Secondary sources are the sources which are compiled from the primary sources. They analyse, interpret and discuss information about the primary sources. Information is not original, but it is analysed or interpreted. Secondary sources do not carry new and original information but guide the users to primary sources of information. They organise the primary sources in a convenient form.

Primary sources are the important sources of original information but most of them are not systematically organised and difficult to consult. On the other hand, information in secondary sources is usually modified, selected or reorganized in such a way that they are easy to consult. Secondary sources help the user to locate the information.



*Example:* Indexing and abstracting journals.

Secondary sources are more easily and widely available than primary sources. It is difficult to find information from primary sources directly. It can be found with the help of secondary sources. The secondary sources also serve as bibliographical key to primary sources of information. In simple terms, a secondary source writes or talks about something that is a primary source. If a person writes about an original work (research work), it would be secondary sources discussing the original work. Most of the research papers are based on secondary sources

as they are built on the basis of research or studies which others have done. Most secondary sources analyse the material or restate the works of others. If a person writes about research done by others, this writing will be secondary source.

### Types of Secondary Sources

The secondary sources may be of three types:

- (a) Those sources which index selected portion of primary literature and thus help in finding what has been published on a given subject.



*Example:* Indexes, bibliographies and abstracts.

- (b) Those sources which survey selected portion of the primary literature and thus help in acquiring comprehensive information on a given subject.



*Example:* Reviews and treatises.

- (c) Those sources which themselves contain the desired information collected and selected from primary sources of information.



*Example:* Encyclopaedias, dictionaries, handbooks, etc.

They consist of information such as facts and biographies.

### Features of Secondary Sources

Some of the special features of secondary sources are as follows:

- (a) They do scribe, interpret, analyse and evaluate primary sources.
- (b) They comment on and discuss the evidence provided by primary sources.
- (c) Information in secondary sources is systematically arranged and is easy to consult.
- (d) Either compiled from or referred to primary sources.
- (e) Information given in primary sources are made available in a more convenient form in secondary sources.
- (f) Generally, secondary sources do not contain original information. They depend upon the primary sources for reporting and presenting information.
- (g) In primary sources information is not arranged systematically whereas in secondary sources, especially in reference books, information is arranged in a systematic order (e.g., it may be alphabetical, classified).
- (h) Secondary sources, especially reference books, are exclusively designed to answer specific queries. They are collection of millions of facts.
- (i) Reference books are used within the library and meant for consultation only. Users are not allowed to borrow.
- (j) Secondary sources contain a list of documents (bibliographies) at the end of the text. By furnishing the list, they guide the researchers back to the original sources.

Notes

### Examples of Secondary Sources

Examples of secondary sources are:

- Reference books such as encyclopaedias, dictionaries, etc.
- Textbooks
- Guide to literature
- Abstracting journals
- Indexes
- Review of literature
- Monographs
- Bibliographies
- Some of the non-print material such as CD-ROMs

### 1.4.3 Tertiary Sources

Tertiary sources compile, analyse and digest secondary and sometimes primary sources of information. In simple words, we may say that tertiary sources contain information distilled and collected from primary and secondary sources.

An access to all the primary sources is difficult for an individual researcher or a single library. To locate the information from primary sources, a number of secondary sources are published. This, secondary sources act as a key to primary sources. But the number of primary and secondary sources is so large that it is difficult to locate them. There is tertiary source to cite both primary and secondary sources.

The main function of tertiary sources of information is to help the researcher in the use of primary and secondary sources of information. Tertiary sources are keys to primary and secondary sources. Due to growth of literature in various languages, countries, forms, areas, etc., the identification, selection and acquisition of primary, secondary and tertiary sources are becoming increasingly important. The following are some of the reasons of the popularity of tertiary sources:

- (a) Due to increase in literature at a very quick pace, identification and location of the required document is difficult. Tertiary sources are designed as a bibliographic control device to assist in selecting the primary and secondary sources.
- (b) Tertiary sources help promote the use of primary and secondary sources. They describe and comment upon the various types of publications.
- (c) Tertiary sources record the bibliographic information which is important for better utilisation of primary and secondary sources.



*Example:* Tertiary sources are given below:

- (a) **Directories:** Directories are tertiary reference sources which help the researcher in using primary and secondary sources.
- (b) **Almanacs:** According to ALA Glossary, an almanac is an annual publication containing a calendar, frequently accompanied by astronomical data and other information or an annual yearbook of statistics and other information sometimes in a particular field.

- (c) **Yearbooks:** According to ALA Glossary, a yearbook is an annual volume of current information in descriptive and/or statistical form, sometimes limited to a special field.
- (d) **Bibliography of bibliographies:** The lists of bibliographies direct readers to useful bibliographies through subject, individual, places, etc. The bibliographies referred to may be in the form of separately published book or part of the book or part of a periodical article or some other types of documents.
- (e) **Union catalogues:** It is "catalogue listing in one sequence the holdings or part of the holding of two or more libraries." Union catalogue is a combined catalogue, describing the collection (i.e. Books, periodicals) of number of libraries. It consists of holdings of more than one repository such as archives and libraries. It contains records about materials in several collections or libraries.



**Task** Name some products that comprise print media.

## Self Assessment

Fill in the blanks:

14. .... constitute the latest available information.
15. Primary sources come as ..... information from the source or person.
16. ....are more easily and widely available than primary sources.
17. The main function of ..... of information is to help the researcher in the use of primary and secondary sources of information.

## 1.5 Categories of Non-documentary Sources of Information

The non-documentary sources of information are live sources which are extremely important in the process of communication. Very often, if a scientist working on an experiment needs some information, he would turn to his/her colleague working in the same laboratory rather than to a printed page. It is easier to have a dialogue with an expert than to use a bibliography or index or card catalogue or even a consultation with a reference librarian. Non-documentary sources of information provide information instantly and it is very easy to handle. The main disadvantage of non-documentary sources of information is that it involves high cost when distance between the people is large and that it also demands the use of highly sophisticated techniques i.e. computer system, video conference, telephone, etc.

The non-documentary sources of information include government establishment, departments, universities, technological institutions, data centres, information centres, referral centres, clearing houses, consultants, technological gatekeeper, etc. Non-documentary sources of information also include discussion with colleagues, visitors, participants of seminars and conferences, etc. The library through the referral service provides access to important non-documentary sources of information which may include the following types:

- (i) **Research Association:** Research association may establish cooperative information centres. In such cases there is a possibility of firm discussion and exchange of information between the members of an association.
- (ii) **Learned Societies and Professional Institutions:** A member of these bodies forms the core of a discipline or profession. The headquarters' staff helps the members personally on

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professional matter and sometimes they may direct the queries to the expert member of the body.

- (iii) **Industrial Liaison Officer:** These officers provide particularly the preliminary information needed to put a firm on the right track and for information which needs to be given personally and supported by practical advice in order to be fully effective. They visit firms, explore their needs and problems and help them to find solutions, sometimes directly on the spot, more often by putting them in touch with specialized sources of information and assistance or refer to some other specialists.
- (iv) **Mass Media:** Mass media is a means of communication of information through broadcasting and telecasting or a combination of these two for the masses, which is more effective than any documentary sources.



Caselet

### Educational Resources Information Center (ERIC)

The Educational Resources Information Center (ERIC) contains more than 1.2 million abstracts of journal articles and research reports on education-related topics. The database can be searched by going to [www.eric.ed.gov](http://www.eric.ed.gov), or by using ERIC in commercial databases provided in many libraries. Most ERIC documents are available electronically, in print, or on microfiche in libraries. Many non-journal materials are available, at no charge, as PDF documents or via links to publisher Web sites. Check with your local library (academic, public, etc.) to find out if they can provide journal articles or documents that are not available online. If the library cannot do this for you, print copies of journal articles can be purchased through such article reprint services as Ingenta ([www.ingentaconnect.com](http://www.ingentaconnect.com)).

- **ProQuest® Education Journals:** The database includes more than 750 journals in primary, secondary, and university-level education. More than 600 of these titles include full texts of the articles. This and similar ProQuest products are available at many libraries.
- **JSTOR:** This is a database of academic journals, monographs, and other academic papers from multiple disciplines, including the social sciences, humanities, and the sciences. It is available from libraries that subscribe to the service. Individuals in the United States can subscribe for a modest amount; JSTOR made special arrangements for individuals in Africa to have access to this database for free ([www.jstor.org](http://www.jstor.org)).
- **PsycINFO:** This is a product of the American Psychological Association (APA) that contains indexes and abstracts from 1,300 journals, as well as books and book chapters related to psychology. Both members and non-members can search the database and purchase articles. Information about that is at <http://psycnet.apa.org/index.cfm?fa=main.landing>. As with other databases, you can check on its availability at your local library.
- **PsycARTICLES:** This is another product of the APA, but it includes the full text articles of 42 journals related to psychology that APA publishes. Information about this database can be found at <http://psycnet.apa.org/index.cfm?fa=main.landing>. The database can be searched by APA members and by non-members (for a small fee).

Source: [http://www.sagepub.com/upm-data/29986\\_Chapter3.pdf](http://www.sagepub.com/upm-data/29986_Chapter3.pdf)

## Self Assessment

## Notes

Fill in the blanks:

18. The ..... sources of information are live sources which are extremely important in the process of communication.
19. .... officers provide particularly the preliminary information needed to put a firm on the right track.
20. .... is a means of communication of information through broadcasting and telecasting or a combination of these two for the masses.



Case Study

### Study of Flood Events from Documentary Sources

**H**istorical investigations aiming at a high level of completeness have to consider the question of very large-scale access to manuscript document collections. When it comes to environmental information, the chance of finding a news item about a phenomenon could extend to any type of document from a country's documentary heritage, so that the deployment involved in a complete, exhaustive investigation would surpass the capacity of an individual investigator or of a research group. The documentary collections potentially containing climatic information are: (a) *Local Government collections*: municipal council archives with all the subject-matter lying within the jurisdiction of the local authorities in past times. (b) *Central (state) government collections*: subject archives of various types, such as administrative, fiscal, military, public works, legal and diplomatic archives. (c) *Church collections*: archives kept by the various hierarchical levels of the Catholic Church in its territorial administration, such as episcopal, diocesan, parish or monastic archives. (d) *Private collections*: archives kept by noble families, records of family agricultural holdings, archives kept by liberal professionals and corporate archives. (e) *Notarial archives*: archives containing records of the relations between natural and legal persons in relation to their assets (cessions, sales, donations, assignments, rights) and conflicts deriving therefrom.

An initial selection would have to look at those collections with information about the day-to-day lives of human communities and all the problems affecting them. Accumulated experience to date suggests that better results are to be expected of local authority collections, local ecclesiastical authorities (parishes and particularly cathedral chapters or convent/monastery communities) and, lastly, private documentary collections. Once an analysis of the historical content has been carried out, the locations to which the study should be applied have to be chosen properly. In the light of the physical characteristics involved in a study of floods, the location to be studied must lie sufficiently close to a river course, which is relatively easy in that in historical times technological limitations meant that populations were obliged to run significant risks in order to obtain hydraulic power and water for industrial and agricultural production processes. That is, their vulnerability to flooding risk makes these sites optimum locations for research.

#### Documentary Series

The selection of documentary sources to which the gathering work should be applied is based on the following criteria:

Contd....

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- (a) **Accessibility of the Documents.** The documentary series must be available to the public under optimum conditions of organisation to allow orderly consultation within a reasonable time.
- (b) **Continuity of the Records.** The documentary series must have temporally continuous records to ensure that there were no floods that eluded system recording. Discontinuity problems can arise at the time the documents are produced or due to subsequent accidents or destruction.
- (c) **Reliability of the Documents.** The documents must come from a highly reliable source, precluding in so far as possible errors of interpretation, translation or transcription.

*Two Criteria have to be met in Order to Ensure the Reliability of a Document: firstly, the scribe, or recounter of the record, has to have been a contemporary witness of the facts recounted; secondly, the documents must be originals (copies or transcriptions must be identified as such and treated with the utmost prudence).*

- (d) **Objectivity of the Information.** The person or group creating a documentary record must be objective and impartial.

Applying these criteria places from the outset a substantial limitation on the documentary series; that must be consulted systematically and completely. The criteria are fulfilled in the series of ledgers of minutes or resolutions of local authority and ecclesiastical governing bodies. These can be supplemented by diaries and books of memoirs from private sources. Documents of this type allow continuous reconstructions spanning some five to seven centuries, even though this involves handling hundreds of volumes of original manuscripts.

**Printed Sources**

Historical research work which aims to be exhaustive in gathering references to flooding must naturally have recourse to various types of printed sources. Such sources can never replace the completeness and quality of the original documentary sources. However, their usefulness lies in providing a chance of fast access to prior research work and the results of previous partial data gathering work. Local or regional historiography is usually a useful source of preliminary information, since it indicates the documentary sources of best quality and provides diverse information on the characteristics of a river and river basins in general; sometimes, depending on the sensitivity of the author to environmental themes, these works are of such quality that they permit a complete chronology of flooding events to be built up. We must nevertheless insist on the need to use these sources at preliminary level only, and to take advantage of what they say to achieve best access to the documentary sources.

**Questions:**

- 1. Analyse the case and write down the case facts.
- 2. Explain the term printed Sources in this case study.

Source: [http://www.ica.csic.es/dpts/suelos/hidro/images/chapter\\_13\\_phefra.pdf](http://www.ica.csic.es/dpts/suelos/hidro/images/chapter_13_phefra.pdf)

**1.6 Summary**

- A "source" is anything that provides you with information. There are mainly two types of information sources. They are: documentary and non-documentary.



- The documents are physical sources of information that are fit for physical handling or they are the record in some physical form.
- A document constitutes embodied thought which is a record of work on paper or other material fit for physical handling, transport across space and preservation through time.
- There are several different types of documents in the library.
- Documentation science, documentation studies or just documentation is a field of study and a profession founded by Paul Otlet (1868–1944) and Henri La Fontaine (1854–1943).
- Different authors classified the documentary sources of information into different categories.
- Print Source is a source of information that was originally published and made available to the public by being printed on paper.
- Non-Print sources are the media where information is available in non-conventional form.
- Primary sources of information are more current and up-to-date than any other sources of information.
- Secondary sources are the sources which are compiled from the primary sources.
- Tertiary sources compile, analyse and digest secondary and sometimes primary sources of information.

## 1.7 Keywords

**Directory:** A directory is a list of names and addresses of persons, organizations, manufacturers, or periodicals.

**Document:** It constitutes embodied thought which is a record of work on paper or other material fit for physical handling, transport across space and preservation through time.

**Leaflet:** A leaflet is a small sheet of paper folded once and printed to make two or four pages.

**Non-Print Sources:** These are the media where information is available in non-conventional form.

**Original Documents:** These are scanned images of original legal documents.

**Periodicals:** Periodical is a social publication. It is the most important and useful in primary sources.

**Primary Source:** The primary documents exist of their own and usually contain original information on the first formulation of any new observation, experiment, ideas, etc. These sources of information are more current and up-to-date than any other sources of information.

**Print Source:** It is a source of information that was originally published and made available to the public by being printed on paper.

**Secondary Sources:** These are the sources which are compiled from the primary sources.

**Tertiary Sources:** These compile, analyse and digest secondary and sometimes primary sources of information.

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**1.8 Review Questions**

1. Explain the classification of documentary sources of information.
2. Differentiate between printed and non-printed sources.
3. Define the concept of document.
4. Enumerate the different document types.
5. Describe the process of documentation.
6. Differentiate between primary and secondary sources.
7. List the benefits and drawbacks of primary sources.
8. Explain tertiary sources with examples.
9. What are secondary sources? What are the types of secondary sources?
10. What is a non-documentary source of information? What are its types?

**Answers: Self Assessment**

- |                        |                       |
|------------------------|-----------------------|
| 1. True                | 2. True               |
| 3. False               | 4. False              |
| 5. True                | 6. False              |
| 7. True                | 8. False              |
| 9. True                | 10. True              |
| 11. True               | 12. False             |
| 13. True               | 14. Primary sources   |
| 15. First-hand         | 16. Secondary sources |
| 17. Tertiary Sources   | 18. Non-documentary   |
| 19. Industrial Liaison | 20. Mass media        |

**1.9 Further Readings**



Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.

**Notes**



*Online links*

[http://labspace.open.ac.uk/file.php/2538/!via/oucontent/course/167/deh313\\_1blk3.13.pdf](http://labspace.open.ac.uk/file.php/2538/!via/oucontent/course/167/deh313_1blk3.13.pdf)

<http://www.greatneck.k12.ny.us/gnps/shs/dept/library/pages/print.pdf>

[http://www.holmdelschools.org/schools/satz/eng\\_dept/MLA/sources.htm](http://www.holmdelschools.org/schools/satz/eng_dept/MLA/sources.htm)

<http://www.netugc.com/sources-of-documentary-information>

## Unit 2: Reference Services

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### Objectives

After studying this unit, you will be able to:

- Define the concept of Reference Service
- Describe the need of Reference Service
- List the types of Reference Service
- Differentiate between Ready Reference and Long Range Reference Service
- Explain Reference Service in different types of libraries

### Introduction

Reference service is one of the important services provided to the users of libraries and information centres. Such services are usually provided by consulting documents where the required information is likely to be available. It is therefore, vital that librarians should be conversant with different types of services and their features so that the information can be provided without much difficulty. In this Unit, we provide you an overview of reference books/sources, which are very useful for providing information quickly to the users. You will also get an exposure to the requirements and necessity of a reference department consisting of reference collection in a library.

## 2.1 Concept of Reference Service

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According to Ranganathan, right contact means, “contact between the right reader and the right book at the right time and in the right personal way.” He was of the view that the establishment of such a contact is “the only available and effective method” of discharging the function of converting the users into habitual users. He has named this method as reference service and adds that “Reference service is the establishing of contact between reader and book by personal service.” Here emphasis is laid on personal service to each.

In simple terms, reference means “process of establishing contact between a reader and his documents in a personal way.” His documents refer to those which will serve his requirements precisely. It is a personal service, which involves various activities, aimed at making information available to the users as easily as possible. In order to provide information, a reference librarian may make use of resources of the library as well as, those resources available outside his library. He may give information itself or the documents containing information, depending upon the requirements.

Libraries have always been engaged in providing services to their users. Maximum utilization of resources is the principle underlying the heart of the very concept of the librarianship which is the collective sharing and use of the records for the benefit of society as a whole and of the individuals making up the society in particular. In the first law of Library Science too Dr. Ranganathan has emphasized that ‘Books are for use.’ In reference work, thus, the qualified library professionals supplement the various facilities of the library by providing personal assistance to individual users in search of information. The role of the reference librarian is to give assistance to the library users by exploiting the library collection to the maximum.

Reference work is the actual assistance given to the users in need for information. It enables librarians and users to understand where the recorded information exists and helps in searching the needed information. This activity has been designed in the libraries for the convenience of the users. The library materials require exploitation if it is to be of benefit to the people coming to the library. Generally most libraries have a separate reference section or collection. The librarian usually provides reference services on the basis of this collection of reference books which are placed in a prominent and separate section of the library. Majority of the users are familiar with reference books as many of them have dictionaries, encyclopaedias, yearbooks, etc. at home as part of their private collection.

### 2.1.1 Reference Service and Information Service

Reference and information services have always been the main component of library services. They provide personalized assistance to library users in accessing suitable information resources to meet their needs. Traditionally speaking information service and reference service are two different kinds of services. Sometimes a service may be called information service but it may be nothing but reference service as understood traditionally. Vice-versa may also be true.



*Did u know?* What are the major differences between the two services?

Reference Service	Information Service
<ul style="list-style-type: none"> <li>Refers to traditional approach</li> </ul>	<ul style="list-style-type: none"> <li>Refers to non-traditional approach.</li> </ul>
<ul style="list-style-type: none"> <li>Emphasis on providing documents</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis on providing information.</li> </ul>

*Contd...*

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<ul style="list-style-type: none"> <li>• User generally directed to material information</li> </ul>	<ul style="list-style-type: none"> <li>• Generally exact and requisite provided</li> </ul>
<ul style="list-style-type: none"> <li>• Provision of information on demand</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of information in anticipation</li> </ul>
<ul style="list-style-type: none"> <li>• Attention paid instructing User in use of documents on his own</li> </ul>	<ul style="list-style-type: none"> <li>• Less attention paid for instructions to users</li> </ul>

### General Categorization of Reference and Information Service

The focal point of Reference Service is answering questions posed by the library user. Based on the activity that are performed to meet the user demand, the Reference and Information service can be categorised as follows:

- (a) **Instructional:** Instruction in using the library and library resources (bibliography, encyclopaedia, OPAC), assisting the end user to locate the appropriate material within and outside the library, etc. are an important function associated with the Reference and Information Service of a library. Questions that range from as simple as “Where are the bound volume?” or “Where is the catalogue?” to research questions that may take hours or even days to properly answer are to be dealt with in this section.
- (b) **Referral Service:** It directs enquirers to a source of information which may be an organization or an individual expert.



**Caution** Generally, when a library or information centre does not have the material and cannot obtain it from the sources but it knows the exact location of the document/information, then it can refer the user to the sources of information.

- (c) **Information Scouting:** Information scouting service consists of keeping abreast of who has what information and where. Then it can refer the request to the appropriate person and place in the organization or outside it or both. Information scouting is an extended form of referral service.
- (d) **Citation Verification Service:** Citation Verification Service is intended to verify the citations/references and authentication of bibliographical details of books, articles, reports, thesis and other published materials obtained from sources other than the authoritative indexing and abstracting services offered by reputed publishers and licensed database producers. The library patrons need this type of service for the preparation of assignments, dissertations, theses, and project proposals.
- (e) **Literature Search/Bibliographical Survey:** Literature search may be defined as a systematic search for literature in any form on a particular topic. It forms the very first step of a research pursuit. Otherwise, if a research work is duplicated the valuable time, money and labour of the researcher will be wasted. The literature search is also needed to present the latest available facts in writing articles or topic on any theme. Special library and information centres generally provide literature search facilities to its patrons on demand. Later, the result of the literature search is circulated to the enquirers.



**Notes** A sub type of this service is also known as Database Search Service (DBSS), which intends to obtain information critical to the proposed or ongoing dissertations, theses, post-doctoral research and other project work by consulting different online and offline data bases.

- (f) **Preparation of Bibliographies, Indexes and Abstracts on Certain Minute Subject:** If demands come from the research scholar or a research team member of the parent organization, the library prepares the bibliographies, indexes and abstract for him/her to meet the demand. It offers the bibliographies or reading lists on diverse topics relevant to the proposed or ongoing dissertation work, doctoral and post-doctoral research. The compilation of bibliographies is the end product of a literature search. From the bibliographies, the users can find out all the materials on a given subject at a time. It helps the user in selecting the required information by saving time.
- (g) **Translation Service:** Translation is a process of transforming precisely the information contents of the text in one language into another language. The former is called the Source language and the latter is called as the Text language. Translation service helps overcome the language barrier.

In the field of science and technology, the National Translation Centre, Chicago, America, International Translation Centre, Delft, Netherlands, British Library Lending Division, Boston and in India, INSDOC, New Delhi have foreign language translation service for all the individuals and organizations, who cannot afford the expensive in-house translation facilities.



*Notes* In case of online, whenever a search result lists a relevant resource in another language, one can check out AltaVista's translation feature. With this service, French, German, Italian, Spanish, and Portuguese websites are translated to English (and vice versa). One can also try with Google Translation to meet this purpose.

- (h) **Interlibrary Loan Request:** Interlibrary loan (ILL) is a cooperative activity and a narrower form of interlibrary loan service. In theory, it is capable of expanding the walls of the library to encompass all the world's library collections. The ILL concept is expanded by UNESCO's Universal Availability Publications Program (often called UAP). UAP has the goal of making any publication available to any person anywhere in the world. ILL has practical limits that make its scope smaller but still its potential of expanding customers' access to other libraries' collections is great. The material obtained from ILL may be delivered through different means and avenue (physically, making photocopy or printing, scanning) based on the need of the user.

Processing interlibrary loan request from other library and delivering the material through email/fax/speed post is another duty of the library reference staff.

- (i) **Consultancy Service:** Consultant can be defined as "an expert who gives professional advice usually on payment basis" and consultancy can be defined as "an organization that provides professional or organization expert advice on payment basis". In the industrial sector the consultants play a vital role by providing information & advice on production, export, import etc. "Information Consultant" is a term used for those persons or firms involved in various activities including library or information centre design, database design, records management, hardware and software selection and training, etc. The library and information science professionals can effectively discharge their duties as information consultants for various organizations as well as individuals but to perform this duty they should have vast practical experience and in-depth subject knowledge. In this connection the following points are to be noted:
- (a) **Tools:** Information consultants have their own unique set of tools, e.g. bibliographies, search and Meta search engines, databases, reference collection, etc. The consultants get their work done with the help of these sets of tools, a particular combination and

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configuration of specialized equipment technique and style in addition to their knowledge base as the organizer of world information to get their job done.

- (b) *Benefits from Information Consultant:* The importance of information consulting profession is directly related with the advancement in micro-computer technology and information explosion in print as well as digital environment. Consulting the information consultant can give four benefits to the clients. These are:
- ◆ It provides objective independent advice in regard to political, religious and other matter;
  - ◆ To take the help of consultants can be highly cost-effective because money can be saved by not going through the vast number of documents and by procuring them and getting the required information;
  - ◆ The consultant has the necessary knowledge and skill;
  - ◆ They are easy and convenient but the funding of the organization makes it difficult to employ them for a long or short term basis in the organization.
- (c) *Services:* Services rendered by consultants and consulting organization mostly fall within the scope of technical enquiry service, feasibility studies, reviewing some technologies, software, evaluating technologies, marketing of the products, market survey, designing new databases, software to be used in information processing, storage or retrieval, system analysis and management, advice on collection development, doing cataloguing, editorial services like indexing, abstracting, etc.
- (j) *Information Broker Service:* An information broker (IB) is “an individual or organization who on demand seeks to answer questions using all sources and who is in business for a profit”. They are those individuals or firms who are so professional and experienced enough in their lines that they can gather the requested information with a computer and a telephone within a few minutes or hours. An IB may not simply be a librarian, or simply one who “goes online” and searches for the answers to questions and problems of the patron; or he isn’t someone who “has all the answers”.



*Did u know?* The Association of Independent Information Professionals, the first professional association devoted to information brokers, was formed in Milwaukee in 1987.

The profession has its roots in 1937 when librarians and other information professionals formed an organization called the American Society for Information Science and Technology in an attempt to establish their professional identity separate from public libraries.

- (a) *Tools:* IBs use a combination of online, offline, and physical search techniques depending on the clients’ needs. Every assignment is different and the IB determines the appropriate method of obtaining the clients’ requested information, while remaining within the clients’ budget. Once all the required information is located and retrieved, the IB then cleans up the raw information and presents it in the manner most appropriate for his/her client. This may mean summarizing the information or verifying the correctness of it.
- (b) *Importance:* If anyone had a major health problem they would not attempt themselves to solve it. They would seek the services of the appropriate professional (a doctor in this case). So, just a person would use an attorney for legal work or a doctor for medical work, they use an Information Broker for access to the needed information. A great impetus for the growth of information broker has come from the recognition that knowledge is a business and information is a commodity and the fact that many people simply are not



aware of many of the avenues available to find the needed information. People can locate information in many cases, but it is the experienced IB that knows and has access to more avenues of information retrieval than the average individual or firm. After all, this is the IBs' specialty.

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- (c) *Services:* Information broker helps in getting the appropriate information by the end users. It is a cost effective and time saving mechanism. The common uses for the information brokers include market research, patent searches, and any other type of information research, preparation of report on any subject, and so on.



*Task* List the chief reasons for providing reference service in Libraries.

## Self Assessment

Fill in the blanks:

- ..... is the actual assistance given to the users in need for information.
- ..... directs enquirers to a source of information which may be an organization or an individual expert.

## 2.2 Need of Reference Service

The present day society is in the process of development and is entering the information age. In this new age, information becomes a resource as well as a commodity, and its handling and processing also becomes a main activity. In this information age, or post-industrial society, the demands will be focused on the knowledge of what to gather, how to gather, process and utilize it. It is in this context we have to know/study the need for reference sources. The users have varied information needs and requirements. Our user can be students, teachers, researchers, scientists, technologists, specialists, planners or policy-makers. The average user does not have access to information required by him because he does not know where to look for it.

Besides, the users have also several other requirements such as:

- need to obtain information quickly for a specific requirement area;
- awareness of newly generated information is difficult;
- need for selection of information, as there is overabundance of information;
- would specialization only in a restricted subject area;
- obtain copies of required material or the material itself; and
- criteria for evaluation and selection of reference materials.

All these requirements/needs of the users can be met by having access to proper and up-to-date reference books. The reference books help the librarians and libraries in maintaining the information banks from which answers to users' queries and materials required by the users are available. In other words, the sound basis for any reference service in a library is the reference books maintained by the reference staff of the library. This means that reference service is not just answering question posed by the users by using an appropriate reference tool but it is also about maintaining the information resource banks from which information is provided to users. It also includes establishing links with information providers both inside and outside the library environment.

**Notes**

The problems faced by the users mentioned above can be overcome, by resorting to some of the following techniques:

- identification of reference books available in the library;
- locating reference books and their suppliers outside the library;
- organising new reference books in e library to cater to the identified information needs of the users; and
- cooperating with other libraries and information org 'ores to pool the resources together.

The development and generation of information is dependent on the access, location and dissemination of the relevant documents. The reference service in the library takes care of the function of making available the information whereas the library activity of acquiring, organizing, and preserving the reference materials is something which the users are not aware of, but is of maximum relevance to them.



*Caselet*

### **Reference Section in T.S. Central State Library, Chandigarh**

**T**he basic objective of the reference section is to assist the clientele to use resources of the library in an effective manner leading to their optimum utilization. Reference service is the most intensive kind of personal service which attempts to bring together the user and information in a personal way. There are two types of reference services, direct and indirect. Under direct reference services, personal assistance is provided, directly to the user. It may take the form of library instruction and information service. Indirect reference service consists of information provided through development of catalogues, bibliography, and other reference aids. The current era has acquired the name of "Information Era". Libraries and computers can contribute towards efficiency in disseminating of information. Keeping in track with the changing scenario, the library has started disseminating information on the internet and e-mail services. Very shortly services providing ONLINE access to various databases shall be started. Keeping in mind the local literary potential, the library has now devoted a separate sub section of books written by authors based in Chandigarh, Mohali and Panchkula.

#### **Free Internet Access**

To make the library services more attractive and to prove library competency with the changing scenario, the library has started giving free internet access to its members. The library has five work stations in the Reference Section for the use of internet. Members can use the internet for half an hour daily. He/she can continue for longer hour if there is no 'Q'. The time slot booking can be done through telephone. One station has been provided for word processing. This facility has been provided for those users who do not have an access to the computer. The American Corner at the T.S. Central State Library provides a window on life and culture in the United States and is the first place to visit for accurate and up-to-date information about political, economic, cultural, educational and social trends in the United States.

The American Corner in Chandigarh is a partnership between the American Library of the U. S. Embassy, New Delhi and the T. S. Central State Library in Chandigarh. The American Corner has books, Magazines, CD-ROMs with current full text articles, videos, DVD's and internet access.

Source: <http://cslchd.nic.in/ref.htm>

## Self Assessment

Notes

Fill in the blanks:

3. In this new age, ..... becomes a resource as well as a commodity, and its handling and processing also becomes a main activity.
4. All these requirements/needs of the users can be met by having access to proper and up-to-date .....

## 2.3 Types of Reference Service

There are broadly two types of reference services

1. Ready Reference Services
2. Long Range Reference Services

Ready reference service and long range reference service are two different aspects of reference service.

### 2.3.1 Ready Reference Service

According to Ranganathan, "Ready reference service is reference service finished in a very short time in a moment if possible," Thus the concept of ready reference service is based on duration of time. In case of ready reference service, the reference staff is able to answer the inquiry in a very short duration of time, may be at times immediately.



*Example:* Some of the examples of this type are:

- What is Population of Goa?
- How many states and union territories does India have?
- Who is the Nobel Prize winner in Chemistry in 2002?

One of the services to be performed by a reference section is to train the inquirers in fact finding. This kind of training should be given special consideration in providing orientation to new users.



*Caution* The training should be given in a form, readily acceptable to the users.

Assimilation is to be considered an important aspect of ready reference service. It is the process of absorption of information. Experience on the job is extremely helpful. Assimilation helps us to learn from our experience. At the time of preparation or providing reference service, a reference librarian should try to think of as to who can possibly benefit from the information being dealt at that time. Somebody might have asked for that piece of information earlier. It could be brought to his notice. A reference librarian should share his experiences about public catalogue with cataloguing section. One can go on multiplying situations where assimilation of information on the part of a reference librarian can be a great help in improving library tools, collection and services.

Notes

**2.3.2 Long Range Reference Service**

Long range reference service owes its origin to the modern concept of library service in libraries. Its provision varies from library to library and is a special feature of special libraries. However, it is not totally absent in other types of libraries. Long range reference service may be recognized on the basis of time involved, sources of information and the nature of information sought. Such services involve three processes – preparation, service and assimilation.

**2.3.3 Difference between Ready Reference and Long Range Reference Service**

The general difference between Ready reference and long range reference services are being highlighted below.

Ready Reference Service	Long Range Reference Service
Time taken is short (may be between few minutes to half an hour)	Time taken is more as compared to ready reference query (A few questions may take less than half an hour while some may take a whole day or even weeks).
For Ready reference query sources of information includes general reference sources such as dictionaries, Encyclopaedias, maps, atlases and the like.	Here search may start with general reference sources, but in case the required information is not fetched from these sources, then search may be directed to resources of other local libraries or to libraries in other parts of the country. In nutshell, the aim here is to exploit all possible resources of information.
Major concern here is to provide facts.	Besides facts other types of information such as: exposition of a problem from a particular point of view; undertake systematic search in periodicals; may involve expression of an opinion or a point of view on a particular idea, etc. In brief the required information may need to be culled out after exploiting various sources or means.

**Self Assessment**

Fill in the blanks:

5. .... is reference service finished in a very short time in a moment if possible.
6. .... is to be considered an important aspect of ready reference service. It is the process of absorption of information.
7. .... owes its origin to the modern concept of library service in libraries.
8. Such services involve three processes ....., ..... and .....

**2.4 Reference Service in Different Types of Libraries**

**2.4.1 Public Library**

A public library is a library that is accessible by the general public and is generally funded from public sources (such as taxes) and operated by civil servants. There are five fundamental

characteristics shared by public libraries. The first is that they are generally supported by taxes (usually local, though any level of government can and may contribute); they are governed by a board to serve the public interest; they are open to all and every community member can access the collection; they are entirely voluntary in that no one is ever forced to use the services provided; and public libraries provide basic services without charge.

Public libraries exist in many countries across the world and are often considered an essential part of having an educated and literate population. Public libraries are distinct from research libraries, school libraries, and other special libraries in that their mandate is to serve the general public's information needs (rather than the needs of a particular school, institution, or research population). Public Libraries also provide free services such as preschool story times to encourage early literacy, quiet study and work areas for students and professionals, or book clubs to encourage appreciation of literature in adults. Public libraries typically allow users to take books and other materials off the premises temporarily; they also have non-circulating reference collections and provide computer and Internet access to patrons.

### 2.4.2 Academic Libraries

An academic library is a library that is attached to an academic institution above the secondary level, serving the teaching and research needs of students and staff. These libraries serve two complementary purposes: to support the school's curriculum, and to support the research of the university faculty and students.

The support of teaching requires material for class readings and for student papers. In the past, the material for class readings, intended to supplement lectures as prescribed by the instructor, has been called reserves. In the period before electronic resources became available, the reserves were supplied as actual books or as photocopies of appropriate journal articles.



*Notes* Traditionally, one copy of a book was made available for each 10 students — this is practical for large classes only if paperback copies are available, and the books reused from term to term.

Academic libraries must decide what focus they take in collecting materials since no single library can supply everything. Librarians examine the needs of students and instructors, as well as the priorities of the college or university when deciding what to focus on. When there are particular areas of specialization in academic libraries these are often referred to as niche collections. These collections are often the basis of a special collection department and may include original papers, artwork, and artefacts written or created by a single author or about a specific subject.

### 2.4.3 Special Libraries

A special library is a term for a library that is neither an academic, school, public or national library. Special libraries include corporate libraries, law libraries, medical libraries, museum libraries, news libraries, and non-profit libraries. These libraries are not usually open to the general public, though many are available to specific elements of the public or scheduled appointments. Special libraries are also sometimes known as information centres. They are generally staffed by librarians, although many librarians employed in special libraries are specialists in the library's field rather than generally trained librarians, and often are not required to have advanced degrees in specifically library-related field due to the specialized content and clientele of the library.

**Notes**

Reference services differ considerably in special libraries, their nature being determined in major part by the purpose, dominant subject interests, size, and administrative structure of the parent organization as well as by the initiative of the library staff. In spite of the variations, reference activity in an individual special library normally corresponds to one of the levels of service identified above. It may be restricted exclusively to aiding those who lack facility in use of material, or it may encompass a complex array of services, including direct participation of the librarian in the research process.

Special libraries often have a more specific clientele than libraries in traditional educational or public settings, and deal with more specialized kinds of information. They are developed to support the mission of their sponsoring organization and their collections and services are more targeted and specific to the needs of their clientele. Depending on the particular library, special libraries may or may not be open to the general public or elements thereof. Those that are open to the public may offer services similar to research, reference, public, academic, or children's libraries, often with restrictions such as only lending books to patients at a hospital or restricting the public from parts of a military collection. Given the highly individual nature of special libraries, visitors to a special library are often advised to check what services and restrictions apply at that particular library.

**Self Assessment**

State whether the following statements are true or false:

- 9. There are seven fundamental characteristics shared by public libraries.
- 10. A special library is a term for a library that is neither an academic, school, public or national library.
- 11. Public libraries are distinct from research libraries, school libraries, and other special libraries.
- 12. When there are particular areas of specialization in academic libraries these are often referred to as niche collections.
- 13. Special libraries often have a more specific clientele than libraries in traditional educational or public settings.



*Case Study*

**Reference Service at the Farmington Community Library**

**R**eference service at the Farmington Community Library is one of the most vital and visible expressions of the Library's purpose and mission and is key to each of the Library's service roles—our overarching role to provide an environment that fosters lifelong learning, as well as our primary roles—providing information assistance, popular and current topics and titles, and serving our children, and our secondary service roles—providing a community commons, fostering cultural awareness, offering business and career information, and offering local history and genealogical resources.

Reference service is defined as personal assistance provided to users and potential users of information. Reference service takes a variety of forms including direct personal assistance, directories or signs, exchange of information culled from a reference source, readers'

*Contd....*

advisory assistance, and dissemination of information in anticipation of user needs or interests, and direct end user access to an electronic source or information.

The Library actively publicizes the scope, nature, and availability of the information services it offers. It employs those media most effective in reaching its entire user base or selected segments of that base.

The Library periodically surveys and assesses the information needs of our community, and creates local information products to fulfil those needs not met by published materials, by selecting print and digital sources of information and providing ready access to the same, and by collecting and creating access to the services and resources of local, regional, and state organizations. Based on the community's known needs and interests, the Library also provides information even if it has not been explicitly requested.

The Library's buildings shall not be a boundary to its information services. We continually identify and employ external databases, agencies, and services to help meet the information needs of our community. The Library participates in consortia and networks to obtain better and more cost effective access to information sources and services. When the Library is not able to provide a patron with needed information, we will refer either the patron or the patron's question to some other agency, an expert, or another library which can provide the needed information. The Library uses or provides access to information systems outside the Library when these systems meet information needs more effectively and efficiently than internal resources can. It is the policy of this Library to consider each individual information query to be of equal merit regardless of the age, gender, ethnicity, disability, sexual preference, English language proficiency or status of the inquirer. Our intention is to accord equal attention and effort to each inquiry, although the time spent by staff on a question may vary in response to the perceived needs of the patron, the information resources (both staff and collections) available and the method of receipt of the inquiry. Information requests may be accepted in person, by telephone, by electronic mail, or using a form available on the Library's Web site.

### Reference Service Management

Library coordination of reference services includes management and training components:

- the development, implementation and review of policies and procedures relating to these services;
- the development, implementation and evaluation of competency and skill-based training efforts;
- the recommendation of enhancements, additions, and/or deletions to print and digital resources consonant with the Library's Collection Development Policy;
- resource discovery and maintenance of library based Web pages, both external and internal;
- the purchase of training materials and documentation; and
- the development and implementation of marketing efforts.

Site management of reference services at each branch is the responsibility of the Branch Heads working with Department Heads or their designees. Responsibilities include:

- maintenance and reconciliation of statistics for all reference services, including preparation of monthly statistics;

*Contd....*

Notes

- maintenance of equipment coordinated with the Administrative Office;
- maintenance of user documentation for digital resources;
- supervision and evaluation of staff performance and proficiency levels; and
- maintenance of supplies used in providing such services.

**Staff Training**

The Farmington Community Library views the ability to search print and digital reference sources as a basic service skill for all full time and part time employees. All staff is required to master basic reference competencies which are detailed in the Adult Department Procedures. Professionals are required to master all levels of reference competencies. Training will be conducted in house on a time frame determined by the Branch Heads or Departments Heads. However, the Library will provide the opportunity and training to any staff wishing to learn a higher level competency. The Library will also identify appropriate vendor workshops and send staff members. In addition, the Library will provide current support documentation and training manuals/materials to assist staff with their training and use of reference materials.

**Question:**

Read the case carefully and write down the summary of your understanding.

Source: <http://www.farmlib.org/pdfs/ReferenceService.pdf>

## 2.5 Summary

- Reference work is the actual assistance given to the users in need for information. It enables librarians and users to understand where the recorded information exists and helps in searching the needed information.
- Libraries have always been engaged in providing services to their users.
- Reference and information services have always been the main component of library services.
- In this new age, information becomes a resource as well as a commodity, and its handling and processing also becomes a main activity. In this information age, or post-industrial society, the demands will be focused on the knowledge of what to gather, how to gather, process and utilize it.
- The focal point of Reference Service is answering questions posed by the library user.
- The reference service in the library takes care of the function of making available the information whereas the library activity of acquiring, organizing, and preserving the reference materials is something which the users are not aware of, but is of maximum relevance to them.
- There are broadly two types of reference services, namely, Ready Reference Services and Long Range Reference Services.
- There are many general differences between Ready reference and long range reference services.
- There are Reference Service in different types of libraries



## 2.6 Keywords

Notes

**Books:** A packaged carrier of information and knowledge.

**Growing Organism:** A biological phenomenon indicating growth, not necessarily indicated externally.

**Information:** A society in which the central instrument of change, force and direction is information and knowledge.

**Knowledge:** Organized information irrespective of the physical form.

**Reader/User:** A person using the resources of a library; a customer of information and information institutions.

**Reference Books:** The books which are used to answer immediate questions of users. These books are kept for reference only and are not allowed to be used outside the library.

**Reference Material:** Books and other library materials which may not be borrowed for use out of the library, either because of their nature is such that they are prepared for brief consultation rather than for continuous reading, or they belong to a reference collection from which items may not be borrowed.

**Reference Service:** Is the establishing of contact between Reader and Book by personal service.

## 2.7 Review Questions

1. Why do users require reference sources?
2. How can the librarians help the users to locate information and to overcome the problems faced by them?
3. Define the concept of Reference Service.
4. Explain the relation between Reference Service and Information Service.
5. Enumerate the needs of Reference Service.
6. List the types of Reference Service.
7. Differentiate between Ready Reference and Long Range Reference Service.
8. Explain Reference Service in different types of libraries.

### **Answers: Self Assessment**

- |                                 |  |
|---------------------------------|--|
| 1. Reference Work               | 2. Referral Service                      |
| 3. information                  | 4. reference books                       |
| 5. Ready reference service      | 6. Assimilation                          |
| 7. Long range reference service | 8. preparation, service and assimilation |
| 9. False                        | 10. True                                 |
| 11. True                        | 12. True                                 |
| 13. True                        |  |

Notes

## 2.8 Further Readings



Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



Online links

<http://library.ryerson.ca/info/policies/refpolpublic/>

<http://library.uaf.edu/l101-reference-services>

<http://www.libraries.uci.edu/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC234266/>

## Unit 3: Reference Librarian

Notes

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- 3.2 Role and Responsibilities of a Reference Librarian
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- 3.3 Essential Skills of a Reference Librarian
- 3.4 Reference Librarian: Nature of the Work
- 3.5 Working Conditions of Reference Librarian
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- 3.7 Duties of a Reference Librarian
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- 3.11 Further Readings

### Objectives

After studying this unit, you will be able to:

- Enumerate the qualities and qualification of a Reference Librarian
- Identify the role and responsibilities of a Reference Librarian
- List essential skills of a Reference Librarian
- Describe working nature of reference Librarian
- Explain the working conditions of reference librarian
- Portray the librarian as information
- Enumerate the duties of librarian

### Introduction

Reference librarians help library patrons locate the information that they need. While actual job duties vary by library type and size, reference librarians are usually expected to maintain a collection of relevant and accurate reference sources, assist patrons with information searches and, in some contexts, train patrons in reference and citation techniques.

A librarian is a person who works professionally in a library, and holds a Degree in librarianship (known either as library science or library and information science). Traditionally, a librarian is

**Notes**

associated with collections of books, as demonstrated by the etymology of the word “librarian”. The role of a librarian is continuously evolving to meet social and technological needs. However, a modern librarian may deal with information in many formats, including books, magazines, newspapers, audio recordings (both musical and spoken-word), video recordings, maps, manuscripts, photographs and other graphic material, bibliographic databases, web searching, and digital resources. A librarian may provide other information services, including computer provision and training, coordination of public programs, basic literacy education, and assistive equipment for people with disabilities, and help with finding and using community resources.

### **3.1 Qualities and Qualification of a Reference Librarian**

A Reference Librarian must be responsive to the needs of users, think critically and be organized as well as organize or coordinate projects and services for the user. A reference librarian must be aware of current trends and have a wide base of knowledge. They must also keep tabs on the new types of reference and user services. They must effectively evaluate the sources that they come into contact with so as to provide the user with the best information possible. They must also be able to collaborate with others to improve services and implement new services, in the profession and also with the user. The librarian must also be an advocate for the library and be involved in any outreach programs and actively promote the library and its services. Education for the profession of Reference librarian requires masters in library science from an accredited school and usually some type of library experience.

#### **Competencies, Knowledge and Skills**

- *Interpersonal Skills* – Shows understanding, friendliness, courtesy, tact, empathy, cooperation, concern and politeness to others; relates to different people from varied backgrounds and different situations.
- *Customer Service* – Works with customers to assess needs, provide assistance, resolve problems, satisfy expectations, knows products and services; is committed to providing quality products and services.
- *Oral Communication* – Expresses information to individuals or groups effectively, taking into account the audience and nature of the information; makes clear and convincing oral presentations; listens to others; attends to nonverbal cues, and responds appropriately.
- *Manages and Organizes Information* – Identifies a need; gathers, organizes, and maintains information; determines its importance and accuracy, and communicates it by a variety of methods.
- *Problem Solving* – Identifies problems; determines accuracy and relevance of information; uses sound judgment to generate and evaluate alternatives, and to make recommendations.
- Knowledge of library operations sufficient to be able to assist customers as needed.
- Knowledge of library science theories and procedures sufficient to be able to select or weed materials and maintain library collections.
- Knowledge of library research resources and reader guidance information sufficient to be able to assist customers in locating collection materials or obtaining interlibrary loan services.
- Skill in exercising initiative, judgment, and decision making in solving problems and meeting organizational objectives.

- Skill in communicating and establishing effective working relationships with other employees, organizations and the public.
- Skill in researching library information

**Physical Demands:**

- **Sitting:** Remaining in the normal seated position.
- **Carrying:** Transporting an object, usually by hand, arm or shoulder.
- **Pushing:** Exerting force upon an object so that the object is away.
- **Pulling:** Exerting force on an object so that it is moving to the person.
- **Balancing:** Maintaining body equilibrium to prevent falling over.
- **Stooping:** Bending the body by bending spine at the waist.
- **Reaching:** Extending the hand(s) and arm(s) in any direction.
- **Handling:** Seizing, holding, grasping or otherwise working with hand(s).
- **Fingering:** Picking, pinching, or otherwise working with fingers.
- **Talking:** Expressing or exchanging ideas by means of spoken words.
- **Hearing:** Perceiving the nature of sounds by the ear.
- **Eye/hand/foot Coordination:** Performing work through using two or more.

**Working Environment:**

- Exposed to infections and contagious diseases.
- Subject to varying and unpredictable situations.
- Subject to many interruptions.
- Pressure due to multiple calls and inquiries

**Education Requirement:** Master's Degree in Library Science from an American Library Association accredited program.




**Caution** According to the BLS, an aspiring research librarian should have a master's degree in library science, which can take two years to complete.

An undergraduate degree is typically required to enrol in a Master of Science in Library Science (MSLS) or a Master of Library and Information Science (MLIS) program. In these programs, students learn how to evaluate resources and determine their appropriateness for a given audience, to organize materials in a library and to determine how patrons may use information. Some schools offer programs that lead to certification as an education professional or to a dual degree that allows students to earn a master's degree in library science and a law degree simultaneously.

Reference librarians often educate others about research methods, proper citation and the use of reference sources. Academic or school librarians may teach stand-alone courses or workshops in research methods or present on these subjects in other teacher's classrooms. Public librarians may likewise offer presentations and lectures on library reference materials and Internet resources to library patrons and the community at large.

**Experience Requirement:** One year of experience solving problems and providing customer service to business or public clients.

Notes



*Task* Visit a librarian and find out his/her skills, experience and qualifications.

### Self Assessment

Fill in the blanks:

1. A ..... must be responsive to the needs of users, think critically and be organized as well as organize or coordinate projects and services for the user.
2. According to the BLS, an aspiring research librarian should have a ..... in library science, which can take two years to complete.

### 3.2 Role and Responsibilities of a Reference Librarian

Reference librarians play an important role in the daily operations of a library. They provide assistance to library users in finding resources and how to efficiently use the library. They must have knowledge on a wide range of topics because she may field a request concerning just about any topic. Reference librarians typically possess a master’s degree in library science and may work in public libraries, learning institutions or for research organizations.

This can be dependent upon the setting: In an academic environment it could be promoting the library’s services, interacting with faculty, teaching information literacy courses, collection development, keeping up with new technology, creating information services and conducting the reference interview. In a public library it could mean doing reference work as well as checking out books to patrons. The reference librarian is part of user services and is therefore very important to the user and fulfilling their needs. The role of the Reference librarian today is definitely changing, especially with so many students using Google and getting most of their sources online, also there are several sources online where students can go that provide information services. The Reference librarian is not called upon to answer questions or gather information as much as they have in the past and the ways in which they answer questions are changing as well.



*Did u know?* “Coffman and Arret reported on recent ARL statistics that show a decrease of 40 per cent in reference transactions between 1997 and 2003” (Cassell and Hiremath).

#### 3.2.1 Additional Responsibilities

Experienced librarians may take administrative positions such as library or information centre director. Similar to the management of any other organization, they are concerned with the long-term planning of the library, and its relationship with its parent organization (the city or county for a public library, the college/university for an academic library, or the organization served by a special library). In smaller or specialized libraries, librarians typically perform a wide range of the different duties.

Representative examples of librarian responsibilities:

- Researching topics of interest for their constituencies.
- Referring patrons to other community organizations and government offices.
- Suggesting appropriate books (“readers’ advisory”) for children of different reading levels, and recommending novels for recreational reading.

- Facilitating and promoting reading clubs.
- Developing programs for library users of all ages and backgrounds.
- Managing access to electronic information resources.
- Building collections to respond to changing community needs or demands.
- Creating pathfinders.
- Writing grants to gain funding for expanded program or collections.
- Digitizing collections for online access.
- Answering incoming reference questions via telephone, postal mail, email, fax, and chat.
- Making and enforcing computer appointments on the public access Internet computers.

### Self Assessment

State whether the following statements are true or false:

3. Reference librarians play a minor role in the daily operations of a library.
4. Experienced librarians may take administrative positions such as library or information centre director.

### 3.3 Essential Skills of a Reference Librarian

Librarians select, develop, organize and maintain library collections and provide advisory services for users. They are employed in libraries or in a department within a library.

The most important essential skills for librarians are:

#### A. Reading Text

- read notes from co-workers.
- read summaries of recently published titles in suppliers' catalogues and professional journals to become familiar with the content of new releases they might order for their libraries' collections.
- read e-mail from co-workers and colleagues, and memos from managers.
- read library users' e-mail and chat room entries.
- read letters from publishers informing them of new authors and book titles.
- read monthly, quarterly and annual reports which summarize the operations of their libraries.
- read policies, procedures and technical manuals.
- read local and national newspapers.
- read collective agreements and copyright regulations.
- read professional and academic journals.
- read a variety of books, reports and other publications critically and purposefully.

#### B. Document Use

- scan labels, catalogue cards, book spines, periodical covers and copyright notices for publication dates, titles, authors' names, classification codes and other identification data.

Notes

- may refer to a variety of drawings.
- scan graphs displaying use of library resources. For example, they review bar graphs showing the number of books placed on hold per week and pie charts showing the circulation of materials across various collections.
- locate information in forms. complete a variety of forms.
- locate information in a variety of lists, tables and calendars.

**C. Writing**

- write reminders for themselves and notes for co-workers.
- write e-mail messages.
- write letters.



*Example:* Librarians in public libraries write letters inviting users to participate in their guest lecture programs.

- complete incident reports describing unusual occurrences and incidents at their libraries.
- write library guides, announcements and press releases.
- write reports outlining activities in their locations, work units and departments.
- may write critiques of selected resources for publication in newspapers, professional journals and newsletters and for distribution to colleagues and co-workers.

**D. Numeracy**

- accept cash and make change for a variety of library service fees, fines and charges.



*Example:* They collect fines levied on overdue and damaged materials and payments for printing and photocopying services.

- calculate expense claim amounts. They include costs incurred for parking and determine travel reimbursement using per kilometre rates.
- calculate dollar amounts of purchase orders and suppliers' invoices. They apply publishers' discounts, add applicable taxes and calculate totals.
- may create weekly and monthly schedules for their libraries, departments and work units.
- may record and compare expenditures against amounts budgeted for their library departments and work units. They adjust budgets to incorporate unexpected credits and debits.
- may measure furniture such as computer desks and bookshelves when placing shelves and organizing work areas.
- count library resources, items in circulation and library users accessing services.



*Example:* They count titles in collections and track numbers and types of resources requested, loaned, damaged and lost. Public and medical librarians count participants attending instructional programs and guest lectures.



- create summaries to compare library usage data across days, weeks, months and years to identify trends in library usage.



*Example:* They determine patterns by examining increases and decreases in program attendance and circulation numbers.

- compare library usage statistics across departments and locations.



*Example:* They compare circulation and program attendance statistics to determine usage patterns and to plan acquisitions and new programs.

- estimate available amounts of shelving space for new acquisitions.

#### E. Oral Communication

- greet library users and direct them to reference collections, computer stations and meeting rooms.
- explain library services to users and assist them with the selection of books and other resources.



*Example:* They recommend specific titles to users and describe library services. They explain procedures such as borrowing non-circulating resources and using library catalogues, databases and computers.

- talk to suppliers and service providers.



*Example:* They discuss scheduling arrangements with guest lecturers and negotiate contracts for digitization services.

- discuss ongoing library work with managers, co-workers and colleagues.



*Example:* They discuss performance reviews, changes to policies and procedures and upcoming events with their managers. They attend staff meetings to discuss topics such as collection development, archiving, new initiatives, changes to schedules, and users' concerns and suggestions. They participate in meetings and conference calls with librarians at other locations to discuss topics such as library services, collection building and shared service possibilities. They discuss procedures for cataloguing, indexing and digitizing acquisitions with co-workers.

- lead tours and facilitate book clubs and storytelling sessions. Librarians in public libraries provide informational tours for new users, facilitate book clubs for groups such as teens, new mothers and seniors, and host children's story sessions.
- deliver workshops and presentations.



*Example:* They may present workshops to post-secondary students on the use of library databases for in-depth research. They may present operational updates to library board members and topic-specific information to audiences such as lawyers and medical practitioners. They may deliver presentations on best practices to colleagues at conferences.

Notes

**F. Thinking Skills**

1. *Problem Solving*

- ❖ cannot physically locate titles requested by users. They re-check their databases to confirm the status of requested titles and place holds. If users require titles immediately, they check availability at other locations and request inter-library loans.
- ❖ receive last minute cancellations for scheduled programs.



*Example:* When guest lecturers cancel on short notice, librarians determine if the lecturers can be rescheduled, if alternate guest presenters are available and, if not, offer apologies when cancelling the lectures.

- ❖ cannot complete assigned tasks due to disruptions.



*Example:* When dissatisfied users constantly complain about long waits for computer access, librarians create and post sign up sheets, monitor the appropriate use of computers and suggest users access computers on other floors.

When users are being too noisy, they ask them to respect library rules and be quieter. They may ask unruly users to leave.

- ❖ are unable to complete job tasks due to process and equipment failures.



*Example:* When users arrive to collect requested resources, librarians may find that there are no records of the requests. They identify causes such as data entry errors and resolve them by teaching the users the proper processes to follow.

When equipment fails they carry out basic diagnostic and repair procedures found in service manuals and contact information technology departments for additional assistance.

2. *Decision Making*

- ❖ decide which library programs to offer. They consider the cost of new and existing programs and the staff time needed for each. They review attendance data from programs operated in the past.
- ❖ choose to repair, replace and cull library resources such as books and videotapes. They review circulation histories, publication dates, reprint availabilities and numbers of titles by the same authors. They check to see if newer editions are available.
- ❖ choose titles to add to collections. They consider summaries in publishers' catalogues, consult colleagues and question users' about their interests. They consider existing titles in their collections, the value of new acquisitions for library users and the demographics of their library communities. They analyze circulation data for similar titles as indicators of potential usage demand.

3. *Critical Thinking*

- ❖ Evaluate performance of library assistants, technicians, clerks and volunteers. They review employment records for data on shifts worked and sick days taken. They observe assistants' interactions with library users. They read and listen to users' comments about assistants, technicians, clerks and volunteers.

- ❖ Assess suitability of titles prior to acquisition. They read all available title reviews and discuss proposed title additions with their managers. Librarians in colleges and universities seek expert opinions from academic department professors. They consider possible users' reactions and potential repercussions when recommending controversial titles.

#### 4. *Job Task Planning and Organizing*

- ❖ *Own job planning and organizing:* Librarians organize their own job tasks under the general supervision of library managers. They respond to library users' requests and queries and this interaction disrupts the completion of regular duties and other tasks assigned by their managers. As a result, they must frequently reorganize their schedules. In larger libraries, they may rotate positions to cover various service areas.
- ❖ *Planning and organizing for others:* Librarians plan work schedules and assign tasks to library assistants, technicians, clerks and volunteers.

#### 5. *Significant Use of Memory*

- ❖ remember titles, authors and locations of materials within collections.
- ❖ remember user names, passwords and procedures for accessing computer systems and commonly used databases.

#### 6. *Finding Information*

- ❖ Locate resources in response to users' requests. They conduct searches of databases, library catalogues and web sites. They read title descriptions, journal abstracts, published reviews and consult colleagues.
- ❖ Find background information on a variety of topics when writing articles for publication and preparing presentations. They search databases and catalogues, read journal articles and scan bibliographies. They consult co-workers, colleagues and managers.

### G. Working with Others

Librarians work independently, staffing various circulation and reference desks, researching specific topics, cataloguing new acquisitions and instructing computer orientation classes. They coordinate job tasks with technicians, assistants and volunteers.

### H. Computer Use

- Use graphics software.



*Example:* They use presentation software such as PowerPoint to create slide shows for computer classes and orientation sessions.

- Use communications software.



*Example:* They exchange e-mail with managers, colleagues and co-workers. They frequently attach documents and add links to articles and web sites and use instant messaging software to chat online with library users.

- Use spreadsheets.



*Example:* They enter cataloguing, indexing, program attendance data and volunteer hours into spreadsheets for tracking purposes. They record expenditures against their departments' budgets including costs for programs and special events.

Notes

- Use the Internet.



*Example:* They place orders on-line for resource materials such as journals and books.

They access newsletters from other libraries and professional associations. They use various search engines to research new authors, reference requests and reviews of books. They host on-line discussions with users. They may use distance-training software to instruct users and co-navigate virtual tours of databases and web sites.

- Use word processing.



*Example:* They use programs such as Word to write letters, reviews and monthly reports.

They create signs to direct users to specific locations and inform users of available services. They create brochures, library guides, announcements and press releases.

- Use databases.



*Example:* They use databases for tasks such as cataloguing new acquisitions, culling collections and requesting inter-library loans.

They query both their own organizations' and public databases such as EBSCOHost.

### I. Continuous Learning

Librarians learn continuously to remain knowledgeable about topics and titles of interest to library users. The majority of learning occurs through their daily activities and interactions with co-workers, colleagues and library users. They may attend courses offered by their organizations to enhance software and research skills and local, national and international conferences sponsored by professional associations.

Learning may be acquired:

- As part of regular work activity.
- From co-workers.
- Through training offered in the workplace.
- Through reading or other forms of self-study
  - ❖ at work.
  - ❖ on worker's own time.
  - ❖ using materials available through work.
  - ❖ using materials obtained through a professional association or union.
  - ❖ using materials obtained on worker's own initiative.
- Through off-site training
  - ❖ during working hours at no cost to the worker.

### J. Other Information

In addition to collecting information for this Essential Skills Profile, our interviews with job incumbents also asked about the following topics:

- *Physical Aspects:* Librarians sit when reviewing publishers' catalogues, stand and walk about libraries to view various collections and bend and reach for books on shelves.

They require hand-eye coordination to use pointing devices, upper limb coordination to shelve materials and multiple limb coordination to climb ladders. They require limited strength to move books and catalogues.

Notes

- **Attitudes:** Librarians must enjoy serving the public and learning about a wide range of general interest and specialist topics.
- **Future Trends Affecting Essential Skills:** In the future, librarians will need sophisticated computer use skills because more resources will be digitized and made available electronically. Librarians will increasingly need to teach users how to access resources and refine searches for information. They will take a major role in importing and procuring selected resources to their libraries' digital collections.

### Self Assessment

Fill in the blanks:

5. .... select, develop, organize and maintain library collections and provide advisory services for users.
6. They require limited strength to move .....

### 3.4 Reference Librarian: Nature of the Work

A reference librarian is an individual who helps to track down specific, requested information. Many of these professionals work for public libraries, schools and universities. This position performs administrative, supervisory, and professional duties requiring adherence to standards of accuracy, timeliness, tact, and confidentiality. Position requires ability to move and shelve heavy books. Position works varying work schedule and includes some evenings and weekends. Consequence of errors may result in dissatisfied library users and loss of time to find and correct mistakes.

The traditional concept of a library is being redefined, from a place to access paper records or books, to one which also houses the most advanced mediums, including CD-ROM, the Internet, virtual libraries, and remote access to a wide range of resources. Consequently, librarians are increasingly combining traditional duties with tasks involving quickly changing technology. Librarians assist people in finding information and using it effectively in their personal and professional lives. They must have knowledge of a wide variety of scholarly and public information sources, and follow trends related to publishing, computers, and the media to effectively oversee the selection and organization of library materials. Librarians manage staff and develop and direct information programs and systems for the public to ensure information is organized to meet users' needs.

Most librarian positions incorporate three aspects of library work—user services, technical services, and administrative services. Even librarians specializing in one of these areas perform other responsibilities. Librarians in user services, such as reference and children's librarians, work with the public to help them find the information they need. This involves analyzing users' needs to determine what information is appropriate, and searching for, acquiring, and providing information. It also includes an instructional role, such as showing users how to access information.



*Example:* Librarians commonly help users navigate the Internet, showing them how to most efficiently search for relevant information.

**Notes**

Librarians in technical services, such as acquisitions and cataloguing, acquire and prepare materials for use and often do not deal directly with the public. Librarians in administrative services oversee the management and planning of libraries, negotiate contracts for services, materials, and equipment, supervise library employees, perform public relations and fundraising duties, prepare budgets, and direct activities to ensure that everything functions properly.

In small libraries or information centres, librarians usually handle all aspects of the work. They read book reviews, publishers' announcements, and catalogues to keep up with current literature and other available resources, and select and purchase materials from publishers, wholesalers, and distributors. Librarians prepare new materials by classifying them by subject matter, and describe books and other library materials so they are easy to find. They supervise assistants who prepare cards, computer records, or other access tools that direct users to resources. In large libraries, librarians often specialize in a single area, such as acquisitions, cataloguing, bibliography, reference, special collections, or administration. Teamwork is increasingly important to ensure quality service to the public.

Librarians also compile lists of books, periodicals, articles, and audio-visual materials on particular subjects, analyse collections, and recommend materials. They collect and organize books, pamphlets, manuscripts, and other materials in a specific field, such as rare books, genealogy, or music. In addition, they coordinate programs such as storytelling for children, and literacy skills and book talks for adults; conduct classes; publicize services; provide reference help; write grants; and oversee other administrative matters.

Librarians are classified according to the type of library in which they work—public libraries, school library media centres, academic libraries, and special libraries. Some librarians work with specific groups, such as children, young adults, adults, or the disadvantaged. In school library media centres, librarians help teachers develop curricula, acquire materials for classroom instruction, and sometimes team-teach.

Librarians also work in information centres or libraries maintained by government agencies, corporations, law firms, advertising agencies, museums, professional associations, medical centres, hospitals, religious organizations, and research laboratories. They build and arrange an organization's information resources, which are usually limited to subjects of special interest to the organization. These special librarians can provide vital information services by preparing abstracts and indexes of current periodicals, organizing bibliographies, or analysing background information and preparing reports on areas of particular interest. For instance, a special librarian working for a corporation could provide the sales department with information on competitors or new developments affecting their field.

Many libraries have access to remote databases, and maintain their own computerized databases. The widespread use of automation in libraries makes database searching skills important to librarians. Librarians develop and index databases and help train users to develop searching skills for the information they need. Some libraries are forming consortiums with other libraries through electronic mail. This allows patrons to simultaneously submit information requests to several libraries. The Internet is also expanding the amount of available reference information. Librarians must be aware of how to use these resources in order to locate information.

Librarians with computer and information systems skills can work as automated systems librarians, planning and operating computer systems, and information science librarians, designing information storage and retrieval systems and developing procedures for collecting, organizing, interpreting, and classifying information. These librarians analyse and plan for future information needs. The increased use of automated information systems enables librarians to focus on administrative and budgeting responsibilities, grant writing, and specialized research requests, while delegating more technical and user services responsibilities to technicians.

Increasingly, librarians apply their information management and research skills to arenas outside of libraries—for example, database development, reference tool development, information systems, publishing, Internet coordination, marketing, and training of database users.



*Notes* Entrepreneurial librarians sometimes start their own consulting practices, acting as free-lance librarians or information brokers and providing services to other libraries, businesses, or government agencies.



*Caselet*

### Workplaces for Librarians – Public, Academic, School and Special Library

**B**asic categories of workplace settings for librarians are routinely classified around the world as: public, academic, school, and special. Some librarians will start and operate their own business. They often call themselves information brokers, research specialists, knowledge management, competitive intelligence or independent information professionals. The Public Library is the local centre of information, making all kinds of knowledge and information readily available to its users. The services of the public library are provided on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status. Academic library is a library that is an integral part of a college, university, or other institution of postsecondary education, administered to meet the information and research needs of its students, faculty, and staff. The primary purpose is to support the students, teachers, and curriculum of the school or school district. In addition to library administration, certificated teacher-librarians instruct individual students, groups and classes, and faculty in effective research methods, often referred to as information literacy skills. News, law, medical, government, nongovernmental organization, prison, corporate, museum or any other type of library owned and operated by an organization are considered as special library. They can be highly specialized, serving a discrete user group with a restricted collection area. In an increasingly global and virtual workplace, many special librarians may not even work in a library at all but instead manage and facilitate the use of electronic collections. Librarians in some types of special libraries may be required to have additional training, such as a law degree for a librarian in an academic law library or appropriate subject degrees for subject specialties such as chemistry, engineering, etc.

*Source:* librarians.askdefine.com/

### 3.5 Working Conditions of Reference Librarian

Librarians spend a significant portion of time at their desks or in front of computer terminals; extended work at video display terminals can cause eyestrain and headaches. Assisting users in obtaining information for their jobs, recreational purposes, and other uses can be challenging and satisfying; at the same time, working with users under deadlines can be demanding and stressful. More than 2 out of 10 librarians work part time. Public and college librarians often work weekends and evenings, and have to work some holidays. School librarians usually have the same workday schedule as classroom teachers and similar vacation schedules. Special librarians usually work normal business hours, but in fast-paced industries, such as advertising or legal services, they can work longer hours during peak times.

Notes

### **3.5.1 Training, Other Qualifications and Advancement**

A master's degree in library science (MLS) is necessary for librarian positions in most public, academic, and special libraries, and in some school libraries. The Federal Government requires an MLS or the equivalent in education and experience. Many colleges and universities offer MLS programs, but employers often prefer graduates of the approximately 50 schools accredited by the American Library Association. Most MLS programs require a bachelor's degree; any liberal arts major are appropriate.

Most MLS programs take 1 year to complete; others take 2. A typical graduate program includes courses in the foundations of library and information science, including the history of books and printing, intellectual freedom and censorship, and the role of libraries and information in society. Other basic courses cover material selection and processing, the organization of information, reference tools and strategies, and user services. Courses are adapted to educate librarians to use new resources brought about by advancing technology such as on-line reference systems, Internet search methods, and automated circulation systems. Course options can include resources for children or young adults; classification, cataloguing, indexing, and abstracting; library administration; and library automation. Computer related course work is an increasingly important part of an MLS degree.

An MLS provides general preparation for library work, but some individuals specialize in a particular area such as reference, technical services, or children's services. A Ph.D. degree in library and information science is advantageous for a college teaching position, or a top administrative job in a college or university library or large library system. In special libraries, an MLS is also usually required. In addition, most special librarians supplement their education with knowledge of the subject specialization, sometimes earning a master's, doctoral, or professional degree in the subject. Subject specializations include medicine, law, business, engineering, and the natural and social sciences. For example, a librarian working for a law firm may also be a licensed attorney, holding both library science and law degrees. In some jobs, knowledge of a foreign language is needed.

State certification requirements for public school librarians vary widely. Most States require school librarians, often called library media specialists, to be certified as teachers and have courses in library science. In some cases, an MLS, perhaps with a library media specialization, or a master's in education with a specialty in school library media or educational media, is needed. Some States require certification of public librarians employed in municipal, county, or regional library systems. Librarians participate in continuing training once they are on the job to keep abreast of new information systems brought about by changing technology. Experienced librarians can advance to administrative positions, such as department head, library director, or chief information officer.

### **3.5.2 Job Outlook**

Slower than average employment growth, coupled with an increasing number of MLS graduates, will result in more applicants competing for fewer jobs. However, because MLS programs increasingly focus on computer skills, graduates will be qualified for other, computer-related occupations. Applicants for librarian jobs in large metropolitan areas, where most graduates prefer to work, will face competition; those willing to work in rural areas should have better job prospects. Some job openings for librarians will stem from projected slower than average employment growth through 2008. Replacement needs will account for more job openings over the next decade, as some librarians reach retirement age.

The increasing use of computerized information storage and retrieval systems could contribute to slow growth in the demand for librarians. Computerized systems make cataloguing easier,



which library technicians now handle. In addition, many libraries are equipped for users to access library computers directly from their homes or offices. These systems allow users to bypass librarians and conduct research on their own. However, librarians are needed to manage staff, help users develop database searching techniques, address complicated reference requests, and define users' needs.

Opportunities will be best for librarians outside traditional settings. Non-traditional library settings include information brokers, private corporations, and consulting firms. Many companies are turning to librarians because of their research and organizational skills, and knowledge of computer databases and library automation systems. Librarians can review vast amounts of information and analyse, evaluate, and organize it according to a company's specific needs. Librarians are also hired by organizations to set up information on the Internet. Librarians working in these settings may be classified as systems analysts, database specialists and trainers, webmasters or web developers, or LAN (local area network) coordinators.

### Self Assessment

Fill in the blanks:

7. A ..... is an individual who helps to track down specific, requested information.
8. An ..... offers usual preparation for library work, however few individuals specialize in a certain area like reference, technical services, or children's services.
9. .... needs for public school librarians differ extensively.

### 3.6 Librarian as Information

It seems clear that one of the primary functions and goals of libraries and librarians in our societies is to connect people with information, whether it is in the form of a book, manuscript, painting or digital document. But what is not clear is how this connection in fact takes place, which is essential to understand if librarians are to design and manage their libraries most effectively.

Some patrons will call the library for assistance instead of visiting. In these cases, the reference librarian serves the role of answering a question by performing a quick Internet search or performing a search on the library's computer system. Depending on the complexity of the question, the librarian may need to conduct additional research and get back to the patron with the correct answer.

The emergence of a vast storehouse of information on the Internet poses a different kind of conundrum. Librarians, the traditional gatekeepers of knowledge are in danger of being bypassed, their skills are ignored, their advice unsought. Search engines send user straight to the information they require – or so users may think – without any need for an intermediary to classify, catalogue, cross-reference, advice on sources. The location and provision of information services has dramatically changed over the last ten years. There is no need to leave the home or office to locate and access information now readily available on-line via digital gateways furnished by a wide variety of information providers.



*Example:* Libraries, electronic, publisher, businesses, organisations, individuals.

Information is electronically accessible from a wide variety of globally distributed information repositories. Information is no longer simply text and pictures. It is electronically in a wide variety of formats, many of which are large, complex (i.e. video & audio) and often integrated (i.e. multimedia).

**Notes**

**Traditional Library:** Libraries are where the access points such as, library catalogues as well as library collections are print based and their management is by and large manual.

**Automated Library:** A library where access points and housekeeping operations are computerised is called an automated library. The graphic records are still print-on-paper publication.

**Electronic Library – Digital Library:** The access point as well as the graphic records are in electronic/digital form when these electronic/digital libraries are connected via various networks, particularly the Internet, this is called virtual library. Digital library is not only digitization of physical resources, but also thoughtful organisation of electronic collection for better access. Such organisation provides coherence to a massive amount of shared knowledge base while the method of access provides convenient information retrieval for a wide range of global user. Essentially a digital library deals with organisation and access of a large information repository. In all probability, digital libraries are likely to augment traditional libraries, such as an on-line card catalogue augments, rather than strictly replacing, a book collection. The reason for this could be that the digital medium tends to be better for searching and the physical medium better for reading.

**Self Assessment**

State whether the following statements are true or false:

10. Some patrons will call the library for assistance instead of visiting.
11. The location and provision of information services has not changed at all the last ten years.

**3.7 Duties of a Reference Librarian**

The American Library Association's (ALA) Reference and User Services Association note that a research librarian's job is to assist users in finding information ([www.ala.org](http://www.ala.org)). The ALA describes a research librarian's duty as organizing reference materials in a system that is easy to access. In addition to providing direct service to patrons, a reference librarian's duties include staying up-to-date on the different types of references available.

Specific duties vary depending on the size and type of library. Olivia Crosby described librarians as "Information experts in the information age". Most librarians spend their time working in one of the following areas of a library:

- Archivists can be specialized librarians who deal with archival materials, such as manuscripts, documents and records, though this varies from country to country, and there are other routes to the archival profession.
- Collections development librarians monitor the selection of books and electronic resources. Large libraries often use approval plans, which involve the librarian for a specific subject creating a profile that allows publishers to send relevant books to the library without any additional vetting. Librarians can then see those books when they arrive and decide if they will become part of the collection or not. All collections librarians also have a certain amount of funding to allow them to purchase books and materials that don't arrive via approval.
- Electronic resources librarians manage the databases that libraries license from third-party vendors. School librarians work in school libraries and perform duties as teachers, information technology specialists, and advocates for literacy. Instruction librarians teach information literacy skills in face-to-face classes and/or through the creation of online

learning objects. They instruct library users on how to find, evaluate and use information effectively. They are most common in academic libraries.

Notes

- Media specialists teach students to find and analyse information, purchase books and other resources for the school library, supervise library assistants, and are responsible for all aspects of running the library/media centre. Both library media teachers (LMTs) and young adult public librarians order books and other materials that will interest their young adult patrons. They also must help YAs find relevant and authoritative Internet resources. Helping this age group to become lifelong learners and readers is a main objective of professionals in this library specialty.
- Outreach librarians are charged with providing library and information services for underrepresented groups, such as people with disabilities, low income neighbourhoods, home bound adults and seniors, incarcerated and ex-offenders, and homeless and rural communities. In academic libraries, outreach librarians might focus on high school students, transfer students, first-generation college students, and minorities.
- Public service librarians work with the public, frequently at the reference desk of lending libraries. Some specialize in serving adults or children. Children's librarians provide appropriate material for children at all age levels, include pre-readers, conduct specialized programs and work with the children (and often their parents) to help foster interest and competence in the young reader. (In larger libraries, some specialize in teen services, periodicals, or other special collections.)
- Reference or research librarians help people doing research to find the information they need, through a structured conversation called a reference interview. The help may take the form of research on a specific question, providing direction on the use of databases and other electronic information resources; obtaining specialized materials from other sources; or providing access to and care of delicate or expensive materials. These services are sometimes provided by other library staff that has been given a certain amount of special training; some have criticized this trend.
- Systems librarians develop, troubleshoot and maintain library systems, including the library catalogue and related systems. Technical service librarians work "behind the scenes" ordering library materials and database subscriptions, computers and other equipment, and supervise the cataloguing and physical processing of new materials.
- A young adult or YA librarian serves patrons who are between 12 and 18 years old. Young adults are those patrons that look to library services to give them direction and guidance toward recreation, education, and emancipation. A young adult librarian could work in several different institutions; one might be a school library/media teacher, a member of a public library team, or a librarian in a penal institution. Licensing for library/media teacher includes a Bachelor or Master of Arts in Teaching and additional higher-level course work in library science. YA librarians who work in public libraries usually have a Master's degree in Library and/or Information Science (MLIS), relevant work experience, or a related credential.

## Self Assessment

Fill in the blanks:

12. .... librarians monitor the selection of books and electronic resources.
13. In ....., outreach librarians might focus on high school students, transfer students, first-generation college students, and minorities.

Notes

- 14. .... develop, troubleshoot and maintain library systems, including the library catalogue and related systems.
- 15. .... are those patrons that look to library services to give them direction and guidance toward recreation, education and emancipation.



Case Study

**Embedded Librarians Showcase Skills and Resources in Unique Community Partnerships**

**L**ibraries are constantly evolving to adapt to the needs and desires of our users. Most of these changes have occurred inside our buildings, from obtaining cutting-edge technology to providing self-service and redesigned spaces. While these changes have been vital, they have failed to increase our presence in the community. How can we truly demonstrate our value to our communities beyond our physical/virtual space, programming, outreach, and materials?

Jamie LaRue, library director for Douglas County (Colo.) Libraries (DCL), asked his librarians this question. LaRue envisions a future where the librarian and the library are a central hub of the community. Librarians have the power to change lives and build community—but to do this, we have to leave our desks, leave our buildings, and show the community what a powerful tool we are. LaRue firmly believes that the library’s most powerful asset is its professional staff. He wants librarians interacting with the community, answering their questions, informing their discussions, and helping them—as partners—achieve their goals. These opportunities will not find us; we have to seek them.

Traditional reference questions are not coming into the library as they have in the past, and yet those questions continue to be raised by participants in community group meetings. Community reference involves sending librarians out into the community to work closely with groups and conduct onsite reference interviews, as needed, to discover and answer their questions. This process helps our librarians stay informed on the needs, goals, and direction of the community, allowing us to showcase our skills and services in a new way. We know that librarians are passionate about reference and research and are well-suited to provide expert research assistance at little or no additional cost to the community. Now it is up to us to demonstrate that. Librarians are uniquely trained to inform the conversations that are happening all around us, just outside our doors. All we have to do is get involved.

As Douglas County Libraries grappled with this concept, a small group of staff was selected to address the most prevalent concerns: What does community reference look like? Can we make this into something that truly adds value to the community? We discovered that to create something strategic, impactful, relationship-centred, and part of our everyday duties we needed to follow three simple guidelines: Show up, pay attention, and stay in touch.

**Show up: Embedding our librarians**

Embedding librarians in local organizations is the cornerstone of community reference. Assignments for embedded librarians vary from branch to branch so as to strategically target organizations that will provide the greatest partnership opportunities. DCL staff are embedded throughout the county in local schools, city councils, metro districts, economic development councils, and even a local women’s crisis centre. Not only can embedded librarians attend meetings, inform discussions, and answer community

*Contd....*

reference questions—asked during a meeting or by community leaders with whom embedded librarians meet—librarians often also assist with the leadership of the organization; report on the group’s activities, goals, and direction; and in general become an integrated part of the group. Participating in these organizations allows us to demonstrate our value, while also becoming deeply knowledgeable about the issues they are facing. With this information, we can then discover the issues that our entire county is facing.

Douglas County Libraries’ first experiment with embedded librarianship occurred in 2006 when LaRue was invited to attend the meetings of the Parker Downtown Development Council (DDC). A group of property and business owners who wanted to improve the downtown shopping district invited town staff, city council members, and other stakeholders to work with them. The Parker Library manager and librarians began attending their meetings and served as the DDC’s secretary and in-house researcher (doing everything from minutes to volunteering at events, hosting information on the library website, and researching local architecture and methods for economic development in small towns). When the DDC was asked to describe the value of the library’s service over several years, members mentioned the importance of the expert research the librarians provided, the communication we facilitated, and the credibility a partner like the library brought to a fledgling organization. The library built strong relationships with these motivated community leaders, amazed them with our research skills, and helped the group grow into a formal non-profit that leads the community’s drive for economic growth.

#### **Unique outreach benefits both partners**

Community reference is a way to integrate ourselves into the community that highlights the skills and services we have to offer. This unique outreach creates a valuable partnership for the library, communities, and the library profession at a time when we need our communities to support the existence and funding of their local library. It is outreach with a hyper local emphasis, something the library can do better than any other community organization. As libraries all over the country face steep budget cuts, the library needs to reinvent itself to stay relevant and create a library culture. We rely on our community’s support, and community reference in turn allows us to be strategically placed for our community to rely on our skills and services.

The value of the library’s involvement with a community organization includes both the tangible and the intangible. The embedded librarian generates reports, minutes, executive summaries, bibliographies, and many other deliverables that represent hours of research and analysis performed in response to an organization’s information needs. The cost of having an independent information professional perform the same research would be prohibitive for most community groups or non-profits.

But the value of the library’s partnership is not limited to concrete pieces of information. The library stands with the local organization as a non-competitive partner who has a deep and broad knowledge of the community, connections with other groups that might assist or inform the organization’s mission, and a desire to see the organization succeed. At times, the library’s connection can go beyond our greatest hopes—for example, when the Parker DDC publicly acknowledged that the library lent credibility to their fledgling organization. The idea that the library can validate a group’s worth was not something that we ever considered. But it makes perfect sense: Everything that the library offers to individuals to help them succeed—resources, guidance, and expertise—is also available to organizations as a whole. This makes us just as essential to these groups as we are to our patrons.

*Contd....*

Notes

**Questions:**

1. Analyse the case and write down the case facts.
2. Write down the summary of the case.

Source: <http://www.americanlibrariesmagazine.org/article/community-reference-making-libraries-indispensable-new-way>

### 3.8 Summary

- Reference librarians play an important role in the daily operations of a library.
- A Reference Librarian must be responsive to the needs of users, think critically and be organized as well as organize or coordinate projects and services for the user.
- The Public Library is the local centre of information, making all kinds of knowledge and information readily available to its users.
- Librarians select, develop, organize and maintain library collections and provide advisory services for users. They are employed in libraries or in a department within a library.
- A reference librarian is an individual who helps to track down specific, requested information. Many of these professionals work for public libraries, schools and universities.
- A master's degree in library science (MLS) is essential for librarian positions in most public, academic, as well as special libraries, and in few school libraries.
- It seems clear that one of the primary functions and goals of libraries and librarians in our societies is to connect people with information, whether it is in the form of a book, manuscript, painting or digital document.
- The American Library Association's (ALA) Reference and User Services Association notes that a research librarian's job is to assist users in finding information.
- Specific duties vary depending on the size and type of library. Olivia Crosby described librarians as "Information experts in the information age".

### 3.9 Keywords

**Academic Library:** It is a library that is an integral part of a college, university, or other institution of postsecondary education, administered to meet the information and research needs of its students, faculty, and staff.

**Outreach Librarians:** They are charged with providing library and information services for underrepresented groups, such as people with disabilities, low income neighbourhoods, home bound adults and seniors, incarcerated and ex-offenders, and homeless and rural communities.

**Public Library:** These institutions are created through legislation within the jurisdiction they serve.

**Reference Librarians:** They help library patrons locate the information that they need. A reference librarian is an individual who helps to track down specific, requested information.

**School Library Media Centre:** Libraries which exclusively serve the needs of a public or private school.

**Systems Librarians:** They develop, troubleshoot and maintain library systems, including the library catalogue and related systems.

**Technical Service Librarians:** They work "behind the scenes" ordering library materials and database subscriptions, computers and other equipment, and supervise the cataloguing and physical processing of new materials.

### 3.10 Review Questions

1. Enumerate the qualities and qualification of a Reference Librarian.
2. Explain the role and responsibilities of a Reference Librarian.
3. Discuss the thinking skills of a Reference Librarian
4. List the essential skills of a Reference Librarian.
5. Describe the nature of working of Librarian.
6. Explain the training, other qualifications and advancement.
7. How would you portray the librarian as an information centre?
8. Enumerate the duties of a librarian.

### **Answers: Self Assessment**

- |                        |                             |
|------------------------|-----------------------------|
| 1. Reference Librarian | 2. master's degree          |
| 3. False               | 4. True                     |
| 5. Librarians          | 6. books and catalogues     |
| 7. reference librarian | 8. MLS                      |
| 9. State certification | 10. True                    |
| 11. False              | 12. Collections development |
| 13. Academic libraries | 14. Systems librarians      |
| 15. Young adults       |                             |

### 3.11 Further Readings



#### Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.

**Notes**



*Online links*

<http://crln.acrl.org/content/74/6/288.full>

<http://faculty.washington.edu/jernel/521/kccomp.htm>

<http://homeworktips.about.com/od/libraryresearch/a/reference.htm>

<http://www.scimagojr.com/journalsearch.php?q=4700152758&tip=sid>



## Unit 4: Information Services and Products

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### Objectives

After studying this unit, you will be able to:

- Explain the concept and origin of Information Service
- Describe the importance and need of information
- Differentiate between Information Service and Reference Service
- Discuss the role of Information Officer
- Compare and contrast Information Officer with Librarian
- Explain how dissemination of Information takes place
- Identify Current Awareness Services (CAS)
- Describe the concept of Selective Dissemination of Information

## **Introduction**

The acute problem of increasing amount of literature felt by scientists and technologists (who used scientific and technical libraries) on one hand and resource crunch to acquire at least all that which is important for the core user group on the other hand has led librarians and information scientists to devise ways and means of supporting R&D activities. In order to solve the problems created by the growth of literature, information service acted in scientific and technical libraries. The intention was to provide information service by one who can keep in touch with research going on in laboratory. His primary function was to organize literature and he was to know all the possible sources of information, which might be useful to the group of persons being served by him. As mentioned earlier, information service was started first in scientific and technical libraries because scientists and technologists were the first to feel the acute problem of increasing amount of literature. However, many other types of libraries are also providing this kind of service.

### **4.1 Information Services**

Libraries are meant to provide information services to its clientele. Modern libraries provide various library and information services to fulfil the information needs of the clientele. Information revolution is responsible for increase in the variety and volume of information services. Electronic delivery of information has become a necessity. Internet has opened new vistas of information resources. Despite of all this, information services are still required and this Unit will discuss a brief account of Information services and products.

#### **4.1.1 Origin of Information Service**

Information systems and services often develop from a conglomerate of loosely related events. Coherent historical narratives documenting their development can be difficult to construct because of the diversity of sources as well as the fundamental problem of finding logical boundaries for the research. As a result, chroniclers of information systems tend to either take an all-inclusive cursory approach, or conduct an incredibly detailed study of a particular system or event that lacks appropriate context. In *A History of Information Services*, Charles Bourne and Trudi Bellardo Hahn are able to split the difference and create a detailed narrative that addresses key contextual developments while effectively holding the reader's interest.

By focusing on the period from 1963 to 1976, the authors capture the emotion and revolutionary nature of moving from a fundamentally print information service system, to one that is chiefly based on online systems without getting lost in the expanse of the entire evolution from Vannevar Bush to the networked web. Service, as opposed to system, is the key word in the book's title. By focusing on overall services rather than narrowing in on the systems themselves, the book transcends its encyclopaedic narrative and somewhat numbing detail to present a balanced focus on people, events, and products. This holistic approach enables the writers to interject compelling biographical narratives of the key players who took developing online systems from experimental to fundamental components of information service. The best example is chapter five, where the long and winding development of DIALOG is bolstered by insights into integral service developers such as Roger Summit and Van Wente. As the authors explain in summing up the story of online information services, "It was not the available hardware, but the pioneers' visions of possibilities that pushed the frontier".

Bourne and Bellardo Hahn fill a significant gap in the information science and computing literature. Among the many efforts to chronicle development of online information systems and services from infancy to mature industry, none has addressed this historical period in such

detail nor brought the intelligent perspective of this work. The book holds one's interest well enough for a complete read by scholars of the history of information science as well as being useful as stand-alone chapters or snippets of detail. The indexing is quite helpful and facilitates the use of the book as a reference tool. A History of Online Information Services is recommended for information science and computing collections as well as anyone interested in the history of information retrieval.



Caselet

### Indian Literature through the Ages

**I**ndian literature includes everything which is included in the word 'literature' in its broadest, sense: religious and mundane, epic and lyric, dramatic and didactic poetry, narrative and scientific prose, as well as oral poetry and song. In the Vedas (3000 BC-1000 BC), when one finds such expressions, "I am standing in water but I am very thirsty", one marvels at the continuity of a rich heritage which is both modern and traditional. It is, therefore, not very correct to say that ancient Indian literature includes only the religious classics of Hinduism, Buddhism and Jainism. Jain narrative literature in the Prakrit language is full of erotic stories and realism.

Vedic poets are called the rishis, the seers who visualized the archetypal truths of cosmic functioning at all levels of existence. The Yajur Veda is related to yajna, which is not just sacrifice, but also means creative reality. Vedic ritual is preserved in literary texts called the Brahmanas. The main division of the contexts of these extensive texts is twofold – the ritualistic injunction and discussions on the meaning of Vedic ritual and all that is related to it.

The word Purana means 'that which renews the old' and is almost always mentioned alongwith Itihasa. The Puranas were written to illustrate and expound the truth of the Vedas. The fundamental abstruse philosophical and religious truths are expounded through popular legends or mythological stories. The Sanskrit language is divided into the Vedic and the classical. The great epics, the Ramayana and the Mahabharata and the Puranas are part of the classical period, but are discussed separately because of their enormity and importance, and are undoubtedly the precursors of Sanskrit Kavya (epic poetry), nataka (drama) and other literature. Classical Sanskrit literature includes the Kavyas (epic poetry), the Nataka (drama), lyric poetry, romance, popular tales, didactic fables, gnostic poetry, scientific literature on grammar, medicine, law, astronomy, mathematics, etc. Classical Sanskrit literature is on the whole secular in character. During the classical period, language was regulated by the rigid rules of Panini, one of the greatest Sanskrit grammarians.

Pali and Prakrit were the spoken languages of Indians after the Vedic period. Prakrit in the widest sense of the term was indicative of any language that in any manner deviated from the standard one, i.e. Sanskrit. Pali is archaic Prakrit. In fact, Pali is a combination of various dialects. These were adopted by Buddhist and Jain sects in ancient India as their sacred languages. Lord Buddha (500 B.C.) used Pali to give his sermons. All the Buddhist canonical literature is in Pali which includes Tipitaka (threefold basket). The Indian people speak languages belonging to major four distinct speech families: the Austric, Dravidian, Sino-Tibetan and Indo-European. In spite of these four different language groups, there is an Indian characteristic running through these language groups, which forms one of the bases of that certain underlying uniformity of life described by Pandit Jawaharlal Nehru as unity in the midst of diversity.

Source: <http://crtindia.gov.in/literaryarts.htm>

### 4.1.2 Concept of Information Service

A very simple definition is an Information Service is a service, which provides (serves) data/knowledge/information somehow. However, this definition is not strong enough to describe the range and domain of an Information Service. Therefore, it is necessary to define the term Information Service in a specific context. Fortunately, Wikipedia delivers, or better saying serves, a good definition of this context, which is called Information System.

An Information System is any combination of information technology and people's activities using that technology to support operations, management, and decision-making.

The definition continues with explaining the term from a bit more technical view:

In a very broad sense, the term Information System is frequently used to refer to the interaction between people, algorithmic processes, data and technology.

Regarding the first part of this definition, an Information Service is an instance of Information Technology. Hence, an Information Service is a part of an Information System. The second role in this definition is people. This term must be substituted by the term agent, which could be an administrator and/or a user. A user could be a customer and/or contributor. In addition, an agent could be a human or a machine. The interaction is that an Information Service, which collects (retrieves), manages (structures) and stores the data/knowledge/information, serves this data/knowledge/information to an user.

The outcome of this is the following definition:

An Information Service is this part of an Information System that serves data/knowledge/information to customers and collects it from its contributors, to manage and store it by optionally using administrators.

The basic objective of a library is collection, organization, storage, analysis and dissemination of information. Dissemination of information is being done in some way. This means of dissemination of information may be called a service. Reference services, CAS, SDI, literature search, database search, document delivery and translation service are some of the important information services in a library.

There are two aspects of information service such as:

- **Provision of Information on Demand:** When a user needs the information. He/she approaches the reference/information desk and requests for information by means of a specific query. He would be provided an answer to his specific query on demand.
- **Provision of Information in Anticipation:** This aspect aims to keep the users well informed and up-to-date in their field of specialization and also in the related subjects. This is called as dissemination of information or what we frequently use 'current awareness service' (CAS). This is a very important feature of information service. It is certainly a special feature of special libraries or information/documentation centres. However this aspect, of information service will not be completely missing in other kinds of libraries, though. It might get less attention.

### 4.1.3 Types of Information

The mission of research is to find solutions to problems for which information is required. This may be obtained either from the accumulated store of information or one may look to the flowed communication—either directly from primary information sources or through secondary source of information—with the available informational resources. Whatever may be the situation; there are certain types of information which have been identified by Hertz and Rubenstein as:

- **Conceptual Information:** The ideas, theories, hypothesis about the relationship which exists among the variables in the area of the problem.
- **Empirical Information:** Experience or the data of research may be drawn from one's self or, through communication, from others. It may be laboratory generated or it may be the product of "literature search".
- **Procedural Information:** This is the methodology which enables the investigator to operate more effectively. It relates to the means by which data of the investigation are obtained, manipulated, and tested; it is essentially methodological and from it has been derived the "scientific attitude."
- **Stimulatory Information:** Man must be motivated and there are two sources for such motivation": himself and the environment. Such information that is environmentally derived is probably most effective when it is transmitted by direct communication.



**Caution** But whether information is directly or indirectly communicated, it is probably the most difficult of all forms of information to systemize.

The emphasis on teamwork is derived from concentrated attack of many minds, with varying skills, aptitudes, experience and points of view. Teamwork magnifies and complicates the informational tasks and greatly increases its importance.

- **Policy Information:** This is the focus of the decision-making process. Collective activity necessitates the definition of objective and purpose, the fixing of responsibility, the codification of rights and privileges and the delineation of function.
- **Directive Information:** Group activity cannot proceed effectively without coordination, and it is through directive information that this coordination is achieved.

#### 4.1.4 Nature and Characteristics of Information

Information of one sort or another impinges on a researcher all the time. Most of it flows past unabsorbed: what is required is "relevant" information. The adjective here is placed in quotation marks because one of the fundamental problems of information retrieval is actually deciding what "relevant" means in a particular context. It can, in the first instance, be time dependent. Information is often required at a specific point in the development of a research project. If it is identified and retrieved at the point, it may be highly relevant; if not, it may become totally irrelevant. Again, the information must be available in an appropriate form for it to be relevant.



*Example:* When seeking to learn about previous work immediately relevant to their projects, researchers may turn to books; and for "knowhow" on techniques to be used, they may turn to colleagues for advice.

What constitutes an appropriate form can also depend on the seniority of the researcher.



*Example:* Research students are the main users of other students' dissertations in most subjects. The general requirement is that information must be supplied at a time, and in a form, that makes it most likely that the researcher will absorb it. Even so, the absorption is typically selective. One of the findings of mass-media research is that members of the audience tend to restructure what they see or hear to fit in with their own preconceptions. Researchers consult the same sources of information; they may see quite different things in them. "Relevant" information

**Notes**

becomes, in effect, whatever researchers are prepared to take abroad in the belief that it may be useful for their work.

In selecting appropriate information, researchers can either play a relatively passive role, choosing from the information streams they encounter in their work, or they can actively seek what they want, searching information sources they would not normally encounter. In practice, this distinction can be blurred. Researchers often configure their environment so as to increase the likelihood of receiving information that will help their work.



*Example:* The colleagues with whom a researcher chats over coffee may prove to be the ones whose comments are particularly valuable. Nevertheless, the distinction between passive acceptance and active searching is worth making because the motivation and activities of the researcher can differ between the two. When researchers actively look for information, they must know that there is a gap in their knowledge that they are trying to fill. The same is not necessarily true of information gained by passive exposure. Their actual recognition of an information gap may not be very well defined. This often comes to light when researchers approach intermediaries for help. The reference interview (as librarians and information scientists call it) nearly always requires some clarification of what the researcher wants. At this point, words must be used with care. Wants and needs are often mentioned when talking of information that researchers desire to have, but the two words have slightly different connotations. The information that researchers want may not be what they actually need. To quote from one librarian's reference interview: "He already had in his mind what he wanted me to produce and I had a lot of trouble getting from him enough information even to look". The more uncertain the nature of the gap in a researcher's knowledge, the more likely it is that the perceived want may not be the real need.

Formulating the information need comes first. It is followed by identification of possible sources containing the required information then comes the process of extracting and absorbing the information from these sources. Finally, the information must be evaluated and, if it seems satisfactory, incorporated into the research activity.

The initial steps are common across all disciplines. All groups tend to differentiate between information sources in terms of such factors as quality, level, types and language. Emphases can vary. Scientists often make more use of secondary services (including computer-based services) than social scientists do. They are also more concerned about possible errors in the information they find. Social scientists and humanities researchers are more likely than scientists to carry out large-scale reviews of the literature before they start.

Differences can occur within disciplines because of the variety of types of research carried out.



*Example:* In humanities, some research requires the study of large amounts of published and archival material and so involves considerable travelling.

Other research entails the comparative study of material that may be most available locally. Still others may require intensive consideration of a limited range of documentation which may all be in the possession of the researcher. In sciences, there is a parallel range of research activities.

**Self Assessment**

Fill in the blanks:

1. ....often develop from a conglomerate of loosely related events.
2. The ..... is quite helpful and facilitates the use of the book as a reference tool.

3. .... includes the ideas, theories, hypothesis about the relationship which exists among the variables in the area of the problem.
4. An ..... is any combination of information technology and people's activities using that technology to support operations, management, and decision-making.

## 4.2 Importance and Need of Information

Information is an important resource. The progress of modern society depends a great deal upon the provision of right kind of information in the right form at the appropriate time. The planners, decision makers, policy makers at national or regional or local level need information to be able to plan properly. A specialist or researcher might need information to keep himself up-to-date and well informed in his field of specialization. All this highlights the value of information.

Dissemination of information is an essential aspect of information service and the efficient information service is one of the key indicators of judging successful functioning of the libraries. In special libraries/information centres/documentation centres, the greatest emphasis is laid on this service. It is also in this area of librarianship that special libraries are ahead of other libraries. No good library can afford to ignore the provision of effective information services in their library system.

Many modern libraries particularly special libraries in the area of Science and technology have reo-oriented their services and are now providing:

- **Personalised Information Services:** Specialised Services which are provided on case by case basis, wherein service provider needs to be academically sound and efficient, so that he/she can address to the query, cull out data from various sources, prepare the information for handing over to the user in the form user needs.
- **Value-Added Services:** These services are also specialized services being provided by special libraries to the users.

Keeping above in view, the need of information service has become all the more important and occupies a more prestigious place as the information scientists now prepare information from raw data (rather than handing over the data) which is what is required now by the users.

## 4.3 Information Service versus Reference Service

Reference service is one of the most important and sought after services of any library/information centre. The reference queries differ from library to library. The reference queries may be of intensive kind as the users could be looking for specialized services/information which includes professors, researchers, planners, managers, policy makers and the senior level personnel or it could be simple information enquiring about availability of a document. Reference service could be of a fact-finding nature or a long-range research type. Whatever may be the type of query, it requires consultation of different categories of reference/information sources. Hence, the main aim of this unit is to familiarize the students with different types of reference sources and the information content of these sources.

The purpose of reference work is to allow information to flow efficiently from information sources to information seekers. The underlying rationale for reference service has been based on four aspects, such as:

- To develop the role of the library as an educational institution
- To assist academic community

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- To help users select best documents from the vast galore of books
- To justify the existence of the library to the persons/people who provide financial support

Having said so let us now understand what is a reference source.

In general a reference source could be -Any publication from which authoritative information can be obtained.

In library terms, this source needs to be (generally) limited to standard reference works.

In the present day information age, information becomes a resource as well as a commodity, and its handling and processing also becomes a major activity. As such, the demands are focused on the knowledge of what to gather, how to gather, process, and finally its utilization. Varied users have varied information needs and requirements, be it students, teachers, researchers, scientists, technologists, specialists, planners or policy-makers. The potential users can have several requirements such as:

- They might need to obtain information quickly for a specific requirement area or availability of the latest information in the specified area.
- As we are aware that more information is being generated than consumed, therefore the need for selection of information arises due to information explosion.
- Besides, a criterion for evaluation and selection of reference materials is also one of the key components as variety of sources of varying scope and limitation are available.

All these requirements/needs of the users can be met by having access to proper and up-to-date reference books. Therefore, the sound basis for any reference service in a library is the reference books maintained by the reference staff of the library. This means that reference service is not just answering questions posed by the users by using an appropriate reference tool but it is also about maintaining the information resource banks from which information is provided to users. It also includes establishing links with information providers both inside and outside the library environment. Hence, the emphasis needs to be given to the concept of cooperating with other libraries and information organizations to pool the resources together.

In order to operate in a more effective way, the library should have provision for effective reference service. This effectiveness however shall depend upon the development and generation, which is dependent on the access, location, and dissemination of the relevant documents. The reference service in the library takes care of the function of making available the information, whereas the library activity of acquiring, organizing, and preserving the reference materials is something which the users are not aware of, but is of maximum relevance to them.

Besides the users have specific reference queries, which is the most important aspect in the reference work that relates to the reference questions with their corresponding reference sources. For fulfilling the information needs of the users, many libraries are facilitating both traditional form of reference services and complementing and supplementing that with the digital services using digital tools and techniques to make provision for real time reference services and/or virtual reference service.

For majority of the questions asked in the libraries, reference sources are the most logical starting point for searching information.



*Did u know?* Much of the reference work involves the knowledge of the reference books and matching the queries to their sources.



## **4.4 Information Officer**

Notes

Information officers are concerned with managing information in order to make it easily accessible. Work activities vary, depending on the needs of the organisation or client, but typically include:

- selecting, managing and acquiring resources (both hard copy and electronic) to meet an organisation's current and anticipated needs;
- classifying, collating and storing information, usually using special computer applications, for easy access and retrieval;
- creating and searching databases;
- cataloguing and indexing materials;
- scanning and abstracting materials;
- conducting information audits;
- developing and managing electronic resources using, for example, online databases and content management systems;
- writing and editing reports, publications and website content;
- developing and managing internal information resources and networks via intranet sites;
- designing for the web;
- overseeing the development of new information systems;
- responding to enquirers' requests using electronic and printed resources;
- running effective enquiry and current awareness or 'alerting' services and developing communications strategies;
- providing user education via leaflets, websites and tours of the library/information room;
- publicising and marketing services, internally and externally, through publicity material, demonstrations, presentations and/or social media;
- providing training and advice to colleagues and sometimes clients on the use of electronic information services;
- managing a range of projects;
- developing and exploiting multimedia information;
- giving presentations and individual consultations.

## **4.5 Information Officer versus Librarian**

As libraries become increasingly based on digital storage and access technologies, knowledge management approaches seem particularly useful. Most knowledge management systems emphasize the role of information and communications technologies, and the question arises about the role of librarians in these systems. If globally digital libraries are to realize their potential for providing access to the widest feasible range of knowledge, librarians and information officers need to fulfil a challenging and critical role as boundary spanners across cultures. This is based on evidence that knowledge is culturally derived, acquired, and applied, and that learning — the acquisition of new knowledge — is enabled by skills that are culturally dependent. This aspect of knowledge suggests that the tacit dimension of knowledge and learning

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may require humans to aid in spanning the boundaries across different knowledge domains and different cultures.

A librarian is a person who works professionally in a library, and holds a Degree in librarianship (known either as library science or library and information science). Traditionally, a librarian is associated with collections of books, as demonstrated by the etymology of the word “librarian” (Latin liber, ‘book’). The role of a librarian is continuously evolving to meet social and technological needs. However, a modern librarian may deal with information in many formats, including books, magazines, newspapers, audio recordings (both musical and spoken-word), video recordings, maps, manuscripts, photographs and other graphic material, bibliographic databases, web searching, and digital resources. A librarian may provide other information services, including computer provision and training, coordination of public programs, basic literacy education, and assistive equipment for people with disabilities, and help with finding and using community resources.

The increasing role of technology in libraries has a significant impact on the changing roles of librarians. New technologies are dramatically increasing the accessibility of information, and librarians are adapting to the evolving needs of users that emerge from the adoption of these new technologies.

One of the most significant examples of how technology has changed the role of librarians in the last 50 years has been the move from traditional card catalogues to online public access catalogues (OPACs). Librarians had to develop software and the MARC standards for cataloguing records electronically. They had to purchase and run the computers necessary to use the software. They had to teach the public how to use the new technologies and move to more virtual working environments.

The same could be said of other technology developments, from electronic databases (including the Internet), to logistical functions such as bar codes (or in the near future RFID). Many librarians provide virtual reference services (via web-based chat, instant messaging, text messaging, and e-mail), work in digitizing initiatives for works in the public domain, teach information literacy and technology classes to their users, and work on the development of information architectures for improving access and search functionality. These examples illustrate some of the ways in which librarians are using technology to fulfil and expand upon their historical roles.

Librarians must continually adapt to new formats for information, such as electronic journals and e-books, which present both challenges and opportunities in providing access and promoting them to library patrons.

Increasing technological advance has presented the possibility of automating some aspects of traditional libraries.



*Notes* In 2004 a group of researchers in Spain developed the UJI Online Robot. This robot is able to navigate the library, look for the specified book and upon its discovery, carefully take it from the shelf and deliver it to the user. Because of the robot’s extremely limited function, its introduction into libraries poses little risk of the employment of librarians, whose duties are not defined by menial tasks such as the retrieval of books.

**Self Assessment**

Fill in the blanks:

5. The ..... differ from library to library.

6. .... are concerned with managing information in order to make it easily accessible.
7. As libraries become increasingly based on digital storage and access technologies, ..... approaches seem particularly useful.

## **4.6 Dissemination of Information**

Information dissemination is a proactive information service designed to educate and inform focused groups of users on social, economic and educational issues, problems, and opportunities of interest to them. It requires systematic planning, collection, organization, and storage of information for its delivery to the target audience using different media and communication means.

Let us now discuss the importance of information dissemination before moving on to a community's information needs.

It is a fact that survival and self-development are the major issues central to several adults in many communities. The need to raise their socio-economic status is thus necessary and urgent. This requires empowering adults, the under-privileged and economically weaker sections of society with technical skills and education. However, organizing programs meant mainly for raising awareness, education, and training are information and communication dependent. Information dissemination as such constitutes an important and critical factor for the success of adult education and learning programs.

More often than not, organizers perceive information dissemination to be a one-way form of communication, circulating information and advice mainly through mass media in a cost-effective and timely manner. In some cases, the media are posters and pamphlets, while in some others reliance is exclusively on text-based print medium. However, two-way form of communication is relatively more relevant and effective for organizing awareness programs and activities in adult education.

Information dissemination requires systematic collection, organization, and storage of information relevant to the needs of adult community. There are several approaches to capturing relevant information both content-oriented information and problem-oriented information. Some approaches are traditional while some others are innovative. Adult educators can generate a series of services after gathering information through such approaches. Let us here look at different models of collecting information.

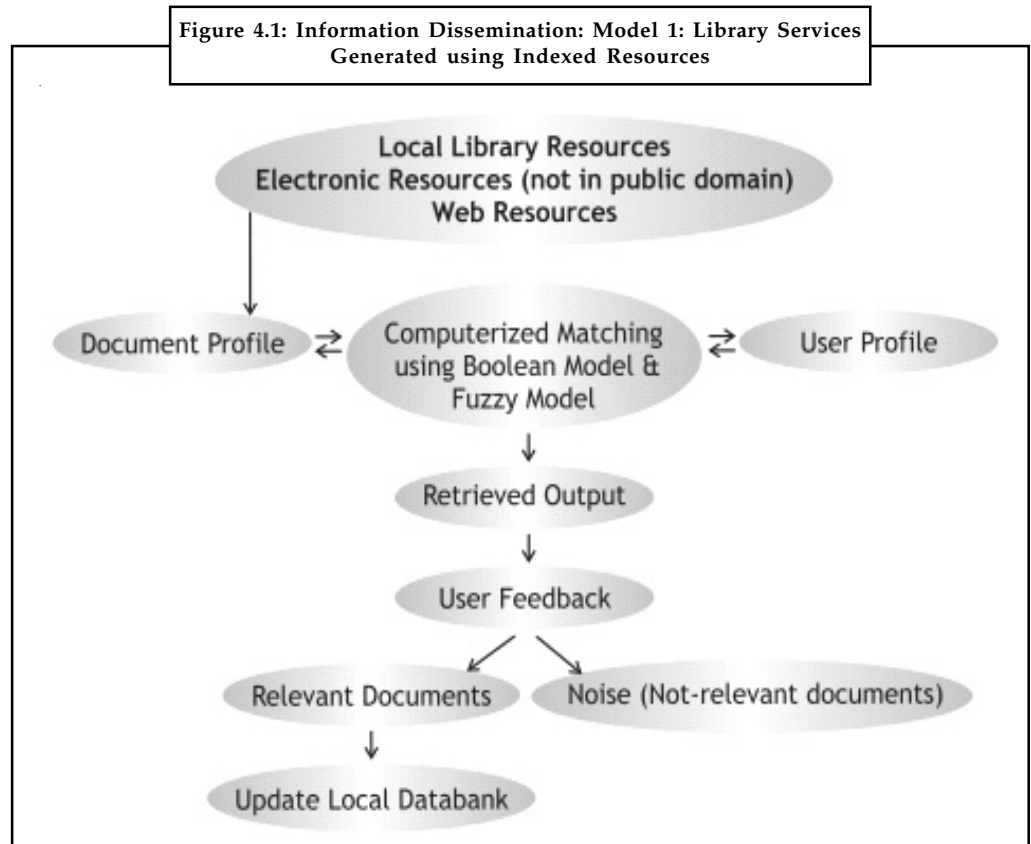
### **Model 1: Searching Indexed Resources**

This model is more suited for collecting content-oriented information. Here we capture information from indexed information resources such as multidisciplinary and specialized databases, library catalogues, repositories, digital libraries, web resources. Information captured from such resources is first stored in the database created for the purpose before it goes to the target audience.

The indexed information resources useful for searching content-oriented information are of the following types.

- Electronic databases and Online bibliographic services
- Local library catalogues
- Digital libraries and repositories on the Internet
- Web resources

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Source: [http://www.unesco.org/education/aladin/paldin/pdf/course02/unit\\_05.pdf](http://www.unesco.org/education/aladin/paldin/pdf/course02/unit_05.pdf)

**Model 2: Non-Indexed Sources**

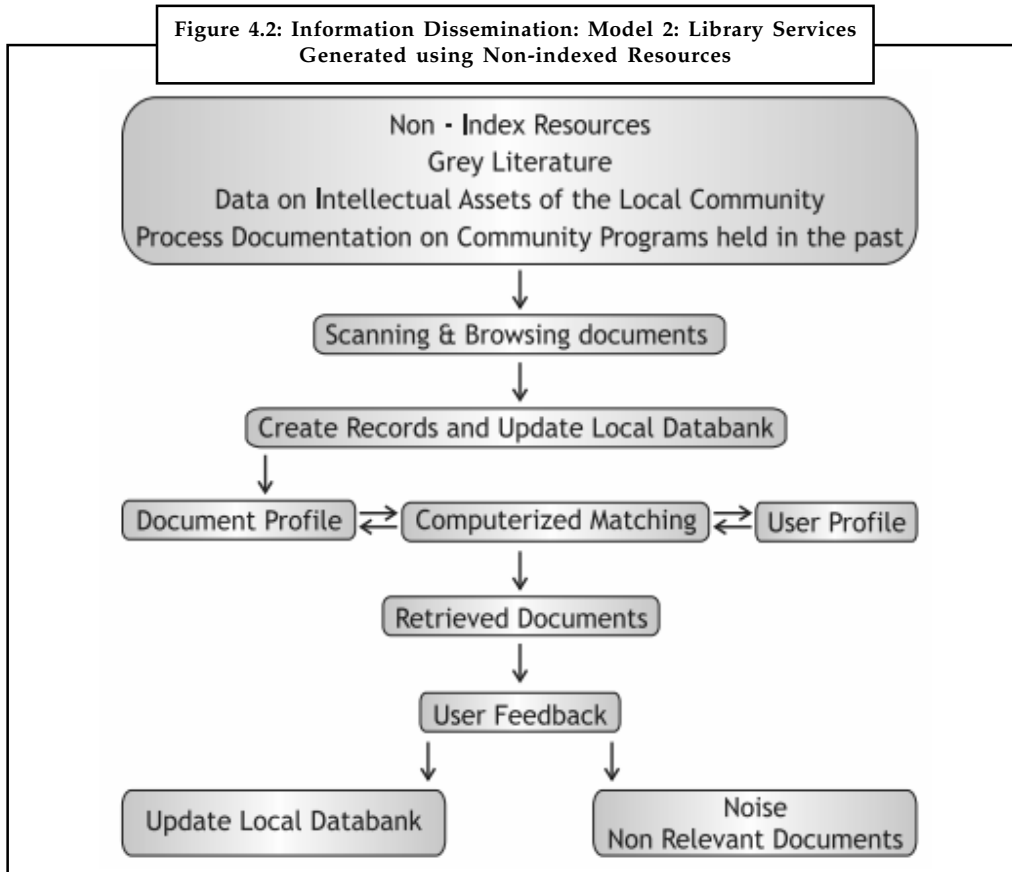
This model is more suited to meeting needs for problem-centred information. It entails browsing non-indexed sources of information for capturing and storing the relevant data first in the databank created for the purpose and later applying it for problem solving, educating, training, and enlarging the choices of the target users.

You can categorize non-indexed information resources in the following heads:

- **Grey Literature:** You can refer it as non-conventional literature. It comprises documents, not published commercially such as census, statistics, government reports, legislations, patents, conference proceedings, theses, preprints, research reports, newsletters, pamphlets, annual reports, and technical reports. Grey literature also comprises newspapers even though they produced commercially. Such documents are often original and comprehensive sources of information and provide access to the latest research in a particular area. However, these sources of information are difficult to search and access compared to traditional sources for two reasons: (i) typically not collected and acquired by libraries systematically and (ii) not well indexed for retrieval. Agencies such as government, academia, business or industry, usually produce them both in print and electronic format.
- **Reference Sources such as Product Directories:** These are typically comprehensive information sources compiled mainly for reference purpose rather than reading them cover to cover. These works are informative in nature and emphasize the documentation of statistical data.



Example: Reference works are: almanac, atlas, concordance, dictionary or lexicon, thesaurus, directory, encyclopaedia, gazetteer, and handbook, etc.



Source: [http://www.unesco.org/education/aladin/paldin/pdf/course02/unit\\_05.pdf](http://www.unesco.org/education/aladin/paldin/pdf/course02/unit_05.pdf)

- Capturing Data about Intellectual Assets of the Local Community:** The local communities in several areas are rich in traditional knowledge, traditional art and artistry, cultural resources, natural resources, agro biodiversity wealth, etc. The knowledge about such wealth and resources generally remains undocumented. There is need to capture information about these resources and preserve them for posterity. One can the data needed for the purpose from process documents produced by NGOs, published sources of information, and supplementing this data by field surveys of the area. Procedurally, it is better to first document information about local cultural wealth and resources in the database and later use for information dissemination to support awareness programs, and education and training programs.

### Model 3: Establishing Public Platforms for Reaching Out to Community Members (Nicknamed Choupal)

This is an innovative model for establishing communication links with the community for education, learning, and addressing issues of importance to the local community such as right to information, product marketing, health, job opportunities, etc. The basis of this model is on the philosophy of community-based participation, wherein the people from within the locality come together at designated venue for discussion and exchange information. Even this model is

**Notes**

novel, but conceptually this approach is not new. Village 'Choupals' have traditionally been the instruments of communication. What is new is the application of the information technology for giving wider reach to the participating communities, enabling them access to new markets over Internet. Secondly, the contemporary 'Choupal' model has the involvement of facilitators such as the 'Non-Governmental Organizations' playing their role as link between the village community on one hand and government and private agencies in the marketplace on the other. States like Tamilnadu, Madhya Pradesh, and Rajasthan have put this conceptual framework into practice. (World Bank Report 2006).



*Task* Compare and contrast all the three models of collecting information.

**Self Assessment**

State whether the following statements are true or false:

8. Information dissemination as such constitutes an important and critical factor for the success of adult education and learning programs.
9. Information dissemination does not require systematic collection, organization, and storage of information relevant to the needs of adult community.
10. Grey literature can be referred as non-conventional literature
11. Village 'Choupals' have traditionally been the instruments of communication.

**4.7 Current Awareness Services (CAS)**

Modern libraries and information centres offer a variety of new documentation and information services to provide support to Research and Development, industrial productivity, management, marketing and trade, all programmes of development of governments and institutions, etc. There has been a tremendous increase in the volume and variety of publications coming out from all corners of the world. This unprecedented growth of publications has posed serious problems for those involved in these activities, to keep themselves abreast of current developments. It has therefore, become necessary for libraries and information centres to design and develop new and innovative information services. Two such services are Current Awareness Services and Selective Dissemination of Information.

**4.7.1 Types of CAS**

Four types of Current Awareness Services (CAS) are described in this unit with their characteristic features. These types of service are: Contents-by-journal, Documentation Bulletin, Research-in-Progress Bulletin, and Newspaper Clippings Services.

- **Contents-by-Journal Service:** This type of service is provided by the library or documentation centre, by distributing a publication which contains copies of contents pages of journals in a broad subject area, e.g. medical sciences. A very good example of a Contents-by-Journal service is the publication called Current Contents published by the Institute for Scientific Information (ISI), Philadelphia (USA). The simplest way in which this can be done is to duplicate the contents pages of journal issues and circulate them individually or in a compiled form to users. The Contents-by-Journal Service is perhaps the cheapest and quickest way of providing a degree of current awareness.

- **Documentation Bulletins or Current Awareness Lists:** This is by far the most predominant form of current awareness service. In this kind of service the library or documentation centre scans primary journals and other sources of current information received in the library to identify potentially useful articles of interest to their users. The bibliographical details of such articles are collected, and classified or grouped into broad or narrow subject groups. At periodic intervals the collected bibliographic entries are listed under the different subject headings, class numbers, or groups. The list is then duplicated and circulated to users.

A documentation bulletin may include abstracts of papers listed in the bulletin. Current awareness lists are published or issued both by the library of an organisation for use within the organisation as well as by professional or learned bodies, international agencies and commercial organisations for use by any user interested in the subject areas covered by the list. Examples include current-awareness lists produced by professional bodies are Chemical Titles of the Chemical Abstracts Service, and Current Chemical Papers of the Chemical Society, U.K.

- **Research-in-Progress Bulletins:** As the name suggests it alerts users to new research projects and progress made in ongoing research projects. Such current -awareness services' usually require the joint effort of more than one organisation working in similar or closely related research areas. A parent body which funds or controls a group of research organization such as CSIR, ICAR in India could also bring out Research-in-Progress bulletins. An example of this type of service is the United States Department of Agriculture's (USDA) service, called Current Research Information System (CRIS). All USDA laboratories and \research stations contribute their input to CRIS. A research-in-progress bulletin usually contains information about the laboratory at which the project is being done, names of principal and associate researchers, funds and sources of funds, duration of the project, and special equipment in use if any. In addition it includes a narrative description of the research project and/or progress achieved till date.
- **Newspaper Clipping Service:** Newspapers are a current-awareness media, since they publish news of recent happenings on the political, social, and economic front of a nation or region. Newspapers carry useful information to everyone from housewives to top management of companies and cabinet ministers. Many organizations maintain newspaper clippings and have a separate section for this service. Examples include: Times of India (daily newspaper) maintains a comprehensive collection of newspaper clippings that can be referred to as and when necessary. Some libraries send copy of the clippings to identified users for keeping them up-to-date with the latest news in their area of interest.

#### 4.7.2 Current Awareness Services - Characteristics

A current awareness service has the following characteristics:

- usually in the form of a publication
- attempts to bring information that is current, new or of recent origin to the attention of its users
- usually confined to a well-defined subject area or topic, though topics from related areas are also covered in the service
- does not seek to answer any specific questions that the user may have
- sometimes confined to a given type of literature, e.g. patents, standards, etc.

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- could be bibliographical (such as a list of references) with or without abstracts; discursive, (ex. a Newsletter) in nature.
- attempts to inform its users to recent development or news as quickly as possible and make browsing convenient and easy for the user.

### **4.8 Selective Dissemination of Information**

Selective dissemination of information (SDI) was originally a phrase related to library and information science. SDI refers to tools and resources used to keep a user informed of new resources on specified topics.

SDI services pre-date the World Wide Web, and the term itself is somewhat dated. Contemporary analogous systems for SDI services include alerts, current awareness tools or trackers. These systems provide automated searches that inform the user of the availability of new resources meeting the user's specified keywords and search parameters. Alerts can be received a number of ways, including email, RSS feeds, voice mail, Instant messaging, and text messaging.

Selective Dissemination of Information (SDI) was a concept first described by Hans Peter Luhn of IBM in the 1950s. Software was developed in many companies and in government to provide this service in the 50's and 60's, which allowed distribution of items recently published in abstract journals to be routed to individuals who are likely to be interested in the contents. For example, the system at Ft. Monmouth automatically sent out (by mail) a different set of abstracts to each of about 1,000 scientists/engineers in the Army depending on what they were working on. The selection was based on an "interest profile," a list of keywords that described their interests. In some organizations, the 'interest profile' was much more than a simple list of keywords. Librarians or information professionals conducted extensive interviews with their clients to establish a fairly complex profile for each individual. Based on these profiles, the information professionals would then distribute selectively appropriate information to their clients. This labour-intensive operation was costly, which over time was diminished. A survey at the time (1970s) indicated that a large number of projects were affected by the SDI service. The software was developed by Edward Housman at the Signal Corps Research Laboratories Technical Information Division.

Selective Dissemination of Information assists user in keeping up-to-date current literature in particular subject areas. The purpose of SDI is to help users cope with information overload. In this column, we provide list of selected literatures or titles of library materials available in the library based on chosen subject. The sources of the literatures may vary, from various materials such as books, serials, proceedings and also electronic sources.

### **Self Assessment**

State whether the following statements are true or false:

12. Newspapers carry useful information to everyone from housewives to top management of companies and cabinet ministers.
13. It has become necessary for libraries and information centres to design and develop new and innovative information services.
14. A documentation bulletin may include abstracts of papers listed in the bulletin.
15. A research in progress bulletin usually in the form of a publication.





Case Study

## Marketing of Library and Information Services in Goa University

### Introduction

Librarians and information specialists have debated the idea of marketing for the information sector. Several things have compelled us to learn about marketing and begin doing it. Librarianship is experiencing rapid change. Information technology has created a new gateway for information services. Information products and services in a multiplicity of formats have made libraries and information centres more competitive and alert. Libraries are being subjected to significant pressures from the information revolution. The challenges of budget cuts, increased user base, the rapid growth of material, rising costs, networking demands, competition by database vendors, and complexity in information requirements are forcing the professionals to adopt marketing to improve the management of library and information centres.

Marketing aims to identify the client base, and to determine and fill its needs, wants, and demands by designing and delivering appropriate products and services. The main focus of the concept is the client, and the goal is client satisfaction. Rowley (2001) calls marketing, the management process which identifies, anticipates, and supplies customer requirements efficiently and profitably. Kotler (1999) says, that marketing is the process of planning and executing the conception, pricing, promotion and distribution of goods, services and ideas to create exchanges with target groups that satisfy customers and organizational objectives. Under the umbrella term marketing, we study concepts like building customer relationships, branding and corporate identity, marketing communications, price and pricing policy, collecting marketing data and marketing strategy and planning. For the purpose of this paper I will restrict the scope of the subject to pricing information products and services.

### Importance of Information

Information is an indispensable factor for promoting the development of society. Kemp (1976:101) observes, that information has been called, the fifth need of man, ranking after air, water, food, and shelter. Luck, et al., add that information is the life blood of planning, directing, and controlling any enterprise (Luck et al, 1981:20). It makes the satisfaction of the demands of the population possible in an efficient way.

The present age is rightly characterized as the age of information, where it success in any activity is based on the amount and accuracy of information available. The fact that information is a key resource for the progress and development of a nation (Raina, 1998:3) is nothing but the socio-economic, cultural, and political development of its citizenry. Information is a commodity or economic good of worldwide significance, which contributes to the national economy. Information has become a commodity that people buy. The criteria that determine power have shifted from industry ownership to the information ownership, as the global economy has shifted from industry-based to information-based. The quality and quantity of the information resources of the country are two of the parameters for development. Countries with adequate information infrastructure and information technology can create artificial demand for superfluous products and use it as a weapon against the economy of other countries. Information is an indispensable input for technological and economic development. It is a negotiable product that moves about in international markets. In today's international developing economies,

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a country that is incapable of providing information to its citizens will lose autonomy and be at the mercy of developed countries for information.

**Information Marketing in University Libraries**

Libraries and other non-profit organizations have only recently become aware of the need to market their products and services. Library and information products and services are now being recognized as commodities that can be sold, exchanged, lent, and transmitted. University libraries rely on their host organizations for operational costs. To gain some self-sufficiency, university libraries think seriously about not only recovering the costs incurred but also making a profit through their services. Narayana (1991:187) points out that the, "survival of a library depends among other things on its image in the minds of the users and the fund allocators. This image should be the outcome of the quality and effectiveness of the services, the ability to anticipate the desires and requirements of actual and potential users and their fulfilment. Marketing is the instrument through which these library objectives can be fulfilled. Vishwa Mohan, Srinivas, and Shakuntala (1996:16) observe that marketing is essential, because those who lack information may not even be aware of this need.

Information marketing by university libraries in India is essential in order to:

- Promotion of the use of information resources;
- Create perception of need and thereby create demand;
- Ensure the optimum use of information.
- Improve the image and status of the libraries and library professionals.
- Tackle the problems of rising costs of reading materials, journals, and databases;
- Cope with the information explosion;
- Introduce cutting-edge information technology systems in library services;
- Balance shrinking funds;
- Save libraries from devaluation
- Save libraries from declining reader-support;
- Uphold the dictum that information is power.

**Information Marketing in Goa University Library, India**

Marketing is an integral part of library service, because it has to do with basic principles of librarianship i.e. to develop good collection and user-oriented services. Goa University Library (GUL) is using most of the skills of information marketing to satisfy the needs of its clientele. The Goa University Library and Information Centre (GUL&IC) was created in 1985. It is housed in a magnificent building that includes stacks, reading rooms, a periodical area, computer centre, administrative division, reception, and circulation area. The collection has about 1.5 million volumes covering a wide range of disciplines, particularly microbiology, marine science, environmental science, computer science, geology, and management, and including a special collection on Latin America and the Caribbean. The library also has a large collection of titles in Konkani, the state language of Goa, and a foreign language section that includes titles in Portuguese, French, and Spanish and continues to grow at more than 2,500 titles annually. The library subscribes to around 450 periodicals covering more than 40 disciplines and receives more than 150 gift periodical subscriptions from various organizations and institutions. Back volumes of all important

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journals are available and the task of filling gaps in important serials is being actively pursued. The Chemical Abstracts Society has recently commended the library with a plaque for its complete collection of chemical abstracts. Readership has now crossed 5,000 mark from the academic community in and around the state of Goa. The GUL is also a partner in the nationwide Information and Library Network (INFLIBNET), a programme of University Grants Commission (UGC). In addition to contemporary holdings, the library also houses a collection of rare historical documents from the collection of more than 52 donors that include the noted historian Dr. P.S.S. Pissurlencar and the eminent Portuguese scholar Mr. Nuno Gonsalves, dating back to 16th Century and encompassing fields such as Indo-Portuguese relations and the history of Goa. The library is also officially designated as repository for nearly 4,000 United Nations publications since 1996.

GUL uses the following methods to design a market mix for ensuring a catalytic role in the modern information community:

- product development;
- physical distribution of information;
- promotion of products and services; and
- price.

#### **Product Development**

A product is anything that can be offered to a market to satisfy a need. A large assortment of materials, services, and programmes constitute the library's product. A library offers goods, either tangible (e.g. books and Internet access) or intangible (e.g. personal assistance, or value of the library as a premier community institution). De Aze (2002: 5) says that, "products and services which provide benefits for users and which answer users' most important needs are the core business of the library and information service" (Aze de Elliot E.2002: 5). Seetharama (1998) considers that, without products no organization has reason to exist, there is no task to perform; hence product is the most important factor in marketing, and Weingand (1995:307) asserts that, the library's product can be arranged within a three dimensional structure of the product mix, product line, and product item. Programmes of the library are a product line where product items consist of bibliographic instruction, displays, and lectures.

GUL is ready to develop the products to meet the needs expressed by the users. The library has automated its functions under the Library Automation Programme with the financial assistance of INFLIBNET. The bibliographic database of the library collection is available online, with barcodes for circulation, and rare archival and special collections materials have begun to be digitized and stored on CD and the Web to enable scholars in Goa and in other countries to access these resources.

**Online Public Access Catalogue (OPAC):** The searchable digital catalogue of library holdings is available on the campus-wide intranet and on the Web at: <http://goalnet.unigoa.ac.in/gulibrary/>.

**Digital Information Services:** The library offers access to reference materials such as general and subject encyclopaedias.

**COPSAT:** The library subscribes to the Contents Pages of Science and Technology (COPSAT) of more than 40 journals in each of eight science disciplines from INFLIBNET, a UGC project. GUL has developed a web-based application using WWWISIS software that queries this database and offers a search service from its website.

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**Searchable full Text e-Journals and Databases:** GUL provides the access to searchable full text of thousands of e-journals and databases through the UGC-Infonet e-journals consortium, providing 34 broad subjects and other e-journals and databases from publishers/vendors such as: ACS Publications, Jstor, Emerald, Blackwell, Institute of Physics, American Physical Society, American Institute of Physics, Cambridge, Springer Link, Nature, Science Online, Elsevier's Science Direct, STN, Royal Society of Chemistry, Taylor and Francis, Annual Reviews, and Project Muse, etc. on the campus-wide intranet. In addition to the above, the GUL website provides links to trials and free access to thousands of e-journals and databases in 24 broad subjects. This will provide the best current and archival periodical literature from all over the world to the university community and mitigate the severe shortage of periodicals faced by university libraries for many years, due to the widening gap between the demand for literature and the limits of available resources.

**NISCAIR Services:** GUL is a regular user of the National Information Science Communication and Information Resources (NISCAIR) services such as Contents, Abstracts and Photocopying Services (CAPS), the Standing Order Abstract Services (SOAS), and the Full Text Journal Services (FTJS). These services serve to reduce the financial burden of subscribing to expensive journals without compromising access to these resources.

**DELNET Services:** GUL is a member of Developing Libraries Network (DELNET). DELNET offers access to web-based databases. GUL uses the Interlibrary Loan (ILL) system to make ILL requests from a union catalogue of books (more than one million records), periodical article database, and the database of thesis and dissertations. GUL is also a member of institutions such as National Chemical Laboratory (NCL), Pune and Indira Gandhi Institute for Development Research (IGIDR), Mumbai. These institutions specialize in particular subjects and send photocopies when requested by GUL.

**Current Awareness Bulletin:** GUL provides contents pages for subscribed journals and has created a new monthly newsletter, which contains links to resources and information on developments in subject areas.

**Library Website:** The library website is to guide to the physical facilities that delivers detailed information about the library as well as providing access to all computer based services. GUL Website <<http://goalnet.unigoa.ac.in/gulibrary/>> also provides links to reference sources, tutorials, library projects, and presentations.

GUL has launched Remote Access Service. A Remote Access Service (RAS) Server has been installed for networking with affiliated college libraries of Goa University and other institutions. Services such as OPAC, querying, ILL management, and electronic mail-based alert services have been provided. It is hoped that a separate dial-in-server will ease the bandwidth difficulties during peak hours.

#### **Physical Distribution of Information**

Corrall and Brewerton (1999) describe acquisition as getting the raw materials and sending that out. GUL has acquired documents as gifts from 52 different donors. There are collections from Dr. P.S.S. Pissurlekar, Mr. Nuno Gonsalves, as well as government publications. To fill in the gaps in collection, the library also has exchange relations with universities all over India and a few foreign universities. Of course, the library also lends material to clients, locally and through ILL. There is a reading room that holds 50 students that is open around the clock. Nearly 400 students at a time can use the stacks. Students and faculty members of affiliated colleges of Goa University, Goa, and research scholars from different universities/institutions of India and abroad can also use the library's collections.

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**Promotion of Products and Services**

GUL users can be divided into three segments: individuals, including post-graduate students, research scholars, faculty members, research associates and assistants, project assistants, and non-teaching staff; corporate and institutional members; and other libraries. Each segment has different needs. The services that the library offers must be made known to as many users as possible, so that they think of the library when they need information. The promotion plans used by GUL are discussed below:

**Publicity**

Wide publicity is given to GUL products and services by various advertising methods. For example, local newspapers and magazines are used for dissemination of information related to the various programmes and activities being performed by the library including the specific ventures such as conducting of the workshops/seminars/refresher courses. The GUL conducts extension activities on various occasions such as National Library Week, Year of Books Programme, Goa Liberation Day, etc. in order to improve upon the image of the library and invite the attention of the large community of the users of the library. Wider publicity is given for all the training programmes being conducted by the library in the field of information technology, library automation and networking, which is the most crucial and challenging job before the libraries in the modern world. The GUL has prepared very attractive information brochures with CD-ROM, and leaflets are distributed widely in order to catch the eye of the user community. The same are incorporated in its homepage for on-line users. GUL is one of the active partners of Million books on the web project located in Carnegie Mellon University, Pittsburgh, USA. Being the partner in this project, the GUL is considered favourably and its attention is being invited by the foreign universities to get the benefit of this project. GUL is also a host library of GOALNET (Goa Academic Libraries Network) and is monitoring searchable Union Public Access Catalogue of the member libraries in Goa and invite s attention from the Indian universities and institutions.

**Public Relations**

Wide publicity is given to GUL products and services by various advertising methods. For example, local newspapers and magazines are used for dissemination of information related to programmes and activities in the library, including the specific ventures such as workshops, seminars, and refresher courses. The GUL conducts extension activities on occasions such as National Library Week, Year of Books Programme, Goa Liberation Day, etc., in order to improve the image of the library and invite the attention of a large community of users. Wider publicity is given for information technology training programmes, and on library automation and networking. The GUL has prepared attractive brochures with CD-ROM, and leaflets are distributed widely in order to catch the eye of the user community. These are incorporated in its homepage for online users. GUL is one of the active partners of the Million books on the web project located at Carnegie Mellon University, Pittsburgh, PA, USA. GUL is also a host library of GOALNET (Goa Academic Libraries Network) and is monitoring a searchable union catalogue of the member libraries in Goa.

**Price**

Price is important in marketing in the world of information as it is elsewhere. Kotler (1983) describes the 4 Ps of marketing: product, place, pricing, and promotion. He argued that the 4 Ps are a seller's paradigm and should be replaced with the 4 Cs of the buyer: customer value, user convenience, user cost, and user communication. Price can be expressed in currency; however, it can use goods or services. In the library, price can be used to

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express the value of information services: a physical product like a CD-ROM or a fee of a service or membership. Price is used to balance supply and demand, to be a stimulus, and to distribute income (Rowley 2001). GUL charges an annual library membership fee to different user groups: Post-graduate student: ₹ 400, M.Phil. Scholar, Research assistant, Project assistant, and ex-students: ₹ 500, Ph.D. scholar: ₹ 750, General public: ₹ 400; Corporate and Affiliated college members: ₹ 5,000. An annual total of approximately ₹ 6,00,000 is collected. A very small amount of income comes from photocopying services. GUL is considering charges for various library services. Discussions among the senior staff and consultation with the university authorities are under way to decide on pricing.

### Conclusion

Libraries are being forced to explore the possibilities of cost recovery and profit potentials for their survival. Libraries must change according to changing market conditions. Libraries need to achieve an imaginative design of service and products, and develop communication methods and a feedback mechanism to improve service. Though the concept of charging for information, particularly in developing countries like India, is a difficult task, libraries must consider what funds that can be generated this way. It must be carefully considered which services can have only a token price, which one cover a reasonable proportion of cost, and which can generate revenues. The impact of the information technology and the adoption of the marketing approach will help improve services for users and enhance the reputation of library and information services and professionals. Within 21 years of its establishment, GUL has found a place among the better known university libraries in India. After having been given a special appreciation and reward by the National Assessment and Accreditation Council (NAAC) of India, the library is poised to work with more zeal and dynamism to earn more on its services and achieve a special status in academic librarianship. GUL will grow and advance by watching user response. University authorities and faculty should also undertake marketing. That would strengthen the marketing plan of the library. As demands become increasingly complex, a strong commitment to marketing provides a means for the library to remain viable.

### Questions:

1. Analyse the case and interpret it.
2. Write down the case facts.
3. Write down an effective executive summary of given case.

Source: <http://www.webpages.uidaho.edu/~mbolin/madhusudhan.htm>

## 4.9 Summary

- A very simple definition is an Information Service is a service, which provides (serves) data/knowledge/information somehow.
- Reference service is one of the most important and sought after services of any library/information centre.
- The reference queries differ from library to library.
- Information officers are concerned with managing information in order to make it easily accessible.
- As libraries become increasingly based on digital storage and access technologies, knowledge management approaches seem particularly useful.

- Information dissemination is a proactive information service designed to educate and inform focused groups of users on social, economic and educational issues, problems, and opportunities of interest to them.
- Modern libraries and information centres offer a variety of new documentation and information services to provide support to Research and Development, industrial productivity, management, marketing and trade, all programmes of development of governments and institutions, etc.
- Selective dissemination of information (“SDI”) was originally a phrase related to library and information science. SDI refers to tools and resources used to keep a user informed of new resources on specified topics.

#### 4.10 Keywords

**Conceptual Information:** The ideas, theories, hypothesis about the relationship which exists among the variables in the area of the problem.

**Directive Information:** Group activity cannot proceed effectively without coordination, and it is through directive information that this coordination is achieved.

**Empirical Information:** Experience or the data of research may be drawn from one's self or, through communication, from others. It may be laboratory generated or it may be the product of "literature search".

**Information Service:** It is this part of an Information System that serves data/knowledge/information to customers and collects it from its contributors, to manage and store it by optionally using administrators.

**Information System:** It is any combination of information technology and people's activities using that technology to support operations, management, and decision-making.

**Policy Information:** This is the focus of the decision-making process. Collective activity necessitates the definition of objective and purpose, the fixing of responsibility, the codification of rights and privileges and the delineation of function.

**Procedural Information:** This is the methodology which enables the investigator to operate more effectively.

**Stimulatory Information:** Man must be motivated and there are two sources for such motivation, himself and the environment.

#### 4.11 Review Questions

1. Explain the origin of Information Service.
2. Define the concept of Information Service.
3. Differentiate between Information Service and Reference Service.
4. Discuss the role of Information Officer.
5. Compare and contrast between Information Officer and Librarian.
6. Explain how dissemination of Information takes place.
7. Define the concept of Current Awareness Services (CAS).
8. Describe the Concept of Selective Dissemination of Information.

Notes

**Answers: Self Assessment**

- |                                     |                         |
|-------------------------------------|-------------------------|
| 1. Information systems and services | 2. indexing             |
| 3. Conceptual information           | 4. Information System   |
| 5. reference queries                | 6. Information officers |
| 7. knowledge management             | 8. True                 |
| 9. False                            | 10. True                |
| 11. True                            | 12. True                |
| 13. True                            | 14. True                |
| 15. False                           |                         |

**4.12 Further Readings**



*Books*

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



*Online links*

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<http://www.neal-schuman.com/uploads/pdf/0213-reference-and-information-services-in-the-21st-century.pdf>

<http://www.netugc.com/types-of-reference-and-information-service>



## Unit 5: Alerting and Bibliographic Services

Notes

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### Objectives

After studying this unit, you will be able to:

- Discuss the meaning of Alerting Services
- Recognise the evaluation of various alerting services, such as CAS, SDI, and other services

Notes

- Know the meaning, aims, functions and types of bibliography
- Discuss about bibliographic control and its importance in the library
- Identify various information services, such as document delivery, translation services, and reference services

## Introduction

The acute problem of increasing amount of literature felt by scientists and technologists (who used scientific and technical libraries) on one hand and resource crunch to acquire at least all that which is important for the core user group on the other hand has led librarians and information scientists to devise ways and means of supporting R&D activities. In order to solve the problems created by the growth of literature, information service acted in scientific and technical libraries. The intention was to provide information service by one who can keep in touch with research going on in laboratory. His primary function was to organize literature and he was to know all the possible sources of information, which might be useful to the group of persons being served by him. Information service was started first in scientific and technical libraries because scientists and technologists were the first to feel the acute problem of increasing amount of literature. However, many other types of libraries are also providing this kind of service.

## 5.1 Meaning of Alerting Services

Alert is a colloquial term used to define a machine-to-person communication that is important and/or time sensitive. An alert contains user-requested content such as a reminder (important), a notification (urgent), and ultimately an alert (important and urgent). Alert messaging or alert notification is the delivery of alerts to recipients. Alert messaging emerged from the study of Personal Information Management (PIM), the science of discovering how people perform certain tasks to acquire, organize, maintain, retrieve and use information relevant to them. Alert notification is a natural evolution of the concept of RSS which makes it possible for people to keep up with web sites in an automated manner. Alerting makes it possible for people to keep up with the information that matters most to them.



*Notes* The library offers alerting services to keep you informed of new publications or databases. It is also possible to keep track of citations of scientific articles.

There are a number of different types of alerting services:

- **Saved Search/Keyword Alerts:** Develop a keyword search and all articles matching your keywords will automatically be sent to you. This can be set up in many article and journal databases.
- **Citation Alert:** This service will alert you when a chosen author or article has been cited by another.



*Example:* The ISI database is the most notable source of citation alerts because of the extent of its coverage.

- **Really Simple Syndication (RSS):** The RSS feed is a way in which information is delivered rather than a type of alerting service. RSS stands for "Really Simple Syndication" and the feed delivers tables of contents, saved search results, or other types of alerts in a form that can be interpreted by RSS feed readers.

- **TOC/Table of Contents Alerting:** A researcher can set up a table of contents alert by selecting his or her journals of interest; email alerts composed of each journal's table of contents are then sent to the researcher as they become available.

The number of scientific publications doubles every 10–15 years. Electronic publication becomes very popular. Since the readers do not want to be forced to regularly search for information about new documents, there is strong need for alerting services (AS). An alerting service keeps its clients informed about new documents and events they are interested in. But alerting services are not restricted to the area of scientific publications. Examples for applications that could benefit from alerting services are applications such as digital libraries, stock tickers, and traveller information systems. Currently, several implementations of alerting services already exist for the different applicational domains.



*Notes* There are two technologies that can be used to electronically monitor new content: email alerts and RSS feed readers.

With both of these technologies, you can choose what content you wish to monitor, and have it sent to directly to your email account or your feed reader, making it unnecessary to regularly search databases or visit journal websites to find new content.



*Notes* However, you should note that not all publishers, vendors, and databases providers support these technologies, or they may support one and not the other.

### 5.1.1 Email Alerts

Email alert services offer a way to have new content sent automatically to your email inbox. Setting up an email alert requires free registration with the publisher, vendor, or database provider offering the service. Registration allows the company to store a profile of what you want to monitor, along with your email address, so that you can be notified when newly available content fits the parameters you have established.



*Notes* If you like, you can set up a filter in your email account so that these incoming messages can be viewed in a separate folder, rather than with all of your other incoming emails.



*Caselet*

#### Law Firm Secures Measurable Results with Email Alerts

**A**fter working closely with eLawMarketing (the law firm division of EM Messaging) to design a custom email template and develop an email marketing strategy, Farella launched its first update in the labour & employment area. The update addressed a recent ruling by the California Supreme Court that expanded the definition of “disability” under California law far beyond the federal definition. Within just two days,

*Contd....*

Notes

over 50% of the labour and employment clients on Farella’s targeted distribution list had opened the email, including many who clicked to read the full analysis of the ruling prepared by Farella’s attorneys. Additionally, several readers clicked on links within the template back to key sections of Farella’s website, thereby contributing to increased site traffic.

Alerts from the construction and environmental groups followed soon after with each experiencing successful response rates from clients. A multi-article IP newsletter was also launched using the system.

Overall, Farella has been very pleased with the value delivered by eLawMarketing’s email alert program. As Cheryl Loof, the firm’s business development manager, explains:

“We view email alerts as a cost-effective method to reinforce the firm’s expertise with clients in specific practice areas, and to expand and develop client relationships. And the great thing is that HTML email alerts deliver measurable results – we know who opened our emails and which articles and/or links they were interested in. That sort of data is quite valuable in helping us identify individual client interests, and thereby serve our clients more proactively and effectively.”

eLawMarketing has helped many law firms leverage email as a marketing and business development tool. Applications include email newsletters, alerts, invitations, and announcements.

Source: [http://www.envoynews.com/envoy/e\\_article000167220.cfm](http://www.envoynews.com/envoy/e_article000167220.cfm)

### 5.1.2 RSS Feeds and Feed Readers

An increasing amount of web content is published in a format that allows you to subscribe to it and monitor it as it is published, much like you might subscribe to a print newspaper to monitor the news every day. Such web content is syndicated, which means that it is sent out to anyone wishing to subscribe, and the name for this technology, RSS, stands for Really Simple Syndication. In order to monitor and read new content published using RSS feeds, you will need to set up an RSS feed reader (also known as a feed aggregator or news reader).



*Did u know?* A feed reader is separate from your email, but still operates a lot like an email inbox.

A feed reader is a personal web space where you can log in and view your subscriptions to various types of content. Some people find a feed reader useful for managing certain tasks without cluttering up their email inbox – but this is just personal preference. However, if you are also monitoring blogs, news sites, or other types of web content that is syndicated, then a feed reader can help you manage all of this in one place, which may make this technology a handier way to keep up-to-date. Furthermore, while email alerts require that you register with the publisher, vendor, or database provider, this is not always necessary with RSS feeds.



**Example: Setting up a feed reader**

To set up a feed reader using Google Reader you will first need to register for a Google Reader account. If you already have a Google email account, you can use that as your login. Once logged in you may see a welcome screen or a screen that tells you your reading list is empty, but to the left you should see a link to “Add subscription”. This is what you will click to add feeds to your reader.

### 5.1.3 Monitoring Research Topics using Email Alerts or RSS Feeds

Notes

You might decide that you want to monitor newly published articles on a particular research topic in which case it is usually a good idea to set this up in a Citation or Full-text Database, as this sort of database is not restricted to the journals published by a particular publisher and will allow you to throw as wide a net as possible to gather articles on your topic. You will likely have to go through several steps where you register to create a profile, conduct a search, save it to your profile, and request that the search be automatically and periodically run against any new content added to the journal or database so the results can be sent to your email or feed reader. The exact steps will depend on the publisher, vendor, or database provider.



*Example: Setting up an email alert to monitor topic results in Zoological Record*

You will need to register with ISI Web of Knowledge (the name of the search interface for Zoological Record) in order to set up an email alert. To register, just click on the link to Zoological Record from the Library's Citation & Full-text Databases page. You'll see a link at the top of the resulting screen to "Sign In." Click that, and then click the link to "Register" in the section called "Customize Your Experience." Register in order to set up a login and password for yourself.

Now, let's say you were interested in having any new articles on the species *Mugil trichodon* sent to you by email as they are added to the database. Go to Zoological Record and conduct a search on this species. Once your search is done, click on the "Search History" link at the top of the results page. You'll then see a link to "Save History/Create Alert" - click this and log in. On the next page you will see that you can name the search, and make adjustments to the format, etc. Make sure to check off the box that says "Send me email alerts." When you have finished making selections on this screen, click on the "Save" button to save your history to the server. You will now get monthly emails letting you know if anything new has been added to the database matching your search criteria.



*Example: Subscribing to an RSS feed to monitor topic results in Zoological Record*

You will first have to register and establish a profile in order to set up RSS feeds in Zoological Record. Information about how to register is provided in the example above. You'll also need to conduct a search on a topic within the database - go through the same steps described above, but this time try doing your search on amphibians. When you get to the page where you name your search and make other adjustments, don't click on the box that says "Send me email alerts." Make all the other adjustments that you want on this page, and then click on the "Save" button to save your history to the server. On the resulting page, click on the link that says "RSS Feed: XML." Then copy the URL of the next screen. Now open your feed reader and look for options to add a new feed (in Google Reader, click on the link to "Add subscription." You will be prompted to paste in the URL of your feed, which is the URL you just copied.

### 5.1.4 Monitoring Journals Using Email Alerts or RSS Feeds

It is usually quite easy to set up monitoring of journals important to your research many publishers have a direct link for setting up either an email alert or RSS feed on the home page of the journal. Often it just takes one click to request that tables-of-contents be automatically sent to your feed reader, while sending this information to your email account is more likely to require that you first register with the publisher to create a profile (once you have done so, in the future you will only need to sign in to your account to add another journal to monitor).

**Notes**

Start by navigating to the journal’s home page. Conducting an Internet search will usually get you there the quickest, or navigate from the Library’s E-journals list (if there are several links, choose the one that goes directly to that journal’s publisher, if possible).

Whether you want to set up an email alert or an RSS feed to get updated content for a journal, expect that you might need to poke around a bit on the journal’s website to look for the links that will help you set up these features. Usually these links are quite obvious, but be aware that different publishers organize their sites differently, and may use slightly different terminology to describe these services.



**Example: Setting up an email alert to monitor new content in the journal Science**

The main page of the journal Science has a link to “Alerts” on the blue bar across the top of the page. Clicking that link will result in a page with a list of different email alerts that you can set up, and a button to “Add/Edit/Delete Alerts.” Click that button and then sign in with your Science login and password. If you don’t have one, then you will have to click on the link to “Register” and go through the process of registering in order to set up a login and password.

Once you have logged in, you can select which alerts you want to receive, such as the weekly table of contents of Science. Click on the “Submit” button once you have made your selections, and you should be all set to receive regular email alerts.



**Example: Subscribing to an RSS feed to monitor new content in the journal Science**

The main page of the journal Science has a link to “Alerts” on the blue bar across the top of the page which you should click; on the Alerts page, you will see a link to “RSS Feeds XML” in the left column under the section called “User Tools.” Click this link and then choose the feed you want by clicking on the feed and copying the URL of the resulting page. Now open your feed reader and look for options to add a new feed (in Google Reader, click on the link to “Add subscription.” You will be prompted to paste in the URL of your feed, which is the URL you just copied.

Web sites that offer RSS feeds often have quick links to some of the most commonly used feed readers, so that you can quickly access and add the feed to your reader without copying the URL (you will still be prompted to log in to your reader.)

Once you have added some feeds to your reader, explore a bit. Feed readers have a variety of options for organizing your feeds into folders, marking off items after you have read them (so you know what you have read and what you still need to read), sorting items in your feed by date, unsubscribing from feeds, etc.

**Self Assessment**

Fill in the blanks:

1. An ..... contains user-requested content such as a reminder (important), a notification (urgent), and ultimately an alert (important and urgent).
2. .... service will alert you when a chosen author or article has been cited by another.
3. Setting up a ..... requires free registration with the publisher, vendor, or database provider offering the service.
4. A ..... is a personal web space where you can log in and view your subscriptions to various types of content.

## 5.2 Evaluation of Alerting Services

Notes

In the last years, alerting systems have gained strengthened attention. Several systems have been implemented. For the evaluation and cooperation of these systems, the following problems arise: The systems and their models are not compatible, and existing models are only appropriate for a subset of conceivable application domains. Due to modelling differences, a simple integration of different alerting systems is impossible.

### 5.2.1 Current Awareness Services (CAS)

Modern libraries and information centres offer a variety of new documentation and information services to provide support to Research and Development, industrial productivity, management, marketing and trade, all programmes of development of governments and institutions, etc. There has been a tremendous increase in the volume and variety of publications coming out from all corners of the world. This unprecedented growth of publications has posed serious problems for those involved in these activities, to keep themselves abreast of current developments. It has therefore, become necessary for libraries and information centres to design and develop new and innovative information services.



*Did u know?* Two such services are Current Awareness Services and Selective Dissemination of Information.

#### Definition

Current awareness means knowledge regarding recent developments relating to matters of special interest to an individual user. It involves a knowledge of new theoretical ideas and hypotheses; new problems to be solved; new methods and techniques for solving old and new problems; new circumstances affecting what people do and how they may do it. Current Awareness Services (CAS) means different things to different persons. CAS is concerned with dissemination of information 'that will keep its users well-informed and up-to-date in their fields of basic interest as well as in the related subjects.'

#### Need for CAS

Due to the tremendous growth of scientific and technical literature, scientists find it difficult to cope up with galore of available literature. It is becoming more and more difficult for them to keep themselves up-to-date and well-informed in the fields of their specialization. Thus CAS attempts to serve the needs of the users.

A user may try to keep himself abreast of the recent developments on his own. But CAS offer additional advantages to the users. Its coverage may be wider and hopefully it would come out regularly which a user may not be of own able to do, as the user may not be able to scan literature as widely and regularly as could be done by a CAS. Hence CAS can lead to the saving of time. An individual or group of library/information centre professionals can scan sources of information and notify the members of the institution or community served thus, saving their valuable time. In case, each user scans literature individually then this will lead to unnecessary duplication of efforts.

A user's information need often depends upon the purpose for which he is seeking information. The Problem of keeping abreast in the ones area of interest owing to rapid growth of published scientific and technical information during this century. As a consequence of the growth in the

## Notes

volume of scientific and technical information, scientists, engineers, technologists, and managers face several problems in accessing information, and in keeping themselves abreast of new developments. The reasons are several.

A few of these are:

- The rate at which new information is being generated, even in narrow areas makes it difficult for a researcher to keep himself abreast of new developments in his area of specialization.
- The increasing interdisciplinary nature of research. The fact that research and development is no longer done by individuals but by teams of researchers belonging to different disciplines has resulted in the scattering of information.
- The useful information can occur in a variety of document types not identified/located by the users easily.

## Types of CAS

Four types of Current Awareness Services (CAS) are described in this unit with their characteristic features. These types of service are: Contents-by-journal, Documentation Bulletin, Research-in-Progress Bulletin, and Newspaper Clippings Services.

- **Contents-by-Journal Service:** This type of service is provided by the library or documentation centre, by distributing a publication which contains copies of contents pages of journals in a broad subject area, e.g. medical sciences.



*Example:* A very good example of a Contents-by-Journal service is the publication called Current Contents published by the Institute for Scientific Information (ISI), Philadelphia (USA).

The simplest way in which this can be done is to duplicate the contents pages of journal issues and circulate them individually or in a compiled form to users. The Contents-by-Journal Service is perhaps the cheapest and quickest way of providing a degree of current awareness.

- **Documentation Bulletins or Current Awareness Lists:** This is by far the most predominant form of current awareness service. In this kind of service the library or documentation centre scans primary journals and other sources of current information received in the library to identify potentially useful articles of interest to their users. The bibliographical details of such articles are collected, and classified or grouped into broad or narrow subject groups. At periodic intervals the collected bibliographic entries are listed under the different subject headings, class numbers, or groups. The list is then duplicated and circulated to users.

A documentation bulletin may include abstracts of papers listed in the bulletin. Current awareness lists are published or issued both by the library of an organization for use within the organization as well as by professional or learned bodies, international agencies and commercial organizations for use by any user interested in the subject areas covered by the list.



*Example:* Current-awareness lists produced by professional bodies are Chemical Titles of the Chemical Abstracts Service, and Current Chemical Papers of the Chemical Society, U.K.

- **Research-in-Progress Bulletins:** As the name suggests it alerts users to new research projects and progress made in ongoing research projects. Such current-awareness services' usually



require the joint effort of more than one organization working in similar or closely related research areas. A parent body which funds or controls a group of research organization such as CSIR, ICAR in India could also bring out Research-in-Progress bulletins. An example of this type of service is the United States Department of Agriculture's (USDA) service, called Current Research Information System (CRIS). All USDA laboratories and research stations contribute their input to CRIS. A research-in-progress bulletin usually contains information about the laboratory at which the project is being done, names of principal and associate researchers, funds and sources of funds, duration of the project, and special equipment in use if any. In addition it includes a narrative description of the research project and/or progress achieved till date.

- **Newspaper Clipping Service:** Newspapers are a current-awareness media, since they publish news of recent happenings on the political, social, and economic front of a nation or region. Newspapers carry useful information to everyone from housewives to top management of companies and cabinet ministers. Many organizations maintain newspaper clippings and have a separate section for this service.



*Example:* Times of India (daily newspaper) maintains a comprehensive collection of newspaper clippings that can be referred to as and when necessary. Some libraries send copy of the clippings to identified users for keeping them up-to-date with the latest news in their area of interest.

### Steps in CAS

There could be several ways of rendering CAS. However the general steps followed are given below:

- Review or scan documents immediately upon receipt.
- Select information and record individual documents pertinent to the programme of the individuals of the organization being served.
- Compare the documents/information with the needs of users being served.
- Send notification to the users about items or information of interest to them.

### Current Awareness Services – Characteristics

A current awareness service has the following characteristics:

- usually in the form of a publication
- attempts to bring information that is current, new or of recent origin to the attention of its users
- usually confined to a well-defined subject area or topic, though topics from related areas are also covered in the service
- does not seek to answer any specific questions that the user may have
- sometimes confined to a given type of literature, e.g. patents, standards, etc.
- could be bibliographical (such as a list of references) with or without abstracts; discursive, (ex. a Newsletter) in nature
- attempts to inform its users to recent development or news as quickly as possible and make browsing convenient and easy for the user.

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### 5.2.2 Selective Dissemination of Information (SDI)

Librarians have been providing this kind of service on manual basis for a long time. During recent years the trend is towards computer based SDI. It is a highly personalized information service directed to individuals so as to cater to their requirements. SDI can be regarded as an off-shoot of CAS, which not only serves current information but is also totally user-oriented. With the advent of computers and telecommunication facilities, SDI is provided centrally by On-line vendors at low cost, ensuring easier accessibility to world's output of current information with greater speed and efficiency.

The basic concept behind SDI consists of matching information/documents with the profile of each individual of the clientele. The profile can be of a single user or a group working on the same project or some specific subject field. Those items which match are brought to the attention of the concerned user.

The basic components of SDI are:

- A database of documents
- A set of user profiles
- A mechanism to match document profiles with user profiles
- User SDI interface and communication.

The functional phases of SDI include:

- Selection of database(s)
- Preparation of user profiles
- Notification of current references to participants
- Feedback and
- Modifications to tune the system to achieve best results

### Self Assessment

Fill in the blanks:

5. .... is concerned with dissemination of information 'that will keep its users well-informed and up-to-date in their fields of basic interest as well as in the related subjects.'
6. The ..... Service is perhaps the cheapest and quickest way of providing a degree of current awareness.
7. In ..... kind of service the library or documentation centre scans primary journals and other sources of current information received in the library to identify potentially useful articles of interest to their users.
8. .... alerts users to new research projects and progress made in ongoing research projects.
9. .... can be regarded as an off-shoot of CAS, which not only serves current information but is also totally user-oriented.

## 5.3 Bibliographic Services

Notes

Bibliography is a list of citations or references to books or periodical articles on a particular topic. Bibliographies can appear at the end of a book, journal, or encyclopaedia article, or in a separate publication. As a discipline, it is traditionally the academic study of books as physical, cultural objects; in this sense, it is also known as bibliology. Carter and Barker (2010) describe bibliography as a twofold scholarly discipline—the organized listing of books (enumerative bibliography) and the systematic, description of books as physical objects (descriptive bibliography).

### 5.3.1 Aims and Functions of Bibliography

Librarianship is a profession in which what is recorded by what so ever of librarianship is bibliographies. Bibliography generally serves the following functions:

- (a) ***It is a Guide to the Literature of a Subject:*** bibliography is actually an index compiled systematically on a subject, so it serves as a guide to the literature of the subject.
- (b) ***Finding the Existence:*** A bibliography enables one to find out what has already been written on his subject and allows him to keep himself well informed and up to date. This avoids duplication in research, saving him both time and money.
- (c) ***Verification of Bibliographic Detail:*** Whenever we are to verify a title or collect information on any subject we are to consult a bibliography (subject bibliography). It also helps us to ascertain bibliographical data about an author thus helping in the identification of a document.
- (d) ***Location of Material:*** A bibliography helps in locating the material or book in terms of place of publication, location in the library on point of purchase.
- (e) ***Book Selection:*** A bibliography by adding a note to each document being listed, indicate the value of the document to a given type of user. So it helps in books selection i. e. which book should be consulted for a given purpose.
- (f) ***It Preserves Documents:*** Bibliography by listing of documents preserve all books, good, bad and indifferent from oblivion.
- (g) ***It Provides List of Prior Records of Civilization:*** Bibliography provide information about the prior records of communication. Thus it is a vital aid to the study of history.

### 5.3.2 Types of Bibliography

Bibliographies are of the following types:

- (a) ***Analytical Bibliography:*** According to Roy B Stokes on analytical bibliography involves “investigation of the physical nature of the book which can be and frequently is sufficiently exhaustive to enable all the circumstances of the book manufacture and history to be revealed”. Analytical or critical bibliography therefore rests to a large extent upon imperfection in the production process and as such it has been defined as the physical examination of books. There would have been virtually no need of analytical bibliography if every step in the production process was perfectly accomplished and a perfect book produced in every care. But unfortunately such perfection has been a rare thing in the history of book production or has at latest happened in exceptional case.

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- (b) **Descriptive Bibliography:** Descriptive bibliography is the application of analytical bibliography to the external form of the book i.e. it concern itself with the materials forms of books and not with their literary contexts. "Its function is primarily that of recording the bibliography details of the book which has been established during the process of analytical bibliography." In Descriptive bibliography the bibliograph details are kept to minimum because the basic purpose to listing. Descriptive bibliography aims to describe all variation from this ideal form. But due to standardization of books production the importance of descriptive bibliography has decreased greatly.
- (c) **Textual Bibliography:** It is an application of analytical bibliography to the contexts of books. It is a bibliography applied to textual studies. The main purpose of such a bibliography is to determine the effect of writing or the printing process on the correctness or completeness of a text. It helps ascertain the variety of authorship edition etc. thus textual variation between a manuscript and the printed books or between various reprints or edition. So the textual bibliography is more interested in the author's wards and tries to determine the exact words that the author intended should constitute his work. The aim is to prepare definite edition of the original author. We can say therefore the textual bibliography is an area which seems to be of great importance for literary critics rather than librarians or bibliographies.
- (d) **Historical Bibliography:** The study of books "as object of art" may be termed a historical bibliography. It is concerned with art of writing, printing, illumination and binding. The historical bibliography makes an attempt to achieve a broad understanding of the milieu of the book in the context of the world of books, and social and cultural conditions in existence at the time because the significance of books is very great in every phase of civilization and of life. Historical bibliography has to content itself with the evolution of typefaces from its very early manuscripts origin. Then again the very material of which the book is compared paper as we know it, from its handmade stage to that of machine manufactured.
- (e) **Systematic Bibliography:** Systematic bibliography is nothing but the listing of books and other reading material according to some useful system of reference scheme. According to Arundell Esdaile "to assemble the resulting entries, simple or elaborate as the case may required into logical and useful arrangement for reference and study" is called systematic bibliography. Esdale in his "student's manual of bibliography" has divided bibliography into two categories namely primary and secondary.
  - (a) **Primary Bibliography:** Primary bibliographies are those which are the original record of the whole or part of their content.
    - (i) **General or Universal Bibliography:** In general or universal bibliography, it attempts to include books published in every country and age and on all subject. It is a survey of all records of civilization in all fields of knowledge for whatever the time, place, language, subject or author. It does not matter. In fact there is no universal bibliography as such but the publish catalogue of great libraries of the world can be stated to be the nearest approaches to this type of bibliography.



*Example:* Library of Congress Catalogue of Books., British Museum General Catalogue of printed books.

Also Konard Gesner, the father of bibliography attempts to list all scholarly publication in the world which appears in 1545, under the title "Bibliotheca Universalis"

- (ii) **Incunabula Bibliography:** This type of bibliography lists the early printed material up to 15th century. It was considered a cradle period of printing and the systematic order in arranging various parts of the book was not followed.



*Example: Proctor Robert:* An index to the early printed books in the British Museum from the invention of printing to the year 1300 with notes of those in the Bodleian library. Konard Burger's index, London 1960.

- (iii) **Bibliography of anonymous and pseudonymous works:** These types of bibliographies are arranged alphabetically by title with notes of author, details of publication and annotations and notes about authority for the ascription. They are also provided with an index of initials and pseudonyms. Sometimes the titles are arranged alphabetically with names of the authors in square brackets and notes about the authority for the attribution at the end.



*Example:* Dictionary of anonymous and pseudonymous literature.

- (iv) **Trade bibliographies:** These types of bibliographies are brought out by large publishing firms engaged in book production or trade. The books available for sale or purchase are listed therein.



*Example:* Whitakers cumulative book list, London, Whitaker British Book in print etc.

- (v) **National bibliography:** It is a comprehensive, almost complete record of both written and printed output in a given country, furnishing description and supplying verification which cannot found in the less complete bibliographies. So in short a national bibliography list all documents published in a given country.

The national bibliography is compiled on the basis of the materials received by the National Libraries under the copyright act as promulgated in various countries. A national bibliography is considered a national heritage and its purpose is intellectual not commercial (selling). It is useful for the researcher and the posterity. Example: Indian National Bibliography, Kolkata, Central Reference Library, British National Bibliography, London

- (b) **Secondary Bibliography:** Secondary bibliographies are "those in which material registered elsewhere is rearranged for the convenience of research". In these documents already recorded in primary bibliographies are selected, analyzed, and rearranged either by subject, author, period or typography.
- (i) **Subject Bibliography:** A subject bibliography is a comprehensive list of all books, periodicals articles, pamphlets and other analytical materials that have appeared on that subject, such a bibliography is international in scope since it covers everything that has been appeared on the subject in different languages and in different countries of the world. Example: Education Abstract, 1949 to date, Paris, UNESCO.
- (ii) **Author Bibliography:** An author bibliography is the list of writing by an author together with the works on him by others.



*Example:* Mahatma Gandhi: A descriptive bibliography, compiled by Dr. J. S. Sharma, Delhi, S. Chand, 1955.

Notes

- (iii) **Personal Bibliography:** A personal bibliography is a list of writings by others on the different aspects of the life of a great man together with what he himself has written, printed and delivered in the form of oratory.



Notes Kindly note that personal bibliography is different from that of author bibliography.



*Example:* Jawaharlal Nehru: A descriptive bibliography by Jagdish Saran Sharma, Delhi, S. Chand & Co, 1955.

- (iv) **Bibliophilic Bibliography:** A bibliography that records old and rare books, first editions of celebrated authors is known as bibliophilic bibliography. These bibliographies are only for those who have a craze for old and rare books, especially for first edition of books of celebrated author. They have fancy for such book for their magnificent look, distinctive physical feature, colourfulness, sumptuous binding, decorative covers, brilliant illustration and pictorial ornamentation, grand illumination and beautiful type face, sometimes on sentimental ground and sometimes for getting original thought of the author.



*Example:* Johnson, Merie de Vore, "American first edition", 4th ed, revised N. Y. Bowker, 1942.

- (v) **Selective Bibliography (Elective):** This kind of bibliography is concerned with the listing of only selected and the best books. This is useful to those who want to record only the best. This is also serves as a valuable book selection tool to small and medium-sized libraries.



*Example:* **The best books:** A readers' guide, 3rd ed, by W. S. Sonnenschein, London, Routledge, 1910-35, 6 Vols.

- (vi) **Unit Bibliography:** It is a list of different editions adaptations, abridged forms, translations, dramatization, versification, criticism, etc. of a single literary work conveniently arranged in order to give a comprehensive picture of its literary excellence and popularity. Every literary work by every author does not deserve a unit bibliography. It is only in the case of such works which have sound scholars curiosity by dint of their great literary merit, universal appeal and enormous popularity that unit bibliographies are compiled.



*Example:* The Arabian Nights' Entertainment with its numerous adaptations and translations.

- (vii) **Bibliography of Bibliographies (Bibliographic Index):** As the bibliographies in various subject fields have multiplied now a day the compilation of this kind of bibliography has become imperative. It is a list of bibliographies recorded in a systematic and logical order. It includes all type of bibliographies in various subject fields, separately published. This kind of bibliography is also known as bibliographic index.



*Example:* Besterman Theodore, "A world bibliography of bibliographies".

**Self Assessment****Notes**

Fill in the blanks:

10. .... bibliography is the application of analytical bibliography to the external form of the book i.e. it concern itself with the materials forms of books and not with their literary contexts.
11. .... is an application of analytical bibliography to the contexts of books.
12. .... bibliography has to content itself with the evolution of typefaces from its very early manuscripts origin.
13. .... bibliography is concerned with the listing of only selected and the best books.

**5.4 Bibliographic Control**

According to UNESCO/Library of Congress Survey, bibliographic control means “the mastery over written and published records which is provided by and for the purpose of bibliography”. Effective bibliographic control should be made at subject and national level.

- (A) **National Bibliographic Control:** The national library ensures the bibliographic control of all the books or book-like documents published in that particular country. It has the provision of legal deposit by a host of different programs such as a cataloguing in publication service or similar mandatory practices. By cataloguing in publication service, the Library of Congress gives a complete catalogue entry of a book to any publisher who sends a final draft or some form of galley proof of a book currently in production.
- (B) **International Bibliographic Control:** One of the main goals of a national library is fulfilling their nation’s part of the common international goal of universal bibliographic control. The International bibliographic control is done by the exchanges and also by fostering the creation of standard conceptual tools such as library classification systems and cataloguing rules. The most commonly used of these tools is the International Standard Bibliographic Description (ISBD). It applies to books and periodicals, but also has variants for other book-like material such as the ISBD (ER) for Electronic Resources or digital documents or the ISBD (A) for Antiquarian documents.
- (C) **Conclusion:** New ideas are generated in each and every branch of human activity from time to time. Apart from new ideas we give new interpretation to old ideas, at times we also borrow ideas from other discipline and try to apply them in a new content. As a result more and more information are produced in a variety of forms leading to information explosion. There is a need to keep track of this information explosion by way of bibliographic control.

**5.5 Recording of Available Information – Bibliographic Control**

On one hand, where we have galore of information being generated and added to the existing pool of resources, the other hand, it becomes more and more difficult for the information seeker to keep himself abreast of the core information exhaustively in his specific subject area. Therefore bibliographical control of the generated knowledge is very essential rather an indispensable tool. Not only are the tools important but control mechanisms are equally important to carry out the tasks effectively. With the advent of information technology, things have become comparatively simpler. The organization of primary knowledge and its subsequent recording in secondary and tertiary sources have also become simpler, quicker and effective.

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### 5.5.1 Reference Service

Reference service, as a distinct function of the library, began in the late nineteenth century, largely in response to the growing prevalence of publicly funded libraries (both public and academic) seeking to serve relatively inexperienced and unskilled readers and scholars. There was only one problem – they did not know how to use the library. Thus reference service was developed to solve that problem.

According to the *ALA Glossary of Library and Information Science*, “Reference Service is that phase of library work which is directly concerned with assistance to readers in securing information and in using resources of the library in study and research”.

*Ranganathan* defines Reference Service as ‘Personal Service to each reader in helping him to find the documents answering his interest at the moment pinpointedly, exhaustively and expeditiously.’

Both definitions convey that reference service means ‘process of establishing contact between a reader and his documents in a personal way’. His ‘documents’ refer to those who will serve his requirements precisely. With the technological advancements, users’ information seeking behaviour has undergone a lot of change.

#### Reference Process – Types of Reference Questions

Based on the nature of the query we may categorize reference questions. These categories could broadly be:

- **General:** Questions could be grouped into directional, fact or ready reference, specific search and long range search. In directional type of question, a user only needs to be directed to specific source or section; for fact type questions, the answer can be found readily such as what is the height of Mount Everest? For questions requiring specific search, one may be required to find limited amount of information on the topic, involving search into number of sources of information. The reader/information seeker may be given books on the topic available in the library and the reader might feel satisfied. While in a long range search query would be the one, which cannot be answered from one or two sources. It would require the use of many specialized sources of information.
- **Subject:** Here as the name implies, the questions are analysed by subject. This would indicate predominant subject interests of the users.
- **Sources of Information:** Here questions are analysed on the basis of sources of information from which the answers are found (primary, secondary and tertiary sources of information).
- **Inquirer:** Categorization can be done on the basis of kinds of users, who make use of reference services.
- **Reference Books:** Questions can be categorized by kind of reference book.
- **Nature of Question:** We may recognize various types of questions, concerning background, a recent event, words, a fact, how to do, trends, evidence to support an idea verification of a reference, new theory or idea or innovation, has somebody already done it, all about it etc.

#### Channels of Receiving Reference Questions

The queries can be received from users through various channels. These channels could be:

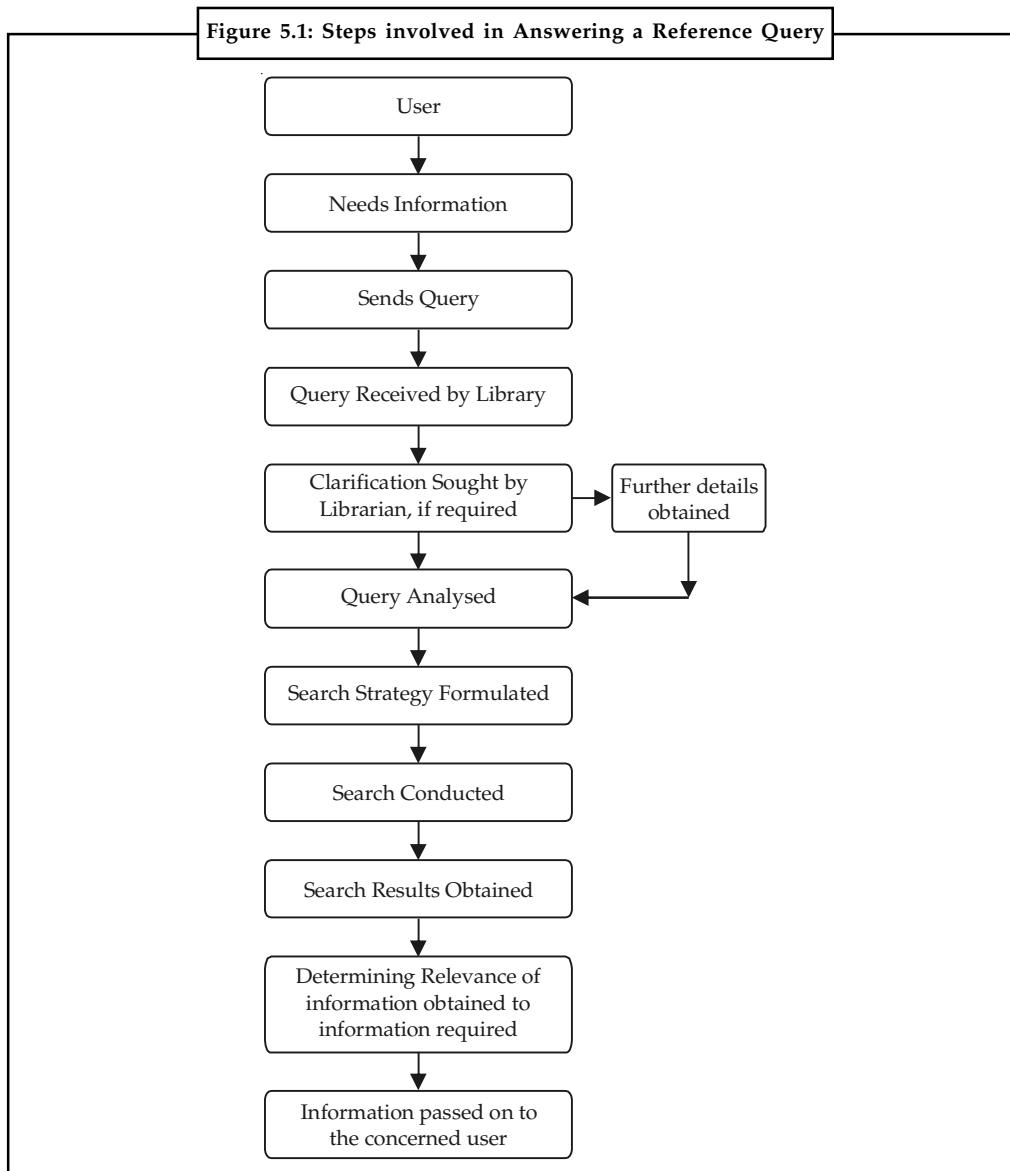
- Direct approach by a user



- Through telephone, telex, fax
- Through post

### Answering Reference Questions

The various steps involved in answering a reference query have been presented schematically below:



### 5.5.2 Literature Search and Database Services

As indicated earlier, there is galore of information available on every conceivable aspect. One needs to sieve this information to get sum and substance from the information that is required by the user at a given point of time. The ultimate objective of any documentation or information activity is to provide a user with the information he requires, to the extent he requires, within a

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reasonable time and cost. Here we shall try to examine all these elements involved in information retrieval. The nature or characteristics of a user could be varied. The user could be a layman who needs information to satisfy his curiosity. A student who needs more details than provided by the text book, a technical worker who needs the information to perform a certain task, a research worker embarking on a new area of research, a project manager contemplating a new product line, or an administrator who has to give his decision on a new project report or formulate a new strategy. Obviously the nature of information, extent of information and depth of information required by each of them are different. Besides the urgency for getting the information may also vary, not only for the different types of users, but for the same type of user under different circumstances. While some of the needs of most of the users could be satisfied by the routine reference service provided by a good library, needs of some others specially research workers and project managers can be satisfied only by extensive literature search entailing all the resources of a modern information centre and ingenuity of the information scientists.

### Reference Service vs. Literature Search

Reference service, according to the A.L.A. Glossary of Library Terms is "that phase of library work which is directly concerned with assistance to readers in securing information and in using the resources of the library in study and research". Usually a reference service responds to a specific piece of information – about a person, about a place or event, a method, procedure, formula etc. The nature of information sought in such a situation is very specific and quite often the answer could be found from the conventional reference tools, like dictionaries, encyclopaedias, manuals, handbooks, gazetteers, directories, yearbooks, etc.

Literature search, on the other hand, can be equated to "long range reference service", where the search has to be more exhaustive – both in depth and extent. The range and complexity of reference sources to be consulted are wider and generally more than one source has to be consulted to adequately carryout a literature search. Besides bibliographies, secondary sources like abstracting and indexing services, reviewing periodicals are the main sources of information. The demand for this service has been growing with the growth of scientific and technical literature which has assumed frightening proportion in the post-Second World War era.

### Need for Literature Search

As indicated earlier, the scientific and technical literature has been growing exponentially, while the amount of time that any user has for reading this literature remains more or less the same. Surely and certainly no research worker can keep a track of the latest developments in his field unaided. The advantage of overabundance of information is hampered by the inadequacy of facilities for handling, disseminating and retrieving this vast amount of documented knowledge. Literature search is the means to bridge this gap between the vast store of documented information and its potential user. The main function of an information service is to bring documents of data to the attention of the user community through searches of the literature conducted generally on demand to meet the problem solving or decision-making needs of the member.

### Ways of Conducting Literature Search

There are broadly two ways of literature searching that is in vogue these days. We shall briefly touch upon these two aspects. These ways are:

1. **Manual Searching:** This involves searching manually paper documents of references sources that could be primary, secondary or tertiary as discussed earlier. The identification of references from these sources is then compiled, organized and passed on to the concern

user. This practice was in vogue when IT tools and techniques were not readily available. But with developments in information and communication technology, this method is generally not preferred as it is laborious and time consuming. The user wants information instantaneously, while checking sources manually involves lot of time. Secondly, the source may not be available locally; therefore the bibliography compiler or librarian needs to visit libraries where such sources are available.

2. **Searching using Information Technology (IT) Tools and Techniques:** With the advent of IT, distances have been bridged. The availability of information is no more limited to developed countries. The yawning gap between information rich and information poor countries narrowing down. Access to information has become not only become a global phenomenon, but also barriers like time and place have also more or less overcome. The INTERNET facilitates everyone who has access to it to search and retrieve information. There is plethora of information available on the INTERNET. There are thousands of databases available on the Net. Besides lot of databases are also available in the CD-ROM format. To put it in simple words, IT has made several products, librarian could search and access literature and make it available to the end user in the shortest possible time using electronic or digital resources. These resources could be tapped either on-line; or using CD-ROM, etc. on which the data is mounted.

This type of literature search is in vogue these days, as conducting literature search using such tools and techniques facilitate the following:

- Easy Access to the literature
- Access to varied resources
- Effective and efficient way of searching
- No time or location barriers (one can make a search whenever one wants, as one does not have to ensure the working timings of other libraries if the source is not available locally, distances to be covered for travelling are also obviated)
- Timeliness of providing the service
- Currency of the data (the information in on-line mode is updated more or less frequently, hence the current nature of the information is ensured, which is not the case with printed documents. As on an average the printed documents would be not less than a year or two old).
- Above all, the user satisfaction is another important aspect. (Since the time lag is minimum; accuracy and currency of the data is high; communication is fast).

### Steps Involved

Intricacies in the Steps involved in literature search may vary from person to person depending upon the searchers personal skill and expertise; however the general steps followed are more or less same that we shall be discussing here. There are many points to consider in making an effective literature search.

- **Ascertain the purpose, scope, depth and precise field of enquiry:** This may entail a dialogue between the user and the information specialist. A quick assessment of the nature and extent of the enquiry will show whether the search is for specific factual information or for a few select references, or for a comprehensive bibliographical search, usually the requirement of a research worker. After the parameters of a query are fully understood, the second step would follow.

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- **Formulate a Proper Search Strategy:** Haphazard searching of literature will lead not only to unnecessary wastage of time, but also to the risk of missing a number of important documents.
- **Choosing Appropriate Sources:** Much of the expertise in literature searching lies in choosing the most appropriate sources to consult in each case and the best order in which to consult them.

Since selection of sources is very critical for obtaining representative and highly relevant literature from the literature search, therefore it may be appropriate to discuss this aspect in detail.

### Selection of Sources

One very good approach to literature search is looking up on appropriate selection of articles in a bibliography, an encyclopaedia or a review publication. This will provide a background of technical knowledge and also some useful references. Once this is done, searches should be carried out with secondary publications like abstracting and indexing services. Depending upon the topic, anyone of the following conditions may crop up:

1. Availability/Non-Availability of Secondary periodicals on the subject.
2. Availability/Non-Availability of Secondary periodicals on the subject as well as on broader subjects.

### 5.5.3 Searching

Let us discuss about searching:

1. **Secondary Sources:** If secondary periodicals are available on the subject as well as on broader subjects, search must first begin with the secondary periodical on the subject proper, supplemented by references collected from the periodicals covering broader subject. The fact that there is a considerable scatter of information on a given topic over a whole range of periodicals covering core, peripheral and alien fields. Although a few core journals, cover considerable part of the published literature on a given topic, yet sizeable portion can be covered by scanning a very large number of peripheral journals in the alien field. Skills are to be developed for the consultation of secondary periodicals, since wide variation is observed in the pattern of the arrangement of the entries as well as in the methods of indexing, and also the types of indexes provided.
2. **Other Sources:** No search will be complete without a look at other sources of information like conference proceedings, research reports, theses, patents, standards and specifications, trade literature and in some cases monographs and treatises. There may be cases where information will be available from non-documentary sources, like institutions and experts. It is important to have knowledge of the main characteristics of all types and familiarity with these sources is needed. Much of the expertise of searching for information lies in choosing the appropriate sources to consult in each case and the best order in which to consult them and the expertise of a good reference librarian lie in this.

### 5.5.4 Recording of References or Information

Every literature Searcher develops his own style of taking notes of references. While every effort should be made to optimize the time and efficiency of search, it is well to remember that a few extra seconds spent to make proper preliminary records may save many frustrating hours later. The first principle in saving search time is to use a single operation to serve multiple

purposes. For example, reference recorded on sheets of paper can serve only one purpose - providing a list of reference without any order. Records on cards or slips, with one reference per card or slip, can serve several purposes. Abstracts can be added under each reference (if required) and the cards can be arranged by subject, or author or chronologically, as required. However this procedure to a great extent is overcome in the on-line searching.

### 5.5.5 Presentation of Results

To be most effective, presentation of search results, require as much skill and care as correctly defining the subject and parameters of search. A search on behalf of a researcher will need exhaustive treatment, and may need slanted abstracts confirming to the users need. Choice of arrangements also depends on what the user needs. An indication should be given as to how authoritative and how complete the bibliography is. The sources should be stated giving the exact references.



*Caution* Since the ultimate aim to have user satisfaction, therefore user's perception should be kept in mind while presenting the information output.

### 5.5.6 Skills Needed

Expertise in literature search can be gained only by experience. Some attitudes or traits conducive to a good literature search are:

- imagination
- flexibility
- thoroughness of sources and subject (subject thoroughness means, the searcher should completely understand the query pertaining to which literature is to be provided)
- persistency
- judgment in resolving contradictory information
- accuracy in recording.

A basic knowledge in the field of search comes handy.

### 5.5.7 Database Services

Literature search which began as a logical extension of reference service, gained momentum with the increasing tempo of research and developmental activities in Post-World War-II period. The advent of computers and spectacular developments in the field of communication technology in the 1960s brought about a drastic change in the information scene. Undoubtedly, the most important phenomenon in the last two decades of the information industry has been the emergence and popularity of machine-readable databases, particularly online databases. In fact, databases can almost be said to have created the present information industry. Let us have a look at some of these products.

#### Indexing and Abstracting Databases

The increasing tempo and complexity of information being generated was causing strain on the resources and capabilities of these information communication systems. However the rapid developments in the field of computer and communication technology have been a great help in

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improved bibliographical control of documents. The generation of machine readable records has become most useful as databases, enabling the users to get access to the required information at a faster rate.

**Full Text Databases**

The latest being creation and generation of full text databases which is proving to be of great value to the users. As end users cannot only get the requisite reference with or without abstract but can also access the complete document, if he/she desires.

**Online Searching**

Online searching has further buttressed the literature search and access to requisite data/information. This process has made it possible to carry out the search in real time situation where with continuous interaction with the database, the search query can be modified until the relevance factor achieved is high.

**Successful Database Searching**

It may be appropriate here to discuss about database searching, as most of the literature search is being carried out using electronic databases.

Databases are collections of references, which can be searched in a variety of ways, and are the most common method used to locate journal articles on a specific topic. Databases may be scanned regularly to keep you updated on a specific subject or can be searched to find information for a specific project or job.

Before searching a database you will need to do some preparation. You will need to think in some detail about what you are actually searching for, for example.

- What terms can be used to describe the subject?
- Are there differences in spelling or terminology for the subject you are looking up?
- How do you combine the keywords together to get what you want?
- Are there any limits you wish to apply (for instance A not B)?
- How you would use this preparation to plan a literature search?

These queries would help you to formulate effective search strategy that is expected to yield most relevant hits.

**5.5.8 Document Delivery Services**

Document Delivery Services are an important component of the Library's inter library loan activity by which users' are facilitated not only to obtain information about the location of a document but the document itself as well. Almost all libraries provide document delivery services, though the scope of such services may vary. For instance a library may facilitate its users by providing document delivery service using its own resources, while some may procure documents for users from other libraries as well. Yet there are few institutions which operate on a much larger scale. Examples include NISCAIR, New Delhi (earlier INSDOC) which procure documents from different parts of the world as well for its country wide users. The largest of all is the British Library Document Supply Centre, UK that we shall be discussing in detail. Besides, there are several such initiatives being made available on the WWW that facilitate document delivery services in online mode that were earlier handled by the traditional manual means.

## British Library Document Supply Centre (BLDSC)

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British Library Document Supply Centre is a single largest source for all your document needs. BLDSC is the leading document provider in the world. A rapid and comprehensive document supply and interlibrary loan service from BLDSC's extensive collections to researchers and scholars in all kinds of libraries and organizations is being entertained by this Centre. The British Library has a large Document Supply Centre dedicated to the supply of copies of journal articles, books and other materials. The British Library Document Supply Centre at Boston Spa (Wetherby, Yorkshire) receives some 15000 requests for article copies per working day, 25% from abroad. 90% of the requests can be met from the own holdings of ca. 50000 current journal titles. This service is also available through online mode. 75% of request is now electronically entertained. Delivery is mostly postal delivery of photocopies, less than 2% is per fax. In online mode if you want to order a copy of a particular journal article or conference paper straightaway, the Articles Direct service is probably what you are looking for inside web provides options for searching for relevant journal articles and conference papers as well as ordering them over the web. Facilities for several other services for more specialist copying of library materials are also included at their site at (<http://www.bl.uk/services/document.html>).

## Translation Services

In a library, you may have information sources in languages other than know to the users and staff. With advent of new technology, one can also search information in other languages. In certain library, as per the policy the publications in a core subject are being acquired in all languages. In such situation translation of the information to the language known to users became a necessity. Many libraries provide translation services to the users. Translation service is an expensive activity and every library cannot afford it. Subject specific national library need to provide such services to the users. Earlier INSDOC and now NISCAIR, New Delhi used to provide translation service to the users.

## Referral Service

Referral services are different from Reference services. Reference services are provided from the collection of a library on other side in referral service a user is being referred use the collection of some other library. Through referral service a user can also be guided to sources other than libraries. These sources may be some organizations, individuals, specialists, databases, internet resources.



*Task* Give some examples of databases for extracting information.

## Self Assessment

State whether the following statements are true or false:

14. The national library ensures the bibliographic control of all the books or book-like documents published in that particular country.
15. The ultimate objective of any documentation or information activity is to provide a user with the information he requires, to the extent he requires, within a reasonable time and cost.
16. Searching using Information Technology (IT) Tools and Techniques involves searching manually paper documents of references sources that could be primary, secondary or tertiary as discussed earlier.

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Case Study

## Systematic Literature Searching and the Bibliographic Database Haystack

The volume of material available to the academic researcher in bibliographic databases and other online sources continues to expand at an exceptional rate. While the increasing volume and ease of availability of information has seemingly made the researcher's task of accessing relevant literature quicker and easier, it has also created a new set of challenges.

The literature on the effective and efficient access to this rapidly evolving information medium has lagged markedly behind its growth. The effective and systematic searching of the variety of databases available to in particular the social and business researcher is however an area of increasing interest.

The interrogation of online databases and other electronic searching still forms only part of a comprehensive literature search strategy. While the ongoing need for the use of more traditional search and inquiry techniques is still vital, the growing wealth of information available from this source demands increased attention and skills development. Many current research reports fail to demonstrate that electronic information sources have been fully exploited indicating a hit-and-miss approach rather than a systematic search methodology.

To varying extents across fields of research the deficiencies of the traditional narrative literature review is increasingly being examined. Narrative reviews attempt to synthesize the primary literature and explore the heterogeneity within it descriptively. The technique relies heavily on the reviewer's judgment and viewpoint especially when reconciling conflicting results or when assessing the merits of confirming or confounding information. The larger the literature base on a topic, the more pronounced these problems can become. Despite these difficulties the narrative review continues as an important vehicle of academic discussion, dissemination and debate.

A variety of approaches and methods have been developed to either compliment or as an alternative to the traditional narrative review. To address the authors research question a range of systematic methods were examined to assess their suitability. One of the more established methods which the author has chosen to use is meta-analysis. This choice was largely driven by conflict, contradiction and uncertainty within the literature under examination. A preliminary literature review revealed that much of the original research and consequent analysis was contradictory, ambiguous or speculative. Meta-analysis requires the systematic identification and combination of quantitative studies examining the issue or issues of interest. This is seen by the author as a suitable method to both contrast and where possible reconcile the much larger literature base of qualitative research on the topic.

While much of the discussion below is driven by the needs of a systematic literature review, the literature search techniques detailed can similarly strengthen or, if neglected compromise, all varieties of literature searching and review.

### **Meta-analysis and Literature Searches**

Meta-analysis has gained a firm standing in both the review and synthesis of quantitative research. It shifts much of the assessment burden from the reviewer's judgment to a set of assessment and statistical tools. It is also highly dependent on a comprehensive and exhaustive literature search.

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A number of groups interested in meta-analysis also have a particular interest in highly targeted and systematic literature searching. While the meta-analysis methodology is used broadly, it is most codified and understood in medical research. The Cochrane Collaboration established in 1993 has specifically worked to develop and standardise the methodology applied to medically related research. This is an international not-for-profit organisation providing up-to-date information about the effects of health care. The group has a strong guiding role in the methodology development and increasingly features in the literature on it. It also takes a leading role in the production of systematic reviews across medical research updating these reviews as new primary research is completed.

Many of the principals and practices detailed in this medically focused literature can and have been adapted to other areas of research. Reacting to this need a sibling organisation to the Cochrane group known as the Campbell Collaboration was formed in 1999 (<http://www.campbellcollaboration.org/>). This group focuses on the systematic review of social, behavioural and educational research and is part of the wider American Institutes for Research organisation that focuses on behavioural and social science research (<http://www.air.org/>). Another major group with a focus on systematic review and social research is the UK based Economic & Social research council (ESRC).

While the Campbell and ESRC groups have both identified and generated literature on systematic searching strategies and methods there is still much development work being carried out. One issue noted within this literature is the additional challenges faced by systematic reviewers working outside of the medical field (Jenkins, 2004). Medical researchers can rely heavily on the Medline database and a highly standardised terminology usage. The social or business researcher often has a wide range of possible databases to examine and a much looser terminology usage within the literature. Other features of the range of databases within these disciplines include poor indexing, lack of consistent abstract structure, lack of standardisation of terms used, and a variety in design of database structures with subsequent varying search fields and layouts.

#### Commonly described Electronic Search Strategies

The typical search description found in recent meta-analysis studies that were examined as possible instructional examples for the author's study consisted of the following:

1. Definition of research problem and types of studies to be sought.
2. Scope of search (within a discipline, topic, language, region etc.) and specific variables being examined.
3. The time period of target studies included in the search ( i.e. relevant studies completed in a defined period, generally set from a time close to the undertaking of the systematic study looking back typically 5 to 10 years depending on the topic).
4. Databases used in the search.
5. Key words or phrases used for the search.
6. Assessment criteria for including or culling the usual high number of studies that this technique typically produces (although this is often incomplete or not described).
7. Follow-up searching using authors' names taken from relevant studies found in the above stages.

Additional methods to ensure that a search has been comprehensive include:

1. **Use of manual searching** – Examination of reference lists from relevant studies obtained in searches, qualitative studies, review articles or relevant journal or book searches. Manual examination of relevant journal indexes.

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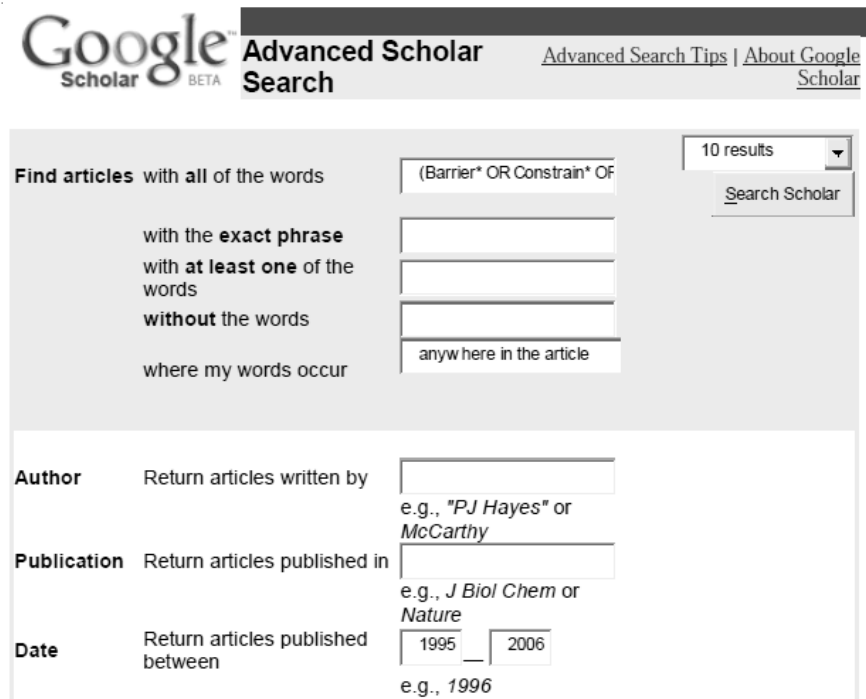
2. Direct correspondences with authors found in the above processes for additional information or studies that they may have been involved with or know of.
3. Wider internet searches for sources of "grey literature" (Government, educational and other institutional reports, research organisation sites, conference proceedings and papers, dissertations, etc.).

Performing a pilot search for studies to include in the author's meta-analysis, it was found that the methods generally described by other researchers or detailed in many texts or papers on the topic required further development. Most electronic search strategies described or suggested used single words or short phrases. Attempting to use this strategy for the authors topic with a variety of databases generally produced thousands of matching studies with the majority being unsuitable. The sheer numbers produced effectively made working through their abstracts impossibly unproductive.

**Application of the Filter to a Range of Databases**

The filter needed to be easily adapted to a range of databases. The approach taken was to focus on the use of the 'search all text in all documents' field. Most databases encountered by the researcher contained this or an equivalent field. Alternately the filter can be used for a search on 'Title and abstract only' but where available the full text search increased the number of studies found. The filter was designed to be used within these fields on a singular basis rather than using a variety of fields in one database and then having to make adjustments depending on field availability in other databases. The only other field required was the 'date range', which was used to delimit the searches to the years 1995 to 2007.

Figure 1: Generalist search databases such Google Scholar accept the filter directly. (Though appearing truncated above, the whole filter fits within the first field)



Contd....

Figure 2: Here using Proquest the filter is split into its four parts. As with the Google search the search is date range but also now also content limited to Social Science.

ProQuest | [Help](#)

Advanced Search Tools: [Search Tips](#) [Browse Topics](#)

Barrier\* OR Constrain\* OR Imped\* OR Obstr\* OR hind\* OR bloc Citation and document text

AND survey\* OR Q Citation and document text

AND Women\* OR G Citation and document text

AND Leader\* OR M Citation and document text

[Add a row](#) | [Remove a row](#) [Search](#) [Clear](#)

Database: Social Sciences - ProQuest Social Science Journals [Select multiple databases](#)

Date range: Specific date range... 01/01/1995 to 01/01/2007 [About](#)

Limit results to:  Full text documents only [About](#)  
 Scholarly journals, including peer-reviewed [About](#)

#### Questions:

1. Give the brief about meta-analysis and literature searches.
2. Explain the application of the filter to a range of databases.

Source: [www.ejbrm.com/issue/download.html?idArticle=195](http://www.ejbrm.com/issue/download.html?idArticle=195)

## 5.6 Summary

- Alert messaging emerged from the study of Personal Information Management (PIM), the science of discovering how people perform certain tasks to acquire, organize, maintain, retrieve and use information relevant to them.
- Email alert services offer a way to have new content sent automatically to your email inbox. Setting up an email alert requires free registration with the publisher, vendor, or database provider offering the service.
- A feed reader is separate from your email, but still operates a lot like an email inbox. A feed reader is a personal web space where you can log in and view your subscriptions to various types of content.
- Modern libraries and information centres offer a variety of new documentation and information services to provide support to Research and Development, industrial productivity, management, marketing and trade, all programmes of development of governments and institutions, etc.
- Four types of Current Awareness Services (CAS) are described in this unit with their characteristic features. These types of service are: Contents-by-journal, Documentation Bulletin, Research-in-Progress Bulletin, and Newspaper Clippings Services.

Notes

- Librarians have been providing this kind of service on manual basis for a long time. During recent years the trend is towards computer based SDI. It is a highly personalized information service directed to individuals so as to cater to their requirements.
- Bibliography is a list of citations or references to books or periodical articles on a particular topic. Bibliographies can appear at the end of a book, journal, or encyclopaedia article, or in a separate publication.
- According to UNESCO/Library of Congress Survey, bibliographic control means “the mastery over written and published records which is provided by and for the purpose of bibliography”. Effective bibliographic control should be made at subject and national level.
- Reference service, as a distinct function of the library, began in the late nineteenth century, largely in response to the growing prevalence of publicly funded libraries (both public and academic) seeking to serve relatively inexperienced and unskilled readers and scholars.
- Document Delivery Services are an important component of the Library’s inter library loan activity by which users’ are facilitated not only to obtain information about the location of a document but the document itself as well.

### 5.7 Keywords

**Alert:** Alert is a colloquial term used to define a machine-to-person communication that is important and/or time sensitive.

**Alert Messaging:** Alert messaging or alert notification is the delivery of alerts to recipients.

**Analytical Bibliography:** It is an investigation of the physical nature of the book which can be and frequently is sufficiently exhaustive to enable all the circumstances of the book manufacture and history to be revealed.

**Author Bibliography:** An author bibliography is the list of writing by an author together with the works on him by others.

**Bibliography:** Bibliography is a list of citations or references to books or periodical articles on a particular topic.

**Bibliophilic Bibliography:** A bibliography that records old and rare books, first editions of celebrated authors is known as bibliophilic bibliography.

**Citation Alert:** This service will alert you when a chosen author or article has been cited by another.

**Current Awareness:** Current awareness means knowledge regarding recent developments relating to matters of special interest to an individual user.

**Current Awareness Services (CAS):** CAS is concerned with dissemination of information 'that will keep its users well-informed and up-to-date in their fields of basic interest as well as in the related subjects.'

**Descriptive Bibliography:** Descriptive bibliography is the application of analytical bibliography to the external form of the book i.e. it concern itself with the materials forms of books and not with their literary contexts.

**Email Alert:** Email alert services offer a way to have new content sent automatically to your email inbox.

**Feed Reader:** A feed reader is a personal web space where you can log in and view your subscriptions to various types of content.

**Historical Bibliography:** The study of books "as object of art" may be termed a historical bibliography.

**Personal Bibliography:** A personal bibliography is a list of writings by others on the different aspects of the life of a great man together with what he himself has written, printed and delivered in the form of oratory.

**Primary Bibliography:** Primary bibliographies are those which are the original record of the whole or part of their content.

**Rich Site Summary (RSS):** The RSS feeds for its security bulletins, advisories, magazine features, and other security-related alerts for IT professionals.

**Selective Dissemination of Information (SDI):** SDI can be regarded as an off-shoot of CAS, which not only serves current information but is also totally user-oriented.

**Systematic Bibliography:** Systematic bibliography is nothing but the listing of books and other reading material according to some useful system of reference scheme.

**Textual Bibliography:** It is an application of analytical bibliography to the contexts of books. It is a bibliography applied to textual studies.

## 5.8 Review Questions

1. What is Alert? Explain in detail, how information can be recorded?
2. Write down the different types of alerting services.
3. Discuss the monitoring of research and journals topics using email alerts or RSS feeds.
4. What is Current Awareness Services (CAS)? Also discuss the need for Current Awareness Services (CAS).
5. What are the different types of Current Awareness Services (CAS)?
6. Discuss about Selective Dissemination of Information (SDI).
7. List the aims and functions of Bibliography.
8. Identify the types of Bibliography.
9. "Effective bibliographic control should be made at subject and national level". Discuss.
10. Explain the types of reference questions.
11. What steps are involved in answering a reference query?
12. Write short note on British Library Document Supply Centre (BLDSC).

## **Answers: Self Assessment**

- |   |                          |
|---|--------------------------|
| 1. Alert  | 2. Citation alert        |
| 3. Email alert  | 4. Feed reader           |
| 5. Contents-by-Journal                                |                          |
| 6. Documentation Bulletins or Current Awareness Lists |                          |
| 7. Research-in-Progress Bulletins                     | 8. SDI                   |
| 9. Descriptive  | 10. Textual Bibliography |

- |       |                |               |
|-------|----------------|---------------|
| Notes | 11. Historical | 12. Selective |
|       | 13. True       | 14. True      |
|       | 15. True       | 16. False     |

### 5.9 Further Readings



#### Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



#### Online links

G Werner - Bulletin of the Medical Library Association, 1979 - [ncbi.nlm.nih.gov](http://ncbi.nlm.nih.gov)

<http://technet.microsoft.com/en-us/security/bulletin/secrssinfo>

[lis.sagepub.com/content/20/3/194](http://lis.sagepub.com/content/20/3/194)

RT Bottle - Journal of the American Society for Information ..., 1970 - Wiley Online Library

## Unit 6: Document Delivery Services and Online Services

Notes

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- 6.3 Challenges and Issues in Document Delivery Service
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  - 6.6.17 Webcasting
  - 6.6.18 White Board Environment
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Notes

## Objectives

After studying this unit, you will be able to:

- Explain the concept of Document Delivery Services (DDS)
- List the models in Document Delivery
- Identify the challenges and issues in Document Delivery
- Explain the concept of Vendor Scorecard
- Discuss the meaning and concept of Online Service in Library Services
- Identify new Web-Based Library Services

## Introduction

The web was designed as an information space, with the goal that it should be useful not only for human – human communication, but also those machines would be able participate and help. One of the major obstacles to this has been the fact that most information on the web is designed for human consumption, and even if it was derived form of a database with well-defined meanings for its columns, that the structure of the data is not evident to a robot browsing the web.

The question is doing the library users happy with the online approach? Yes most of the web based library service provider is getting a lot of feedback from their effective users. So libraries also introducing more and more services on the web, a tremendous amount of content and the system has had some continuity over time.

As the Internet grows ever larger, the sheer quantity of textual information continually increases. Basic text, in ASCII, HTML, PDF, probably makes up the bulk of the information.

- Equal opportunity for access to all.
- Information sharing for any number of users at any time.
- Provides a distributed information system.
- Move to owning model to access model.
- Exchange of electronic mail and other data files in a wide area environment.
- On-line real time interaction with other network users.
- Participation in electronic media mailing lists and conferences.
- Receipts and delivery of electronic publication.
- Access to data stored on remote computers.
- Access to remote scientific computing equipment such as super computer, remote sensing equipment telescope, graphic processors.
- Access to wide selection of public domain and shareware software.

## 6.1 Document Delivery Services (DDS)

Document delivery services (DDS) provide individual customers and users with copies of documents (mainly articles published in scientific journals) on demand. Document delivery (or IAS: individual article supply) is offered by a wide variety of service providers: libraries (public, private, university), scientific institutions and laboratories, commercial document suppliers,



host organisations, publishers, database publishers, subscription agents, etc. Some provide internal services only (“in house” document supply); others provide services to the general public. In practice, it is difficult to draw a line between “internal” and “external” document delivery. Increasingly, services set up originally to serve closed user groups are opened to the general public.

As demonstrated by some of the projects in the Libraries Programme, “documents” may also have the form of digital musical recordings or digitized photographic images. In the future, multimedia applications (combined use of digitally stored and transmitted text, sound and images) will become increasingly important, as storage capacities increase and wide-area networks are developed. In many cases, document delivery services are offered in conjunction with current awareness services; hence the acronym CAS-IAS. Users of these services are periodically informed of recently published articles and other relevant literature, in the form of bibliographical data and abstracts.

Typically, document delivery services are provided through a wide variety of technical means and media. Even though the days of xeroxing and mailing on demand are far from over, electronic storage (“electro-copying”) and transmission are undoubtedly the technical means of the future. Texts are stored and delivered electronically in either image or character encoded (OCR) form; the latter enabling service providers to deliver “customised” information products on demand.

Users may order documents by mail, by telecopier (fax), by electronic mail or in real-time from computer terminals. Documents are delivered by mail, by fax, by electronic mail and on-line. At present, a document delivery service typically involves a combination of paper, digital and electronic media; document delivery is a “hybrid” medium.

The requested material for DDS may be articles from journals, papers from conference proceedings, any other materials required for academic and research purposes, depending on the availability. Modern computer and telecommunication technology made it possible to transfer the electronic text of the document to long distances at extremely fast speed.

### Definition

Document delivery services (DDS) is concerned with the supply of document to the user on demand either in original or its photocopies irrespective of the location and form of original document. The Document Delivery Centre (DDC) on demand, deliver the copies of papers from learned journals, conference proceedings and other material available in their collection. Every DDC will also make the required effort to procure and supply the paper from other institution.

### Need

The need for DDS felt due to ever increasing subscription cost of learned journal that leads to a situation where no library can hold every item required to meet the needs of its user.

### DDS Providers

The British Library Document Supply Centre, Boston and University Microfilm International, Ann Arbor provides the DDS at international level.

In national level, INFLIBNET Centre in collaboration with the following universities provides DDS. The role of INFLIBNET here is mainly to act as a catalyst in promoting this service.

- **Banaras Hindu University, Varanasi:** For the region of Arunachal Pradesh, Assam, Bihar, Manipur, Meghalaya, Nagaland, Sikkim, Tripura, Uttar Pradesh.

- Notes
- *University of Hyderabad, Hyderabad:* For the region of Andhra Pradesh, Madhya Pradesh, Orissa, West Bengal.
  - *Indian Institute of Science, Bangalore:* For Karnataka, Kerala, Lakshadweep, Pondicherry, Tamilnadu.
  - *Jawaharlal Nehru University, New Delhi:* Covers Delhi, Haryana, Rajasthan.
  - *Punjab University, Chandigarh:* Covers Chandigarh, Himachal Pradesh, Jammu & Kashmir, Punjab.
  - *Tata Institute of Social Science, Mumbai:* Includes Diu and Daman, Goa, Gujarat, Maharashtra.

### Placing Request and Delivering the Material

The request, listing the items required with complete bibliographical information are generally made using Email, normal letter by post, fax, telephone (in case of urgency) or requests in person. The delivery is also made accordingly.

### Charging Pattern

Some DDS services are provided on No Profit–No Loss Basis while others are on profit. Each Document Delivery Centre makes best effort to deliver the requested materials as early as possible. The fee for the service is charged depending on the type of members and mode of delivery (electronic copies through email/print out copy of electronic document/photocopy (Xerox) of printed material by hand scanning the printed page through electronic/photocopy of printed material by Fax/Courier/speed post). The members and associated member libraries of DDC can make the payment on supply of requested materials. However, there is some time bound to settle the account.

All non-member, commercial organizations and individuals will have to pay in advance. To avoid the delay and paper work, in many case it is suggested that a deposit account with a minimum of amount may be opened. In today's era many DDC also have the facility of online transfer of money through credit card or internet banking while some others are still functioning by taking account of the Demand Draft, cheque or by cash. The requesting library/individual for the DDS will have to follow the copyright regulations and therefore will have to give an undertaking in the request itself that the requested material will be used only for academic and research purpose and not for any commercial gains.

### Self Assessment

Fill in the blanks:

1. .... provide individual customers and users with copies of documents on demand.
2. Texts are stored and delivered electronically in either ..... form; the latter enabling service providers to deliver "customised" information products on demand.

## 6.2 Models in Document Delivery Service

Libraries endeavour to meet the demand for documents through different methods. These include the following:

- (a) Supply from the library collection itself;

- (b) By obtaining documents from other libraries on inter-library loan;
- (c) By joining library consortia for subscription to journals and databases (particularly full-text databases) and sharing the resources;
- (d) By procuring copies of documents from other libraries, documentation centres and commercial document supply agencies like publishers, etc. and
- (e) By accessing and downloading web-based documents.

These modes are discussed below:

- (a) **Document Delivery from Library Collection:** This involves providing a document requested by the user by picking it up from the library itself, if it is available. This is usually the easiest or quickest way of document delivery. But, at times, it is not fast enough if the document is already issued to another user.
- (b) **Document Delivery through ILL:** In this method, the library contacts another library, which has the required document and obtains it through inter-library loan and delivers to the user who is a bonafide member of the borrowing library. In this process the user usually gets the original document but this borrowing would be strictly as per the terms and conditions of issue, of the lending library. Also, if the requested book is issued to another user of the lending library, it cannot be quickly borrowed on ILL.
- (c) **Document Delivery by Joining Library Consortia:** Library consortia are usually formed to achieve sharing of the journal resources savings in subscription costs. In addition, the journal supplier through the consortium approach, who is usually a large publisher, provides online access to full texts to several additional journals over and above the journals subscribed by the consortium. Using this access facility, libraries can meet a member of demands for delivery of journal articles and other documents transacted by the consortium. In India, the consortium being operated by IITs, IISC, NITs, IIMs, etc., titled INDSET is such consortium.
- (d) **Document Delivery by procuring Copies from Suppliers:** This is a common method of obtaining documents demanded by the user if they are not held by the library, or by the libraries covered by ILL arrangement. However, since procuring documents involves expenditure, this approach for document delivery is used only for bona fide members of the library and when such procurement is approved by the competent authority
- (e) **Document Delivery by Collecting it from Websites:** A number of websites of publishers and other document generating agencies usually make full texts of their open (not classified) documents available on their websites. Such documents are permitted to be downloaded by those who require them either free or against payment. If a document requested from the library is not held by the library, and if it is available on the web, often the user may himself download the document instead of placing the demand on the library. In spite of this, libraries often have to meet such demands by providing a downloaded document copy.

## Self Assessment

Fill in the blanks:

3. .... involves providing a document requested by the user by picking it up from the library itself, if it is available.
4. In ..... method, the library contacts another library, which has the required document and obtains it through inter-library loan and delivers to the user who is a bonafide member of the borrowing library.

Notes

5. .... is a common method of obtaining documents demanded by the user if they are not held by the library, nor by the libraries covered by ILL arrangement.

### **6.3 Challenges and Issues in Document Delivery Service**

Libraries find it highly advantageous to deliver documents requested by the users, electronically:

1. ***Increase in Efficiency:*** Electronic documents are usually made available on the web or other networks, by the concerned publishers or database producers (of course, some are free and some others are chargeable). So, libraries can search online, the availability of the requested document and instantly downloaded it and pass on to the users. Thus, the service can be operated at a great speed.
2. ***Cost-effectiveness:*** Electronic transfer of documents would not involve the charges of packing, postage, etc., as is the case with printed or paper-based documents. Since many libraries would have access to the web via a dedicated telecommunication link, it would hardly cost anything to download; such cost is negligible even if the downloading takes place in dial-up mode.
3. ***Simultaneous Availability of the Document to Several Users:*** If a document is stored in electronic/digital form, several eligible users can simultaneously access it and download the required portions. Thus, the original remains in the library, even if the document is sent to another library (electronically). Such a facility is obviously not available with the printed versions of documents. If a lending library has only a printed version of a document, it would normally prefer to scan the document (or the required pages) and transmit electronically to the borrowing library, as an email attachment, instead of sending the hard copy by mail.
4. ***Increased Demands can be Effectively Met:*** When a library provides efficient/ speedy document delivery service, demand for the service is likely to go up substantially. Even then, efficiency of the service can be maintained by using electronic document delivery method, without increase in staff.

### **6.4 Document Delivery: Vendor Scorecard**

Supplier performance management is a critical initiative in supply chain governance for organizations dealing with multiple suppliers. The globalized manufacturing and sourcing mantra has made companies focus on their core competencies and outsource the rest of the non-core business to suppliers across the globe. Companies in service industry such as banking, financial services and IT have also started realizing significant advantages in sourcing good and services from multiple suppliers while benefiting through improved pricing and enhanced services. Companies are becoming highly dependent on their suppliers and have to assess and manage their supplier's performance to reduce business risks and revenue losses.

For manufacturers High-Technology, Pharmaceutical, Energy, Automotive and Construction industries, this becomes even more important as they spend on average 50%-80% of the total product cost on raw materials and parts procured from multiple suppliers across different parts of the world. Manufacturers with a large or mission-critical supply chain are working on strategies and techniques to gain cost advantages by efficiently managing their suppliers, without sacrificing quality and flexibility.

Supplier performance management can help companies have better visibility into supplier deliverables and offer benefits to uncover and remove hidden cost drivers from poor quality, increase competitive advantage by reducing order cycle times, chargebacks for non-conforming material and supplies, gain insight on how to best leverage their supply base, and align practices between themselves and their suppliers.

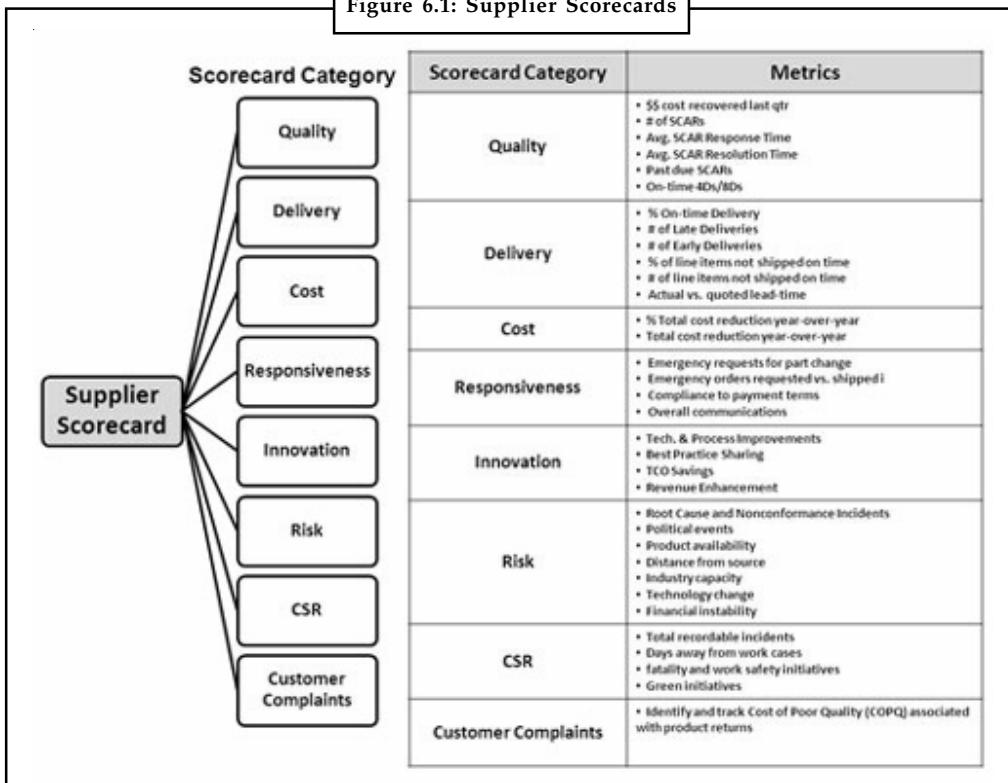
In particular, Supplier scorecards are an integral part of the supplier performance management process.

Notes



*Notes* It should define categories or groupings of metrics/KPIs by which suppliers will be measured, such as, cost of poor quality, delivery cost, inventory cost, response index, order fulfilment score, order visibility score, returns/charge-back score and can be extended to custom categories such as vendor risk, innovation, customer complaints and corporate social responsibility.

Figure 6.1: Supplier Scorecards



Source: [http://www.metricstream.com/solutions/supplier\\_performance.htm](http://www.metricstream.com/solutions/supplier_performance.htm)

A proactive organization should integrate supplier performance scorecards with real-time data to measure and identify key supplier related events, which could impact business operations and revenue.



*Caution* Supplier quality events such as supplier corrective actions (SCAR)/root cause analysis, supplier audit findings and customer complaints should be linked with Quality KPI in scorecards to enable a real-time quality score for suppliers.

Furthermore, scorecard metrics and KPIs should be well integrated with loss and supplier risk management functionality allowing users to define multi-level thresholds and weighting for every risk. Real-time integration of supplier scorecards with supplier quality and risk management events will enable companies to give supplier ratings and generate executive

**Notes** reports such as top performing supplier for quality score, suppliers with poor score for corporate social responsibility, highly innovative and cost efficient supplier etc.

### Self Assessment

Fill in the blanks:

6. If a document is stored in ..... form, several eligible users can simultaneously access it and download the required portions.
7. A ..... should integrate supplier performance scorecards with real-time data to measure and identify key supplier related events, which could impact business operations and revenue.

## 6.5 Meaning and Concept of Online Service in Library Services

Online means the state of being in direct and immediate communication with the computer on which the database is loaded from a remote terminal. It is an interactive system i.e. it allows the user to input instruction, receive responses and then modify or manipulate the retrieved results. Almost all organizations today have shifted to the online services by way of the following:

- (i) Online Public Access Catalogues (OPAC)/Webcats;
- (ii) CD Rom search facility;
- (iii) Developing library websites;
- (iv) Developing different kinds of databases;
- (v) Acquisition of database, e-journal, e-book;
- (vi) Building digital library/institutional repository;

To provide access to all the above resources, a modern library offers internet facility to the user. Introduction of digital section in most of the 21st century libraries also acts as a base of many modern services.

### 6.5.1 Web-based Library Services

At beginning library was just a store house of books and other document. General people were not allowed to use that document. After long time library started document delivery service and circulation came into picture. From middle of the 19th century there was drastic change of library services. A large number of different services came into the picture.



*Did u know?* Computer came during the middle of the 20th century the mode of library services changed dramatically. It became information service and new kind of offline service came into picture and last one decade of 20th century it was started to provide online service.

In early 1960's developed countries began to experiment with the use of computer in library and information processing activities. Mainly these systems were batch oriented and used punched cards as data input media. It was H.P. Luhn of I.B.M., U.S.A. during 1950's initiated computer – based SDI, CAS and Indexing services.



*Notes* Here it should be noted that the term 'information retrieval' as commonly used refers to systems and procedures for retrieval not of information but of documents that may inform the users on the particular subject areas of interest to them.

## Notes

Actually, most retrieval systems do not deliver the documents at all. Instead, they retrieve some form of document surrogate such as full bibliographic citation or bibliographic citation plus the abstract. In the USA among the pioneers of large scale bibliographic processing by the computer, the National Library of Medicine, which launched MEDLARS service in 1963. It was the first large scale system made available to the general public without any restriction. Even today it is one of the most widely used service in the world. It became online during 1970 under the name MEDLINE. In this way during 1970's libraries made proper use of computers in various library operations and launched local system successfully due to availability of improved computer technology and collaboration between libraries and computer specialists.

The Chemical Abstract Service started by the American Chemical Society in 1907 became online during 1967. Another important online retrieval system was the RECON (Remote Console) system of National Aeronautics and Space Administration (NASA) of the several online services available in the U.S.A. The largest is Lockheed's DIALOG Service started in 1972.

There was revolutionary change in library co-operation and resource sharing as a result several library networks like OCLC came into existence. The Online Computer Library Center established in 1963 which became the pace-setter for many such library networks.

In UK the British Library offers an online information retrieval services with several data bases, called BLAISE (British Library Automated Information Service). There are also over 140 computer based international information systems in various disciplines and missions established on co-operating basis by 36 UN organization and agencies within the conceptual framework of UNISIST, many of them offering on-line information retrieval service also e.g. INIS, AGRIS, Global Environmental Monitoring System (GEMS), Population Information System (POPINS), International Patent Documentation Center (INPADOC) and so on.

From 1980's the provision of "packaged" hardware and software system has come into practice and also gained popularity for information storage and retrieval process and reference network of the libraries and bibliographical information center.

### Why Web-Based Library Service?

- To save the precious time of the scientist
- Availability of less number of library staff to carry out the library works and services
- Less dependence upon the library staff for getting the required information
- Location of laboratories/departments in different places in the campus
- Instant and elaborate information requirements for R&D activities
- Information for decision making in MIS
- Multifold increase of the cost of books and journals
- Availability of information in different places and also in different formats
- Cut in library budget.

**Notes**

- Library networks offer many potential and new capabilities for sharing information among different library and information centers at local, regional, national and international levels and eliminate the size, distance, and language barriers among users through resource sharing.
- Inter-library loan can be provided by sending the information through e-mail using the network facilities.
- On-line ordering and acquisition related activities can be carried out through e-mail Centralization and computerized on-line public access cataloguing service can be provided by networking system.
- Networking with union catalogues of various items of information is a boon as it avoids duplication in holding to the extent possible.
- Reference service can be enhanced by e-mail and internet though LAN and WAN.
- CD-ROM and multimedia service can be provided effectively though networks.
- Current Awareness service and SDI may be given though networking systems and the users may retrieve references of their interest in a fraction of second from an online database.
- Speed of data communication though networks are very high and one can obtain information within few seconds from any part of the world sitting anywhere.
- The internet is a major tool that delivers to the front door of other networks, other services and other resources. It is a tool providing access to vast quantities of information and it lets to communicate, share resource and share data with people around the world.



*Task* Make a comparison of commercial document suppliers and interlibrary loan services.

**Self Assessment**

Fill in the blanks:

8. Online means the state of being in direct and immediate communication with the computer on which the database is loaded from a .....
9. .... loan can be provided by sending the information through e-mail using the network facilities.
10. .... is a tool providing access to vast quantities of information and it lets to communicate, share resource and share data with people around the world.

**6.6 New Web-based Library Services**

Several publishers today offer web-based, intranet solutions for providing local access to their databases.



*Example:* Silver Platter, Cambridge Scientific Abstract and Institute for Scientific Information.



Journal publishers have also begun to offer similar situation, for example Elsevier, for electronic version of their journals. Large R&D libraries can take advantage of these developments and provide desktop access to key database and electronic publications to their users.

Apart from the externally purchased databases, libraries have their own collection of CD-ROM databases mounted on their CD server/tower. Online database vender such as Dialog, Lexis-Nexis, and ERIC is delivering their database over internet. So a library which subscribes to this database can now easily access them over Web.

### 6.6.1 Bibliographic and Cataloguing Services

This service can also be prepared from different databases available on the Web.



*Example:* Physics the Los Alamos e-print archives is the more productive means of communication for Astrophysics, Quantum Physics, Considered Matter Theory, etc.

Veronica's net-wide index, Archie and NCSTRL's technical report on Computer Science and some other. [www.chemceter.org](http://www.chemceter.org) is the American Chemical Society's "virtual community" for chemistry professionals, researchers as central source for information on Chemistry related resources. It is an interesting, integrated electronic workplace where we—

1. Receive information on ACS's (American Chemical Society) program and activities.
2. Provide awareness of important scientific issues.
3. Explore career option and job opportunity.
4. Link to publication of ACS.
5. Link to world's most comprehensive database of Chemical information.

Telnet access to remote computer of different organizations' library catalogue is also available. Information on books which are not easily available may be accessed through telnet. Library of Congress Catalogue is a very popular online service LC. Other libraries, which are on the Web, can be easily accessed through telnet services, which help the researchers. Some of the bibliographic service is available online on the Net. Links from the library homepage can be provided to those sites.

### 6.6.2 Bulletin Board Services

A bulletin board is a public discussion area where people can post message without sending them to anyone's e-mail address that can be viewed by anyone who enters the area. On CompuServe a bulletin board is called a forum. On the Internet, the equivalent areas are called newsgroups.

Separate notice board option can be created through e-mail facility and the latest information of the daily news, job opportunities, admission notice, entrance examination, scholarship and fellowships, new courses etc. can be posted and made available for the users though this bulletin board service.

It is proposed to provide this facility to display/view news, announcements etc. with constant updating of information in an electronic bulletin board. The UGC circular can also be put on this board. Several bulletin boards can be made available in the networks for each specific category of user discipline.

Notes

### 6.6.3 Current Awareness Services

As studied earlier (Unit 5), CAS according to Luhn is an essential function of management to make the members of its organization aware promptly of such new information which will most likely contribute to performing their individual task with the highest possible degree of competence. Modern procedures and techniques of CAS have included individual notification of published information directed to individual professional scientist's engineers and others.

The long-term purpose of the CAS is to provide a substitution for the circulation of new journal to the users various electronic current products have been investigated that could partly provide what the circulation of journal has provided over the years. They also had to be available via the Web in order to allow the ultimate extension of the service to research students located at the distance from the campus. Silverplatter, NISC, Ovid, Dialog and Faxon allow the user to save profiles.

A library can provide this service through e-mail, which is easiest and common procedure. Otherwise a library can refer or link directly to some location to their WebPages.

### 6.6.4 Electronic Selective Dissemination of Information

Most of the R&D and academic institute because of the tight teaching and research schedule, it was found that scientists and faculty members of the institute were hard-pressed to personally visit the library. Here an electronic SDI service was formulated to deliver current information of interest to faculty members on their desktop. Through this service the Research Interest Profiles (RIPs) of users are searched in a batch mode on the latest updates of EDB's on a monthly basis and the results are e-mailed to respective faculty members. Thus this service not only function as a Current Awareness Tool, but also influenced the acquisition of information sources as well as usage of other library services like document delivery, resource sharing and acquiring reprints.

For promoting E-SDI services on the web, library should create a link from the existing library environment (i.e. E-SDI page is accessed by clicking the SDI sblink from the information service link of library main page) and the different task followed provide the services can be traced by hyper-navigating the active link. A general definition about E-SDI can be given on the basis of H. P. Luhn's original definition of SDI developed in 1958 which involves the matching of user profile with the new materials, the notification to the users' feedback from the users and the modification of users' profile. Further link outline the different step followed in delivering the output, how the RIPs are constructed, answering the frequently asked question, feedback received from the users, statistical details about the service, and a figurative representation of the whole activity.

### 6.6.5 E-mail

First let me clear that e-mail is not at all web based library service. It is a web based excellent media and most probably most popular media. And the library professionals can use this web medium for various purposes specially for delivering some web based services.

The most easy and convenient method to access the web sources is e-mail. When a researcher who registers his name and chose the content pages of some journals of publishers like ElsevierScience, Pergamon Press and some other society publication, request for sending the content page of the selected journal the publishers take care of sending the content in advance, against the registered individual's e-mail address. This helps as excellent current awareness service to the scientists.

### 6.6.6 Frequently Asked Questions (FAQ)

Notes

FAQ stands for Frequently Asked Questions. A compilation of Frequently Asked Questions and their answer is referred to as a FAQ list or FAQ article. FAQs are compilations of information which are the result of certain questions constantly being asked hence the name FAQ.

There are thousands of FAQs on the World Wide Web. AskERIC is an Internet question answering services run by the ERIC Clearinghouse on Information and Technology at Syracuse University, New York. Since it began in 1994 it has answered more than 2 million education-related questions from around the world. It now offers a new features for ERIC/IT, an abstracts in process database of abstracts that are awaiting final editing to be loaded on to the ERIC database updated weekly, the in process database offer 15 searchable fields and each record contains bibliographic information and an abstract of document and journal articles ERIC/IT has produced.

### 6.6.7 Internet Subject Gateways

Subject based Information Gateways are subject entrances (clearing houses) to quality assessed Internet resources. This can be contrasted with gateways where resources are arranged according to where they are physically placed or “geographically” like W3 servers or according to what type of resource they are, such as InterNIC. Compared to common link-lists SBIGs are labour intensive, but gives the advantage of a quality-assessed collection, with standardized descriptions that gives the user a possibility to judge the relevance of the resources.

A number of libraries in Europe are involved in the development of internet subject gateways services that aim to help users find high quality resources of internet subject gateways offer an alternative to the Internet search engines and Web directories. The definition of subject gateways says in some sense they are the Internet equivalent of an academic or special library. Subject gateways are Internet based services designed to help users locate high quality information that is available on the Internet. They are typically databases of detailed metadata records, which describes Internet resources and offer a hyperlink to the resources. User can chose to either search the database by keywords or to either search the database by keywords or to browse the resources under subject heading.

### 6.6.8 ListServe

Listserv discussion lists are topic oriented forums distributed by e-mail, dealing with a side variety of topics, many of which are academic in nature. Once you’ve subscribed to a listserv discussion list, messages from other subscribers are automatically sent to your electronic mailbox. To subscribe to a listserv discussion group you need to send an e-mail message to a computer thousands of miles away. The listserv program handles subscription information and distributes messages to and from subscribers. There are varieties of listserv programs but they all work essentially the same way.

### 6.6.9 News Clipping Services

News clip service is one of the CAS provided in many libraries in print/ photocopy form. To provide this service, news items from selected newspapers are first marked and then the clippings are pasted on a white sheet. These filed clippings are then circulated among the users. Due to its physical nature, its distribution is limited by the number of copies generated as well as this conventional filing systems provide only one index field for the file. The risk of misfiled and unreturned documents is virtually eliminated in an electronic format. The format may be Text or PDF (Portable Document Format). The image may represent as GIF (Graphic Interchange Format) or JPEG (Joint Photographic Experts Group).

## Notes



*Caution* The entire document should be copied to the server root and the executable to the CGI-BIN directory.

A homepage for news clips service has been created and through which access to the news clips has been achieved.

### 6.6.10 NewsGroup

They are on-line discussion groups on many topics of varied interest. A program called newsreader is required to view and post message in newsgroups. Unlike mail lists and chats, newsgroups allow readers to choose the topics to discuss. They can be of immense help to professionals and scientists. Special libraries must encourage users to participate in newsgroups thereby enhancing the organizational knowledge base. The library staff can post messages in the appropriate newsgroup and discuss library-related problems, adoption of new techniques in libraries, etc.

### 6.6.11 Newsletter Services

It is very good service to the users, listing available Internet services, sites, new addition, publications, useful like Conference, Workshops, Training and Fellowship programs. A catalogue of Internet base information sources is useful assets for all R&D libraries if given at regular intervals through e-mail or they can host it in their website.

### 6.6.12 OPAC

The Online Public Access Catalogue is one manifestation of the massive changes that are taking place as we plunge into the information age. OPACs are the gateways to information in libraries and provide facilities to browse search and locate information. OPACs were developed to meet the needs of users in two different ways (1) it meant access to library housekeeping operations especially circulation and (2) to give the library users direct access to the machine-readable bibliographic records.

#### An OPAC

- Provides the public with direct access to a library's bibliographic database though the use of a terminal.
- Is searchable though a variety of access points greater than those available through card form catalogues.
- Is searchable with a common command language, which may be transferred when the public moves from one library to another.
- Retrieves information from a local library field, and if not successful locally, retrieves information from other libraries' files.
- Provides instructional help.
- Displays search results in readily understandable form.
- Provides links to card form catalogues, reference help, circulation files, etc.
- May be accessed remote from the library's location.

Generally OPAC is accessed via Telnet. But at present, where the internet is dominating in the networking environment, OPAC is available and accessible via Internet. They are known as WebPAC or InternetPAC. WebPAC became more simple popular and easy to handle.

### OPAC to WebPAC

When remote access to the library catalogue meant a telnet connection, users had little incentive to visit the library Web page.

As Web PACs matured to the point where the interface was reasonably functional, many libraries phased out their dumb terminal OPACs. The library Web site then became a more logical gateway to the catalogue and other Web-based library resources. An informative home page introduces users to helpful information about the library, its collections, and services. This order of access is a good opportunity to distinguish between the catalogue and other electronic indexes and databases.

Web PAC is welcome with open arms because: the Web interface is familiar and graphics aid navigation.

The user can click complex subject, or other, headings, less typing is good, there are no UNIX, VMS or other weird commands, it's easy to check periodical holdings in a new browser window without losing search results.

#### 6.6.13 Web PAC

- It offers the libraries the opportunities to have access to various resources of other libraries on the web.
- It allows users to interact with documents stored on computers all over the world.
- Makes easier to access catalogue data in the form of bibliographic records.
- Sometime has the ability to search the OPACs of other libraries.
- Powerful tool that links all the electronic resources for easy access.
- Make the catalogue from providing information to providing access to large banks of actual information.
- It becomes another search engine.
- Referred as 'Web Cats' and as well a type of 'Information Gateway'.
- Some require a login ID, user name and or password.
- Some include information on the screens such as login ID, user name or pass word in boxes and users can see when they access the catalogue.

#### Advantages

1. The users use a standard interface – the Web browser –, which the end users are well accustomed to. So there is little need for end user training.
2. The Web's standard functionality hyper linking text files as well as database reports or searches are used.

## Notes

In addition to searching and browsing the library catalogue end-users can transmit orders or requests directly from the Web OPAC as well as view their own borrower accounts. While they need not do anything but click on a hyperlink to access the OPAC of their local library they have to enter their personal user ID and password to access these services. Hyperlinks through OPAC need not be static but may start a new database search.



*Example:* Our end users can identify other publications by the same author or corporate source by simply clicking on their name. Similar link reports are offered for classification codes, or controlled and supplementary terms.

Such hyperlinks are only generated if there is further reference within the database in addition to the one just being displayed. They may provide for horizontal browsing that means “show me more like this”.

Web OPAC can give different types of link: on the one hand there are links, which identify related records within the catalogues (link reports or cross searches as well as bibliographic hierarchies). On the other hand there are those which refer to external resources, i.e. full text links, links to companies or scientific societies, and links to publishers. This led to database design problem—how exactly should which type of link be displayed.

### 6.6.14 Reference Services

The reference service in a library is often defined as direct personal assistance given to its reader for finding information. It is the branch of library services, which includes personal assistance given to in their search for information on various subject areas, irrespective of size and collection of the library.

Whereas much of traditional library networking has focused on information access within and between the physical boundaries of libraries and research institutions, web based reference services owe their increasing popularity amongst librarians to the increasing need to extend the reference desk beyond the library’s walls. The goal is to meet the demand for easy 24 hours access to electronic reference sources from the dorm room, the office, and even the kitchen table.

Much work has been done recently on the demographics of the current day library regarding access to electronic services. Virtually every academic library and almost all-public ones offer access to CDROM products. Almost all-academic libraries offer mediated access to the traditional online services such as DIALOG, Dow Jones and LEXIS-NEXIS. Much of this searching is done on databases made available either through loading the data on the library’s own server or through access to remote reference servers, such as Information Access Company’s InfoTrac SearchBank or OCLC’s FirstSearch. A search of the web will yield literally hundreds of libraries that have home pages which offer a startling array of services, ranging from book catalogue to commercial databases to community information such as events schedules, political minutes, and information of interest to a user public. Many of these services attempt to provide similar levels of service to those found in the library. In fact most end users and librarians expect that remote access to electronic resources mean these resources must be self-service, from the perspective of offering easy access to the complete content from a wide variety of sources material in electronic form and all of this available 24 hours a day, seven days a week.



*Example:* Reference online— Britannica online—<http://www.members.eb.com> Online Dictionary—<http://www.dictionary.com>

The site dictionary .com incorporates Webster's dictionary for providing answers. This site serves as an effective and efficient reference tool for the librarian. It includes a number of facilities like—Ask Dictionary: this particular link helps in finding out the meaning, adjectives, adverbs etc. by consulting Webster's Dictionary. Community Service: serves the community of readers on the www, e.g. delivering online periodicals, newspapers, classics texts etc.

Online maps and Atlases—[http:// www.atlapedia.com/index.html](http://www.atlapedia.com/index.html) Altapedia Online contains full colour physical and political maps as well as key facts and statistics on countries of the world.

Encyclopaedia—<http://www.encyclopedia.com> Encyclopedia.com was created by Infonautics Corporation to give Internet users a simple, one stop site to begin their research and answer basic questions.

### 6.6.15 UseNet

The UseNet is a global electronic bulletin board, of sorts, in which millions of people exchange public information on every conceivable topic. Also called "Netnews", it consists of thousands of newsgroups covering a vast range of topics. The Usenet newsfeed can be read by a variety of newsreader software programs. Standard newsreader software includes 'rn' on Unix hosts, 'news' on the VMS system, 'nuntius' client software for the Mac, and 'trumpet' client software for DOS machines. Unlike messages received via e-mail, the Usenet newsgroup messages are not stored on your computer unless you specifically save each one.

### 6.6.16 UnCover

UnCover is an online periodical article delivery service and a current awareness alerting service. It indexed nearly 18000 English language periodicals in its database and is still growing. Over eight million articles are available through a simple online order system. Five thousand citations are added daily. Articles appear in UnCover at the same time the periodical issue is delivered to your library or local newsstand, which makes uncover the most up-to-date index anywhere.

It is very helpful to the people who need up-to-the minute information, delivered quickly. Articles located in the UnCover database can be sent via fax machine within 24-48 hours, Monday to Friday- often in less than one hour. Searching the UnCover database is absolutely free.

### 6.6.17 Webcasting

Webcasting which is another example of Push Technology is defined as the "Pre-Arranged updating of news, weather or other selected information on an Internet user's desktop through periodic and generally unobtrusive over the WWW". In other words, push technology or webcasting is a method of information delivery across the web that pushes information to the screens of user's computer. It is a webcasting was introduced by the PointCast Network in 1996. Presently most of the webcasters concentrate on news delivery.

### 6.6.18 White Board Environment

In a whiteboard environment, there can be many users connected to discuss on a topic and it is different form the newsgroup in the sense that the computer screen serves as a whiteboard and the user can draw figure using the mouse and post message/explanation in the comment box that appears simultaneously with the whiteboard for other users to view. It is multi-user Java chat and drawing program and so the systems that are connected must be enabled to download Java applets

Notes



Caselet

### **Web-Based Services Expected from Libraries**

**A**cademic scenario, over the years, has undergone a tremendous change assuming new dimensions influenced by the technology driven applications. Management education is no exception to this. Traditional commerce and management education methods are observed to be inadequate. Quality service package delivery is a formidable task for all institutions of business education. The long-term sustainable advantages in the business education require more attention to the issue of service, quality and cost in the national and international markets.

Libraries are mainly entrusted with a host of predetermined tasks like acquiring, organizing, preserving, retrieving and disseminating information to the users. Right from ancient times to the present Internet era, the primary objective of library has always been this. However, the way this purpose has been achieved has drastically changed.

Information technology has influenced the very nature of business and management libraries. They are undergoing significant changes today not only in outlook but also in function, services, methods and techniques for collection development, processing and dissemination of information. The conventional set up of brick and mortar libraries that store information within a constrained physical space have given way to data centers that integrate data sources around the globe by way of networking. Libraries have not yet explored their full potential to the full. With the advancement in technology and its direct application to libraries, business and management libraries are becoming lean and agile libraries that streamline information supply. The pervasive nature of the Internet, coupled with platform independent database connectivity is turning library portals more and more effective.

The main purpose of this study is to study the availability of websites at management institutes and the extent of library information hosted on it. The study also aims to examine the reasons behind why websites have failed get the attention of majority of users and to identify the library services that they wish to carry through the internet.

#### **Web Portals and Libraries**

A Web Portal can be defined as a website for a specific audience that aggregates an array of content and provides an array of services. They are the sites on the World Wide Web that typically provide personalized capabilities to their visitors. They are designed to use distributed applications, different numbers and types of middleware, and hardware to provide services from a number of different sources. Content linked in library portal is superior to the open access content available on the Web. Authentication software, commonly known as Web Access Management (WAM) are available that allow the library to govern the access to licensed electronic content. Commonly referred to as simply a portal, it is a website that offers access to a broad array of resources and services of libraries such as e-journals, online databases, Web OPAC, new additions and any other static information about library services.

The developments in information and communication technologies (ICT) and their subsequent absorption in library and information science (LIS) have forced information professionals to change the way they are functioning at present. Because of their popularity with the users, an overwhelming attention is being given to the web-based information services in libraries. LIS community has realized that the academic world is increasingly

*Contd....*



## Notes

becoming web-based. Those institutes who wish to attract prospective students and the faculty members must show significant improvements in the institute's infrastructure. Libraries with mere books and journals may no longer lend a credible support to the academic fraternity. Having a tech savvy library and information center with exhaustive information resources in all formats has become unavoidable. Libraries are procuring more and more electronic sources like electronic journals, electronic books, online databases along with locally digitized theses and dissertations. The efforts of libraries in providing users with an integrated way of checking the availability of a source in all possible formats have necessitated a properly designed web portal. Management libraries are also supposed to define and redefine their services and continuously keep their efforts on value addition to the services offered by them. Proliferation of electronic resources has posed several challenges like multiple logins, multiple interfaces and resource discovery. Web portal offers effective solutions to these challenges.

Source: <http://www.webology.org/2006/v3n2/a26.html>

### Self Assessment

State whether the following statements are true or false:

11. A Current Awareness Services is a public discussion area where people can post message without sending them to anyone's e-mail address that can be viewed by anyone who enters the area.
12. A library can provide electronic selective dissemination of information service through e-mail, which is easiest and common procedure.
13. e-mail is all web based library service.
14. FAQ stands for Frequently Asked Questions.
15. News clip service is one of the CAS provided in many libraries in print/photocopy form.



Case Study

### Document Delivery Systems between Gujarat University & Gujarat Vidyapith Library

In this electronic era any document or file transfer through the network is a starting point of electronic delivery of interlibrary loan through the Network. Due to some advantages to electronic delivery of articles or documents to user's desktops, nowadays a large majority of ILL users continue to prefer print on paper delivery rather than electronic delivery. In this electronic environment this fact has implications for introducing extraordinary electronic services in this electronic era. Normally choosing what services to impose on library user, and what services to offer as value-added options in library services, is fundamental to maintaining the credibility of libraries during these times of rapid change for the library professionals.

The materials not owned it may be borrowed or a photocopy may be obtained from outside institutions or organizations or universities or colleges. Select which best suits for your needs. A one-time registration is required for that. The unit you select during your initial registration will be the pick-up location for all material borrowed on ILL (Interlibrary Loan). For this service there is no fee for this.

Contd....

Notes

**Document Delivery**

Document Delivery is an electronic document delivery service offered between Gujarat University Library and Gujarat University Library. From this libraries Faculty, Professors, staff and students may request copies of journal articles, book chapters CDs and other materials to the University Libraries. After that the Documents will be scanned and made available on the web as PDF files through the required or demanded users. There is no fee for this service.

**Gujarat University Library**

Gujarat University (GU) library was started along with its parent body the Gujarat University. The University Library moved to its newly constructed building in May 1967. The Library have more than 3,50,457 books. 11,600 E-Books and 7,500 E-Journals are available. The Library adds about 5000 books every year and subscribes to about 250 Printed periodicals in different subjects. This library caters to the needs of the students and faculties and professors and research scholars of the Gujarat University at large. Further, there are small libraries supported/attached to each school/department in which house texts and reference books on courses being currently offered by the respective school/department are provided. These books are issued from the Central Library of the Gujarat University on long-term basis to each school/department. The Gujarat University department and school libraries offer books and reading-room facilities to their students and teachers, professors and research scholars. Also there is a large reading room attached to the Gujarat University Central Library. The reading room can accommodate more than 600 readers. They can sit and read and write at the same time. For those students, who find the Gujarat University Central Library away from their residence, nearer centers are provided by the Gujarat University in the Ahmedabad city, like as centers at Hajipur, Saraspur and Khokhra-Mehemdabad.

**Services provided by Gujarat University Library:**

- Document Circulation Service
- Reference Service
- Reprographic Services
- Inter Library Loan Service
- Internet Service
- Reading Services
- Current Awareness Service
- Referral Service
- Literature Search Service
- Online Services
- OPAC and WEBOPAC
- Syllabus Service
- Bibliographic Service
- User Orientation Service

Contd....

**Future Planning of Gujarat University Library:**

- Modernization of Circulation System.
- RFID.
- Institutional Repository (IR).
- Modernization of Reading Centre/Department.
- Separate Competitive Exam Reading Centre with useful and necessary resources.
- Separate reading center for Girls.

**Gujarat Vidyapith Library**

Gujarat Vidyapith Library Started since the foundation of the Gujarat Vidyapith in 1920, the Central Library has grown over the years to become one of the richest and extra ordinary repositories of books, journals and manuscripts in Gujarat state of India. The library remains open 364 days a year, remaining closed only on the first day of the Vikram Samvat/New Year. The membership of the library is open to the public at a nominal fee. Its membership stood at 36,864 but in 2011-12 the total active members are more than 15,000 per month. The Central Library of the Vidyapith is the statutory referral library of the Gujarat state for the purpose of copyright. The copyright section has more than 2, 08,635 books as in the year 2011. The library comprises of the main book storage facility, reference section, copyright section, a separate hall for Gandhian studies with Gandhian material, the magazine and journal section, a reading hall and a special and separate children's section. The Gujarat Vidyapith Library has more than 5,34,987 books, 600 Journals, 39 Newspapers and 691 manuscripts.

**Inter library loan services procedure**

- Through interlibrary loan, the Gujarat University Library will attempt to borrow materials or obtain photocopies of materials from Gujarat Vidyapith library.
- Both of the libraries are allow approximately 10 working days to fulfil interlibrary loan requests.
- Both Libraries notified via users mailbox or e-mail or mobile or landline phone when materials arrive. Inter library loan materials can be picked up at the Circulation Desk and it is send through the peon to the concerned library.

Document Delivery they do not need to include credit card information. Most Interlibrary Loan and some Document Delivery requests are totally free.

**Questions:**

1. What is electronic delivery?
2. Discuss the electronic document delivery service offered between Gujarat University Library and Gujarat University Library.

Source: <http://theglobaljournals.com/paripex/file.php?val=MTIwMA>

**6.7 Summary**

- Document delivery services (DDS) is concerned with the supply of document to the user on demand either in original or its photocopies irrespective of the location and form of original document.

**Notes**

- Documents delivered are, to a large extent, articles originally published in scientific or technical journals. In these cases documents carry alpha-numerical information, occasionally combined with photographs, graphics and other visual data.
- Typically, document delivery services are provided through a wide variety of technical means and media. Even though the days of xeroxing and mailing on demand are far from over, electronic storage (“electro-copying”) and transmission are undoubtedly the technical means of the future.
- Companies in service industry such as banking, financial services and IT have also started realizing significant advantages in sourcing goods and services from multiple suppliers while benefiting through improved pricing and enhanced services.
- A proactive organization should integrate supplier performance scorecards with real-time data to measure and identify key supplier related events, which could impact business operations and revenue.
- Online means the state of being in direct and immediate communication with the computer on which the database is loaded from a remote terminal.
- It is an interactive system i.e. it allows the user to input instruction, receive responses and then modify or manipulate the retrieved results.
- Journal publishers have also begun to offer similar situation, for example Elsevier, for electronic version of their journals. Large R&D libraries can take advantage of these developments and provide desktop access to key database and electronic publications to their users.

## **6.8 Keywords**

***Bibliographic and Cataloguing Services:*** This service can also be prepared from different databases available on the Web.

***Bulletin Board Services:*** A bulletin board is a public discussion area where people can post message without sending them to anyone's e-mail address that can be viewed by anyone who enters the area.

***Current Awareness Services:*** It is an essential function of management to make the members of its organization aware promptly of such new information which will most likely contribute to performing their individual task with the highest possible degree of competence.

***Document Delivery by Processing Copies from Suppliers:*** This is a common method of obtaining documents demanded by the user if they are not held by the library, or by the libraries covered by ILL arrangement.

***Document Delivery from Library Collection:*** This involves providing a document requested by the user by picking it up from the library itself, if it is available.

***Document Delivery Services (DDS):*** Document delivery services (DDS) is concerned with the supply of document to the user on demand either in original or its photocopies irrespective of the location and form of original document.

***Document Delivery through ILL:*** In this method, the library contacts another library, which has the required document and obtains it through inter-library loan and delivers to the user who is a bonafide member of the borrowing library.

***E-mail:*** E-mail (electronic mail) is the exchange of computer-stored messages by telecommunication. E-mail messages are usually encoded in ASCII text.

**Frequently Asked Questions (FAQ):** FAQs are compilations of information which are the result of certain questions constantly being asked hence the name FAQ.

Notes

**Online:** Online means the state of being in direct and immediate communication with the computer on which the database is loaded from a remote terminal.

## 6.9 Review Questions

1. What is Document Delivery Services (DDS)?
2. Discuss the models in Document Delivery Service.
3. What are the challenges and issues in Document Delivery Service?
4. What is Supplier performance management? Also explain the supplier scorecards.
5. Write down the meaning of Online Service in Library Services.
6. "Several publishers today offer web-based, intranet solutions for providing local access to their databases". Discuss.
7. Discuss the Web PAC and its advantages.
8. Explain about reference services.

## **Answers: Self Assessment**

1. Document delivery services (DDS)
2. Image or character encoded (OCR)
3. Document Delivery from Library Collection
4. Document Delivery through ILL
5. Document Delivery by Processing Copies from Suppliers
6. Electronic/digital
7. Proactive organization
8. Remote terminal
9. Inter-library
10. Internet
11. False
12. False
13. False
14. True
15. False

## 6.10 Further Readings



Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

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Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



Online links

[www.rmit.edu.au/library/dds](http://www.rmit.edu.au/library/dds)

[www.bl.uk/articles](http://www.bl.uk/articles)

[www.itcompany.com/inforetriever/cir\\_dd.htm](http://www.itcompany.com/inforetriever/cir_dd.htm)

## Unit 7: Translation and Reprographic Services

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### Objectives

After studying this unit, you will be able to:

- Define the term translation and Translation Services
- Understand Skill Profile of Technical Translators
- Explain Translation Services in India
- Analyse Reprographic Services
- Describe Basic Reprographic Methods and Equipment
- Explain Special Reprographic Methods

Notes

## Introduction

Various types of reproductions – photocopies, photographs, digital images and their paper copies – are available for publications. Reproductions are made for private use, research needs or publication activities requiring a high level of quality. Customers are also given the opportunity to carry out reprographic imaging with their own equipment. This unit will help you by providing information about the various equipment and methods available, the criteria for choosing a method, and how to work with printers and graphic arts specialists. Before studying these methods and equipment, however, you need to learn about the legal aspects of copying.

### 7.1 Meaning of Translation Services

Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text. In the context of the translation process and end product, human translation contains many definitions and interpretations. Professional translation experts view the majority of them as meaning-based, which is in line with the age-old translation service tradition. Therefore, the human translation process is viewed as a detached and isolated practice wherein the professional translation agent has to handle textual material that contains all the information needed to make sense of the overall message. However, re-evaluating the definition of translation in the modern context may be required in order to better understand its true meaning.

The indispensable contribution of textual examination and genre studies root from the significance of contextualizing texts. In a manner of speaking, “meaning” isn’t defined as content anymore; it’s now being modified and parleyed in accordance to external factors that play an important role in the comprehension of the communicative act involving formal and social conventions, communicative purposes and private intentions, places or ceremonies, institutions, and actors or participants. The rise of the Internet has fostered a world-wide market for translation services and has facilitated language localization. Translation studies deal with the systematic study of the theory, the description and the application of translation.

Every translator must define the services they will offer. It is important to be aware that translation is not the only service a language professional may offer and that it is possible for a professional translator to offer different services in different fields. Together with services, translators must also choose the fields in which they will offer these services. Some language professionals may feel comfortable with offering interpreting services in a given field as they may have such a good knowledge in a specific field that interpreting in real time may come natural to them while they may only focus on translation in others.

The same applies to the language-service combination. While some language professionals may offer translation services in all the languages they handle, they may focus on interpreting only in those languages they handle best.



*Caution* Once services and specialization have been defined, translators must set their rates, including surcharges, discounts and minimum charges. Rates will depend on the translator’s desired income, productivity, the amount of vacation taken and other factors.

For eastern languages, translation is all about transforming the message. For western languages, translation is all about transporting it from one language to another. Ironically, the translation for the word “translation” shares no common ground to the languages around the world, so its meaning is ultimately ambiguous depending on cultural context. The balance between source



material faithfulness and pragmatic adaptation via localization will probably be debated by theorists and experts for years—perhaps centuries—to come, which gives new meaning to the term, “Lost in Translation”.

As a librarian working in a public library with a highly diverse, culturally and linguistically, service area it is easy to understand just how important it is to serve our different communities in their native language. How can libraries expect inform patrons adequately about their borrowing policies if all of the information published or available is in English? It is not a new idea to translate information into different languages so that non-English speaking patrons can enjoy the same benefits and use the library just as English-speaking patrons do.



*Did u know?* Providing a Spanish translation service to libraries and information centres in Colorado at no charge is a new concept.

Interpreting and translation are two closely related linguistic disciplines. Yet they are rarely performed by the same people. The difference in skills, training, aptitude and even language knowledge are so substantial that few people can do both successfully on a professional level.

On the surface, the difference between interpreting and translation is only the difference in the medium: the interpreter translates orally, while a translator interprets written text. Both interpreting and translation presuppose a certain love of language and deep knowledge of more than one language.

## Self Assessment

Fill in the blanks:

1. .... is the communication of the meaning of a source-language text by means of an equivalent target-language text.
2. Translation studies deal with the ..... study of the theory, the description and the application of translation.
3. Every translator must define the ..... they will offer.

## 7.2 Skill Profile of Technical Translators

Recent decades have seen the work of translators shift into several new dimensions, mainly due to technological advances and the process of globalization. The dramatic increase in the information to be translated, along with the availability of translation-memory tools, has led to changes both in the translator’s work processes and in relations with clients.

The differences in skills are arguably greater than their similarities. The key skills of the translator are the ability to understand the source language and the culture of the country where the text originated, then using a good library of dictionaries and reference materials, to render that material clearly and accurately into the target language. In other words, while linguistic and cultural skills are still critical, the most important mark of a good translator is the ability to write well in the target language.

Even bilingual individuals can rarely express themselves in a given subject equally well in both languages, and many excellent translators are not fully bilingual to begin with. Knowing this limitation, a good translator will only translate documents into his or her native language. This is why we at Language Scientific absolutely require our technical translators only translate into their native language, in addition to their subject matter expertise.

## Notes

An interpreter, on the other hand, must be able to translate in both directions on the spot, without using dictionaries or other supplemental reference materials. Interpreters must have extraordinary listening abilities, especially for simultaneous interpreting. Simultaneous interpreters need to process and memorize the words that the source-language speaker is saying now, while simultaneously outputting in the target language the translation of words the speaker said 5-10 seconds ago. Interpreters must also possess excellent public speaking skills and the intellectual capacity to instantly transform idioms, colloquialisms and other culturally-specific references into analogous statements the target audience will understand.

## Self Assessment

State whether the following statements are true or false:

4. The differences in skills are arguably lesser than their similarities.
5. The key skills of the translator are the ability to understand the source language and the culture of the country where the text originated.

## 7.3 Translation Services in India

Literature and information are printed in so many languages. Normally, people know one or two languages. Hence translation services into their required language are essential. Publication of literature and 15 lakhs articles are printed in more than seventy languages but due to lack of knowledge of language, people cannot read the same. Fifty per cent literature is printed in English but all people do not know English. Hence Translation service is essential.

### Translation Centres in India

1. National Translation Centre – NTC
2. European Translation Centre – ETC
3. British Lending Library, Boston – BLL

### Published List of Indexes

1. *Authors list of Publication*: 1953 and its Supplements 1954.
2. Bibliography of Translation of Russian Scientific Technical Literature 1954-56.
3. Translation Monthly, 1955-58
4. Technical Translation, 1959-67.
5. Consolidated index of Translations into English, 1969
6. National Translation Centre, 1967 onwards, Translation Register-Index

### To avoid duplication in Translation Work

1. Commonwealth Index of Unpublished translations at ASLIB.
2. U.S. Research and development reports which list translations as well as reports and other Government publications.
3. Iron and Steel translation of iron and steel industries.

**Translation by INSDOC is available from Various Languages into English**

Notes

Translation by INSDOC is available from Various Languages into English are as under.

1.	Arabic	12.	Norwegian
2.	Bulgarian	13.	Polish
3.	Chinese	14.	Portuguese
4.	Czech	15.	Rumanian
5.	Danish	16.	Russian
6.	Dutch	17.	Stovak
7.	French	18.	Spanish
8.	German	19.	Swedish
9.	Hungarian	20.	Serbocrottion
10.	Italian	21.	Ukrainian
11.	Japanese		

**Self Assessment**

Fill in the blanks:

6. NTC stands for .....
7. ETC stands for .....
8. BLL stands for .....

**7.4 Meaning of Reprographic Services**

Reprographics refers to all means of copying and duplicating; it includes automated typewriting, phototypesetting, facsimile, and micrographics systems, as well as basic copying and duplicating systems. Because it involves the reproduction of all types of handwritten and printed documents, as well as charts, drawings, and photographs, it is a vital subsystem of an organization's information system. As an office professional, you will probably be involved daily in reprographics decision making.



*Example:* How would you prepare 500 copies of a flier announcing a new product, or 20,000 copies of a brochure? How would you make original-appearing copies of a letter to be sent to 20 individuals who have just been promoted in your Firm? How can you send a copy of a drawing to an office in another city within 5 minutes? How can you save file space and still maintain the records you need?

It is, however, the collections' rules of use, requirements for conservation and security as well as copyright regulations that ultimately determine the kinds of reproductions that can be ordered and made from the various types of materials.



*Example:* Self-service copying is always subject to restrictions if the material is extremely rare or there is a danger that it could be damaged during the copying process. In these cases the reproductions must always be ordered through the Library's Reprographic Service.

Notes

### 7.4.1 Legal Aspects of Copying

Although modern technology provides the capability to produce seemingly unlimited copies of photographs, drawings, musical scores, and other documents, such reproduction must be within the law. Obviously, reproducing currency (counterfeiting) is illegal. Documents illegal to reproduce in all states include drivers' licenses; amateur radio operators' licenses; classified government documents, maps, photographs, drawings, and publications; draft registration cards; badges, identification cards, passes, or insignia carried by members of federal departments and bureaus; automobile registrations; passports, citizenship, and naturalization papers; and U.S. government securities. Reproduction of obscene or morally offensive material in written or graphic form is limited by both local laws and ethical judgment. Reproducing copyrighted material without permission may also be illegal.

#### Copyrighted Materials

The Copyright Law of 1976, the first revision of the U.S. copyright statute since 1909, specifies what constitutes copyrighted material and provides guidelines for reproducing such material. According to the law, copyrighted materials are "original works of authorship fixed in any tangible medium of expression" and thus include literary works; musical works; dramatic and choreographic works; pictorial, graphic, and sculptural works; audio-visual works (such as motion pictures); and sound recordings. Works are copyrighted from the moment of creation, whether published or unpublished. Works prepared for an employer are copyrighted by the employer unless otherwise agreed upon. For example, if an employee writes a manuscript while assigned to a job paid for by the employer, the writer's employer normally holds the copyright to the manuscript. However, the employer could agree to assign the copyright to the employee. Published materials should show copyright information in the form of a copyright symbol ©, the year of the first publication of the work, and the name of the owner of the copyright. This information generally appears immediately after the title page in a book, but it could appear in other places, depending on the type of document.

#### Copyright Permission and "Fair Use" Guidelines

People can obtain permission to reproduce copyrighted material by writing to the owner of (he copyright, requesting use of the material and stating the reasons for wishing to use it. In some cases, a fee will be charged to use the material. This clause specifies that, in certain circumstances, the reproduction of copyrighted material is not "an infringement of copyright." These special circumstances require that reproduction be "for purposes such as criticism, comment, news reporting, teaching (including multiple copies for classroom use), scholarship, or research. . . ." Questions you should ask to determine fair use include:

1. Is the purpose of reproduction commercial or non-profit?
2. What is the nature of the copyrighted work? (That is, while copying two or three paragraphs from scholarly article would be permissible; you might need permission to copy a poem or to copy the music and lyrics of a published song.)
3. How much of the material is to be reproduced?
4. What effect will copying have on the market for the copyrighted work?
5. How often we need to copy the material? Is it systematic (regular, planned copying)?

For example, reproducing two or three pages of a book for one class would be acceptable, while copying ten chapters for several classes would be illegal unless permission were granted by the copyright holder. Likewise, making small numbers of copies of the same copyrighted article for class-work would be illegal if it occurred regularly, such as every few months.

## Self Assessment

State whether the following statements are true or false:

9. Reprographics refers to all means of copying and duplicating.
10. Reproduction of obscene or morally offensive material in written or graphic form is independent to both local laws and ethical judgment.
11. Reproducing copyrighted material without permission 100% legal.
12. Published materials should show copyright information in the form of a copyright symbol ©.

## 7.5 Basic Reprographic Methods and Equipment

Five possible choices for reproduction will generally be available: (1) carbon paper, (2) automated typewriters, (3) copiers, (4) duplicators, and (5) in-house printing or commercial reprographics. In the discussion, “master” refers to the reproducing surface on which the typing, drawing, lettering, or shading is done. In some cases, a master can be the original document to be reproduced; in other cases, a special master must be prepared. Masters may be paper, metal, or other materials; and they may be prepared in various ways, including typewriting and/or phonographic processes. They are prepared to enable the machine to “read” what you want reproduced, and each machine has a different way of interpreting the various reproducing surfaces.

### 7.5.1 Carbon Paper

Although carbon paper or copying film is not as popular as it once was, estimated costs are less than one-half that of photocopying machines. Carbon packs used in conjunction with text-editing typewriters are especially useful because the machines play back (print) copy that has already been corrected. Another timesaver is specially treated paper known as carbonless copy paper that imprints without using a separate sheet of carbon paper. This type of copy paper is frequently used for multicopy forms, in determining whether to use carbon paper, office professionals should weigh the costs of the time needed to correct carbons against the slightly higher costs of copies from copying machines.

### 7.5.2 Automated Typewriters

Automated typewriters can automatically play back previously recorded copy that has been stored in the form of machine memory, cassettes, paper, or magnetic cards and tapes. Depending on the speed of the printing equipment used, originally typed documents can be turned out in seconds. When evaluating the use of an automated typewriter, remember that the higher cost of typed copy must be weighed against the benefits typed copy gives. In such applications as fund-raising campaigns or meetings, the recipient of the letter will value the personalized touch that originally typed copy provides.

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### 7.5.3 Copiers

Because a copier is a machine that reproduces copies directly from an original document, the copies are commonly referred to as photocopies. While some machines must be fed (the copy must be inserted into the machine), other machines can copy such documents as pages from books when the original is laid on top of the machine.

The copying process, like photography, is based on the sensitivity of a surface (either in the machine or in the copying paper or master) to light or heat radiation. The light or heat in the machine reacts with chemicals, either in the machine or in the paper or master, to produce an image. Dry-process copiers operate with dry chemicals only, while wet-process copiers operate with liquid chemicals. Most copy machines today use a dry process, such as an electrostatic process or thermography; while some older machines use a wet process, such as diffusion transfer or stabilization. The diazo process can be either dry or wet.

#### Electrostatic Processes

There are two common electrostatic processes: the transfer process, also known as the xerographic process, which is used in plain-paper copiers (PPCs), and the direct image process, also known as the Electrofax process, which is used in coated-paper copiers (CPCs). A fine black powder, called toner, forms the image on a copy made by either electrostatic process.

Figure 7.1: A Convenience Copier: The Xerox 660 Plain-paper Copier. (Courtesy of Xerox Corporation)



Source: [210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm](http://210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm)

In both electrostatic processes, the image is exposed to a photoconductor (hence the common terminology of “photocopier”) to develop the image. In the PPCs, a coated metal plate or drum serves as the photoconductor; in the CPCs, a special coating on the copy paper serves as the photoconductor. CPCs generally produce better halftones (shaded areas) and sharp images, but the coating on the paper is difficult to write on, and the paper is more expensive than that used in the PPCs.

#### Thermographic Process

In thermography, a heat-sensitive sheet and the original are exposed to infrared light. The heat-sensitive sheet is placed on top of the original before both are inserted into the machine.

For this process to be effective, the printed information on the original must be carbon-based, such as the material found in pencils, carbon-film typewriter ribbons, or specially produced ballpoint pens. However, an original can be turned into a carbon-based copy by making an electrostatic copy of it. The final product may be a lightweight, somewhat brittle, buff-coloured copy: a thermal spirit master; a thermal stencil master; or a transparency.

### Diffusion Transfer and Stabilization Processes

Diffusion transfer and stabilization processes require that negatives be prepared, developed, and printed. Light, specially coated paper and a developer solution are used. Because of the high cost and time involved, these processes are not generally used for office copying.

### Diazo Process

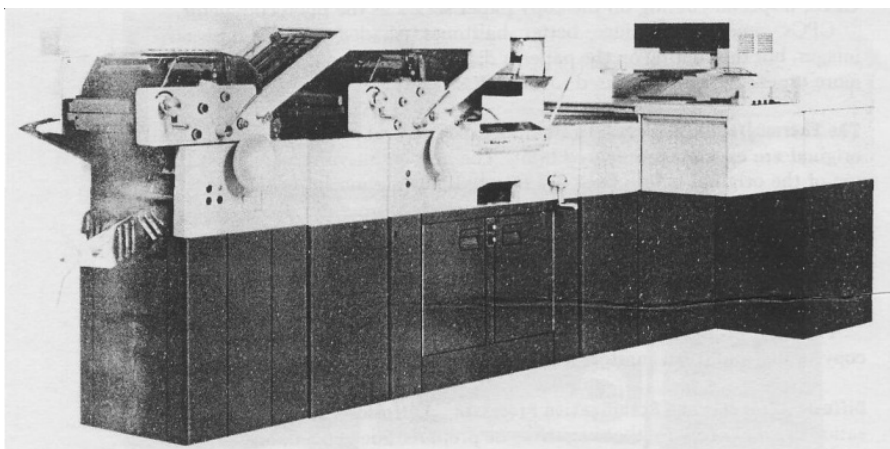
In the diazo process, the original is fed into a machine with specially coated copy paper and exposed to ultraviolet light. Because electrostatic copiers can accommodate large sheets of paper, diazo applications mainly include artwork and blueprints. With this method, however, correspondence can be copied at the rate of about three copies a minute for a cost of less than a cent a copy.

### Copying Equipment and Features

Two main categories of copiers are convenience copiers and copier-duplicators:

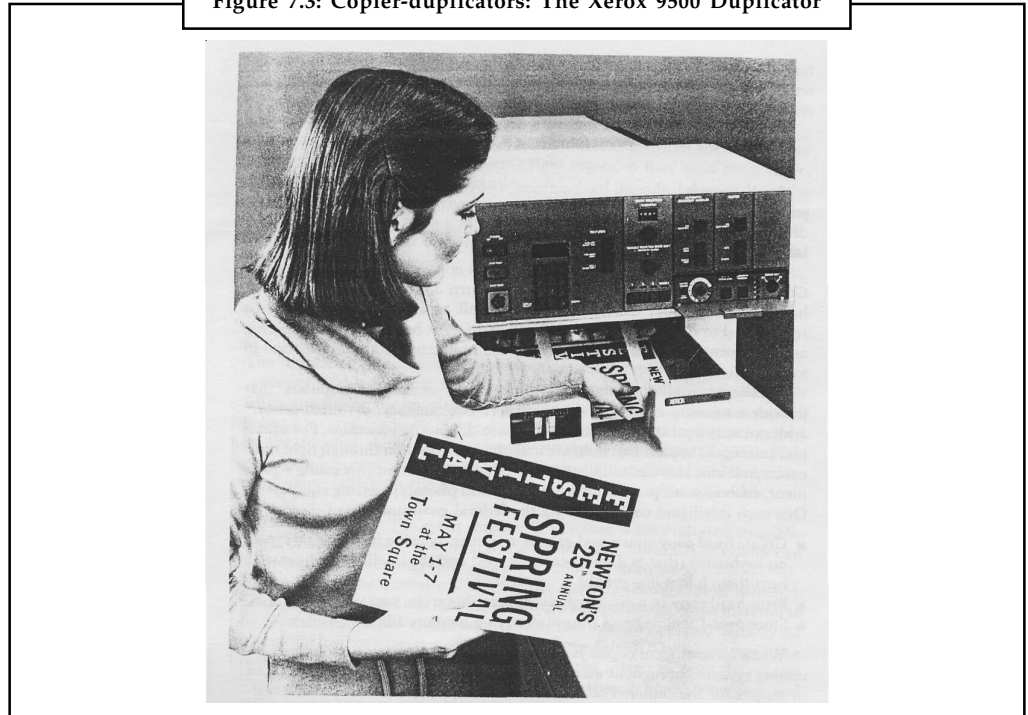
- **Convenience Copiers:** These are usually small, table- or desktop size copiers or may be larger consoles; large organizations may place “convenience” copiers in many locations throughout their building(s).
- **Copier duplicators:** These are large machines that combine copying and duplicating capabilities. Generally, copiers are thought of as machines that make copies directly from an original, while duplicating machines require a master from which copies are run. Copier-duplicators, however, do not fit into either category. These machines are hybrids that can make copies directly from an original yet have large duplicating capabilities; they can efficiently produce large volumes of high-quality copies that could traditionally be produced only through the offset duplicating process.

Figure 7.2: Copier-duplicators: The AM Multigraphics TCS/System



Notes

Figure 7.3: Copier-duplicators: The Xerox 9500 Duplicator



Source: [210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm](http://210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm)

### Copier Supplies and Maintenance

Copier equipment vendors will generally train a few employees in any organization as key operators. These operators, who may be secretaries, are responsible for maintaining the paper supply, adding toner and developer and clearing paper jams.

Paper is either sheet fed or roll fed into the machine. With sheet-fed copiers, the paper is usually placed in a tray or cassette in the machine. Some machines feature interchangeable, removable cassettes for different-sized paper, such as legal and standard size. With roll-fed copiers, the machine cuts off only as much copy as is needed; the machine may or may not match paper size to your original, depending on its particular features.

Toner, which is a derivative of carbon black, provides the darkness of imprint. If your copier is producing light copies, it may need more toner, which comes in cartridges or bottles.

Toner is classified as two-component or mono-component. With a system that uses a separate toner and developer, two-component toner is required. Mono-component toner combines both toner and developer so that only one cartridge of toner is needed.

### 7.5.4 Duplicating Processes

The “duplication” category of reproduction includes spirit, stencil, and offset processes. Although spirit and stencil were the most popular processes of the fifties and sixties, the seventies saw copiers taking over. Convenience copiers became favoured for low-volume duplicating, and copier-duplicators gained as the favoured duplication processes for large jobs. Stencil and offset processes, however, continue to be economical alternatives for high-quality copy—especially with the introduction of convenient tabletop models.



## Spirit Duplicating

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The spirit duplication process is also referred to as the liquid or fluid process, hectograph, Azograph, and “ditto.” The master can be prepared by thermography, typed, written, or drawn on.

The master set contains a carbonlike covered transfer sheet which is placed face up behind the master, creating a reverse image of the material to be reproduced. When the master is run, the image is printed directly on paper that has been moistened with alcohol (the spirit). The paper removes a portion of the dye from the reverse image on the master to print the correct image. The reproduced copy is usually purple, though black, blue, red, and green master sets are available.



### Notes Reason for Rare use of Spirit Duplicating

Spirit duplicating is rarely used in business offices today for three reasons:

1. The copy is not as clear as that of other processes.
2. “Ditto” copies cannot be easily reproduced by copying machines because the print is not dark or sharp enough.
3. The process is messy—dye from the transfer sheet and master is easily rubbed off on typewriters, hands, and furniture.

The process, however, is economical and is therefore used by some educational institutions that want to provide faculty and staff with a fast, economical means of duplicating. Masters are easy to prepare, and the machine is small and easy to operate. Business use would be restricted to internal memos that would not need to be copied further.

## Stencil Duplication

The stencil process, also known as mimeographing, is more versatile than the spirit process. Typically, the master for the stencil process is a wax-covered sheet-oil fibrous material, though it may also be plastic or metal. The master may be prepared by using any of four different methods—thermography, facsimile stencil copying, embossed plate printing, or direct cutting. A thermal stencil master is prepared by using a thermographic machine (in the same way that a thermal spirit master is made). The facsimile stencil imager or scanner is a separate machine, which transfers the image from an original to the stencil. Embossed plate printing is a commercial process, though some centralized reprographics departments have this capability. A directly prepared stencil master is typed with a disengaged ribbon by using the stencil setting on the typewriter. A sharp, pointed instrument called a stylus can be used to make non-typewritten images on the master. When the master is “cut,” wax fibres are separated or opened, leaving the fibre backing intact. The ink then flows through the fibre backing onto the paper and prints each copy. The use of different coloured ink produces black or coloured print. The ink is available either in liquid or paste form, and the paper has a rougher, more absorbent surface than that used in the spirit process. Because of its more simplified, cleaner operations, businesses that used the spirit duplicating process in the past are now using stencil duplicating. Stencil duplicating, which has always been less expensive than offset, is now also competing in quality with the newer tabletop offset duplicators.

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Offset Duplicating

Offset machines require a trained operator because the ink and water used in the process have to be carefully mixed and because the machine must be cleaned regularly. For these reasons, offset equipment is usually located in a centralized reprographics department.

Although offset masters can be prepared in various ways, the two major types are:

1. **Direct Imaging:** Typewriting or imprinting directly on the master
2. **Imaging on Presensitive Masters:** Using aluminium-based or plastic paper sensitized with a coating that accepts a photographic image

Figure 7.4: Stencil Duplication

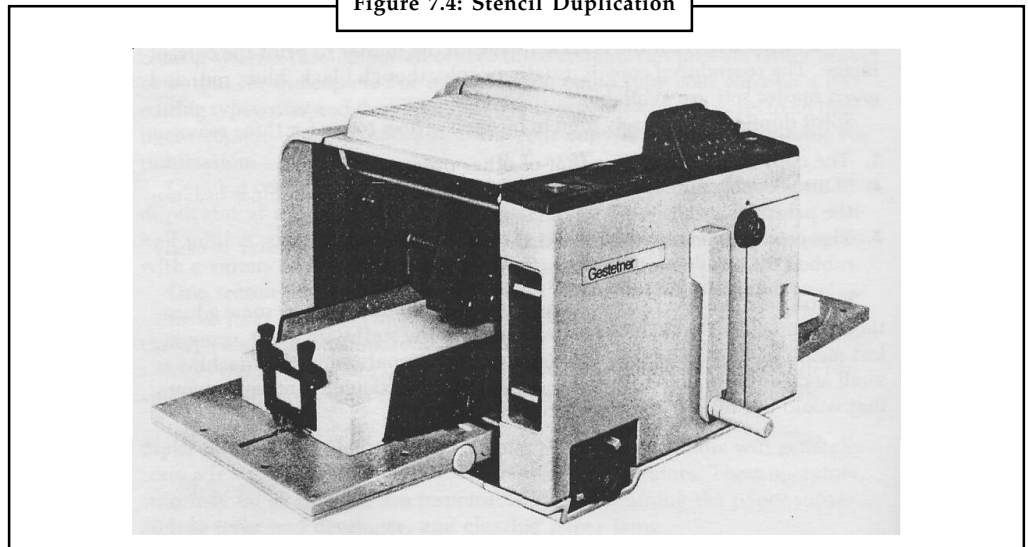
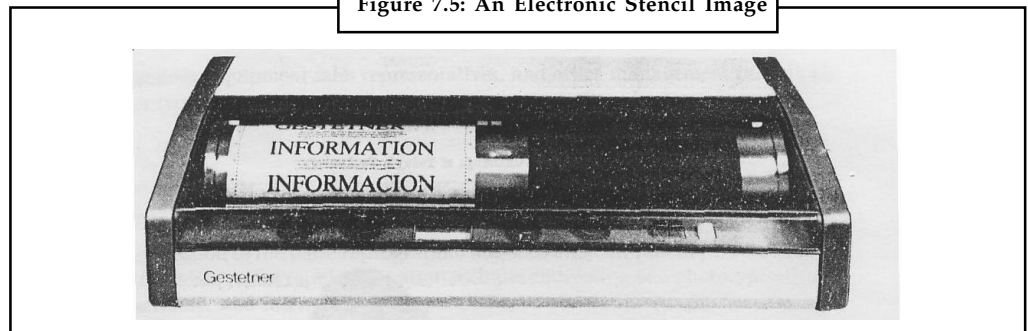


Figure 7.5: An Electronic Stencil Image



Source: [210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm](http://210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm)

Direct-image masters are easy to prepare, and corrections can be readily made with a soft pencil eraser. Imaging on presensitive masters can be accomplished on some electrostatic copiers. Other methods of master preparation include the use of special master-maker machines as well as electronic stencil scanner equipment.

A paper master can be used for about 2,500 copies, while an aluminium plate can be used for up to 50,000 copies, depending on the process used. Because of [he large volume, economy, and high-quality copy, offset is the favoured method of duplication for companies whose work warrants the employment of an operator with special skills. Offset will print more clearly than is possible for any other duplicating or copying method mentioned thus far. The process will

print artwork and halftones (shaded areas of copy, such as light parts of a photograph or drawing), and the use of colour is almost unlimited. For organizations that prefer this high-quality copy yet want smaller equipment that is easier to use, tabletop models are now available and are competitive with stencil duplicators in terms of cost and convenience.

### Manufacturer's Terminology and Machine Selection

Because of the variation in manufacturers' terminology, an "automatic printer" could be either offset or stencil equipment. Similarly, a "duplicator" could be a copying machine. Determine the correct classification by asking the manufacturer what type of master is accepted by the particular machine. In selecting a machine for office purchase, it is important to determine the particular office needs and then to prepare a list of specifications. Included in the specifications would be how many copies of each original document are needed, what size document will usually be reproduced, the availability of personnel to operate the machine, the type of paper and supplies required, and the availability of maintenance and repair service.

Figure 7.6: A Desktop Offset Duplicator



Source: [210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm](http://210.46.97.180/zonghe/book/197-office%20procedure/chapter6.htm)

### Self Assessment

Fill in the blanks:

13. In-house printing is also termed as ..... reprographics.
14. .... image masters are easy to prepare, and corrections can be readily made with a soft pencil eraser.

## Notes



Caselet

### TLS Case Interactive

**T**ransPerfect Legal Solutions (TLS) Case Interactive is a leading provider of web-based review platforms that enable firms to conduct due diligence and litigation support in a secure online environment. The Case Interactive Electronic Case Site platform combines a user-friendly design with optimized technology for high-speed document reviews, making it the next-generation solution for the litigation process. Powered by best-of-breed document storage, indexing, and web front-end technologies, Case Interactive enables litigation stakeholders to securely host and access all case-related documents from anywhere in the world.

#### Case Interactive Key Features

- **Speed** – Highly optimized: One million documents can be accessed by one thousand users within one second (1-1-1 system).
- **Fully Unicode Compliant** – Supports all character-based languages in virtually any file format.
- **Web-Based Platform** – Highly intuitive Web 2.0 application that runs on any browser.
- **Zero-Install PDF Viewer** – Review and redact PDF files directly in your browser.
- **Universal Document Display** – Review over 300 native file formats with our Outside-In™ viewer.
- **HTML Document Preview** – Rapid HTML rendering for document review and navigation.
- **Automatic Metadata Extraction** – Metadata can be automatically extracted from MS Office documents and other popular file formats.
- **Advanced Search** – Save time with state-of-the-art searching technology, including the highlighting of hit terms across virtually all file types.
- **Parent/Child Navigation** – Efficiently navigate from one parent record to the next.
- **Security** – Case Interactive is 8.0 hosted in a SAS 70 Level II *certified* facility and encrypted with multiple layers of security and audit controls.
- **24/7/365 Support** – Rely on a global support team with an average call resolution time of under three minutes.

Source: <http://www.translations.com/products/case-interactive>

## 7.6 Special Reprographic Methods

In addition to the basic reprographic methods and equipment just described, a full-scale reprographics operation includes composing and phototypesetting, facsimile, and micrographics capabilities.

### 7.6.1 Composers and Phototypesetting

Composer typewriters offer proportional spacing and a greater variety of type styles than a standard or text-editing typewriter. By setting a dial, a typist can automatically set margins and spaces between lines. Because typeset copy uses proportional spacing, the copy takes up less

space than that produced by a standard typewriter. It is also more attractive and costs less. The paper saved by typesetting can amount to 30 to 50 per cent, which is significant if you are considering running 1,000 copies of a 20-page booklet. Figure 7.7 shows various type styles.

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Figure 7.7: A Phototypesetter: The Entry-level EPICS System, which Includes Two Intelligent Online



*Notes* The typefaces used in this book hold your attention and have better readability, resulting in better comprehension of the content, than would a typed book.

Typesetting should be used for forms, manuals, catalogues, and internal reports, as well as for letters and announcements that require more than ordinary type faces.

In phototypesetting, a photographic technique is used to set the type; the phototypesetting machine takes pictures of each character one at a time and then prints them at high speeds onto photosensitive paper. Before the development of the phototypesetting machine, composer typewriters were used to prepare special copy. The new phototypesetters are referred to as photocomposers because they combine photographic typesetting capabilities with text-editing capabilities. Photocomposition has, in fact, provided the ultimate link between the word processing department and the printing department, creating an integrated information/word processing operation that provides more services than correspondence-only word processing centres. Photocomposition allows the typist to edit copy and insert typesetting programming commands such as size and style of type, spacing, and alignment (such as number of columns, right or left margin justification, or centred) — all on one machine.

A multitude of input possibilities are available with sophisticated word processing systems that include photocomposition facilities. Depending on the individual machine, photocomposition equipment can accept input from diverse keyboards in the form of paper tape readers, optical character readers (OCR), and computer mag tapes. Various typewriters can be connected to photocomposition equipment, and the machines can communicate with each other over long distances.

### 7.6.2 Facsimile

Facsimile, which is also known as “fax,” is the transmission of graphic communications from one location to another. A facsimile machine is both a scanner and a recorder. The image to be

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copied is scanned (“read”) at one location, converted to an electronic signal, and sent to a machine at another location where the signal is translated into an image and recorded. Sometimes known as telecopiers, these machines are a form of electronic mail because the machines can be in the same building or in different hemispheres of the world.

Figure 7.8: A Facsimile Machine: The Exxon 2150 QWIP®. (Courtesy of Exxon Office Systems, a Division of Exxon Enterprises, Exxon Corporation)

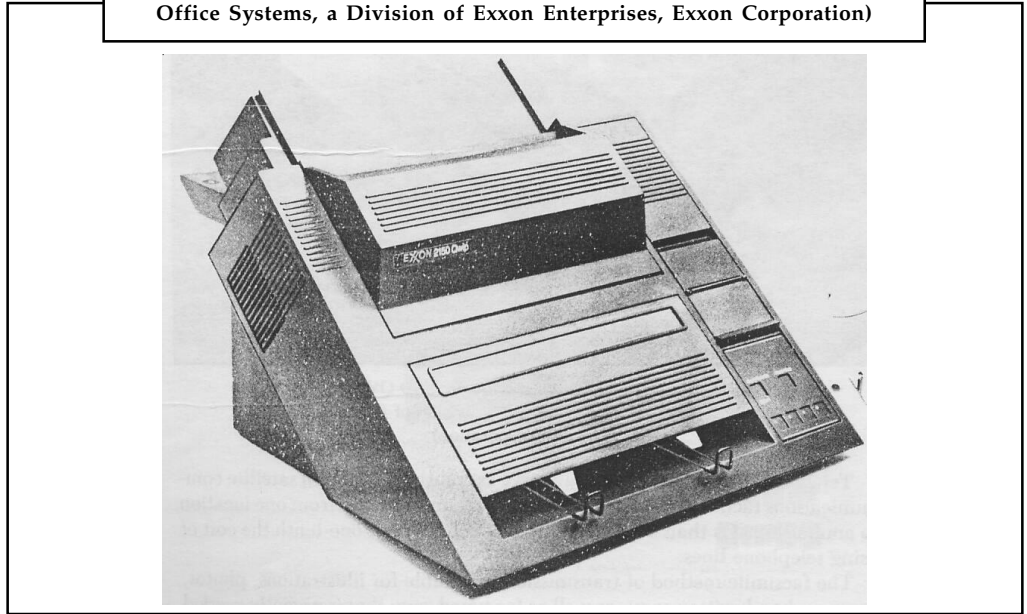
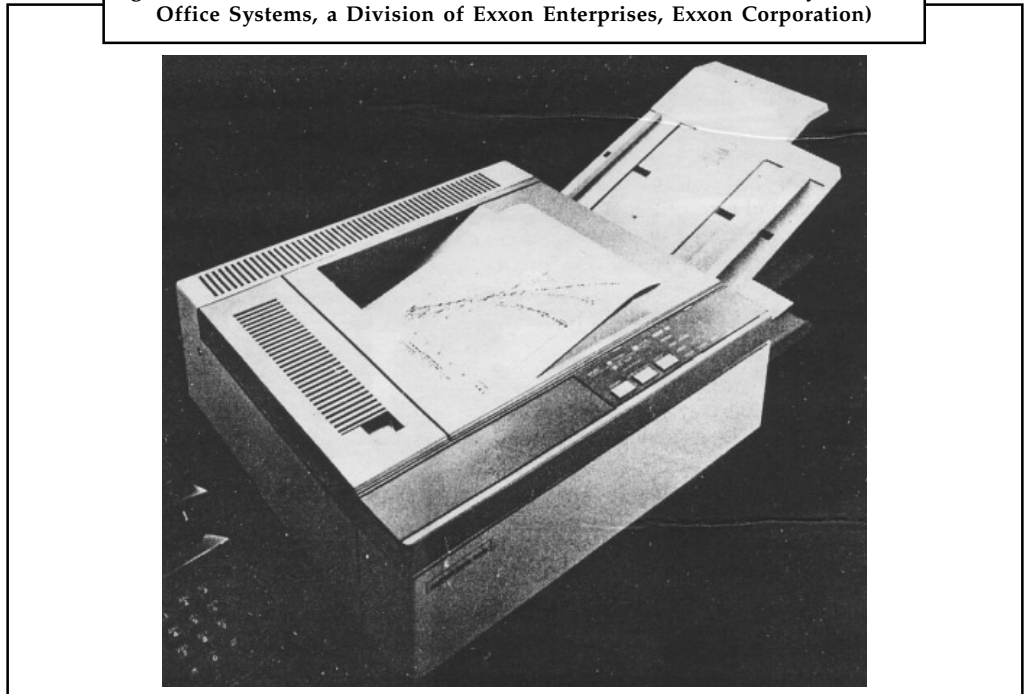


Figure 7.9: A Facsimile Machine: The Exxon 2310 OVVIP. (Courtesy of Exxon Office Systems, a Division of Exxon Enterprises, Exxon Corporation)



Telephone lines or satellites may serve as transmitters. With satellite communications facilities, it is possible to send facsimile copies from one location another for less than 20 cents a page, which is about one-tenth the cost of using telephone lines. The facsimile method of transmission

is suitable for illustrations, photos, maps, or handwritten copy, as well as for typed copy that is urgently needed in the receiving office. Newer models can transmit a standard 8Vz X 11 inch page of pictorial and printed matter in only 2 or 3 minutes' time.

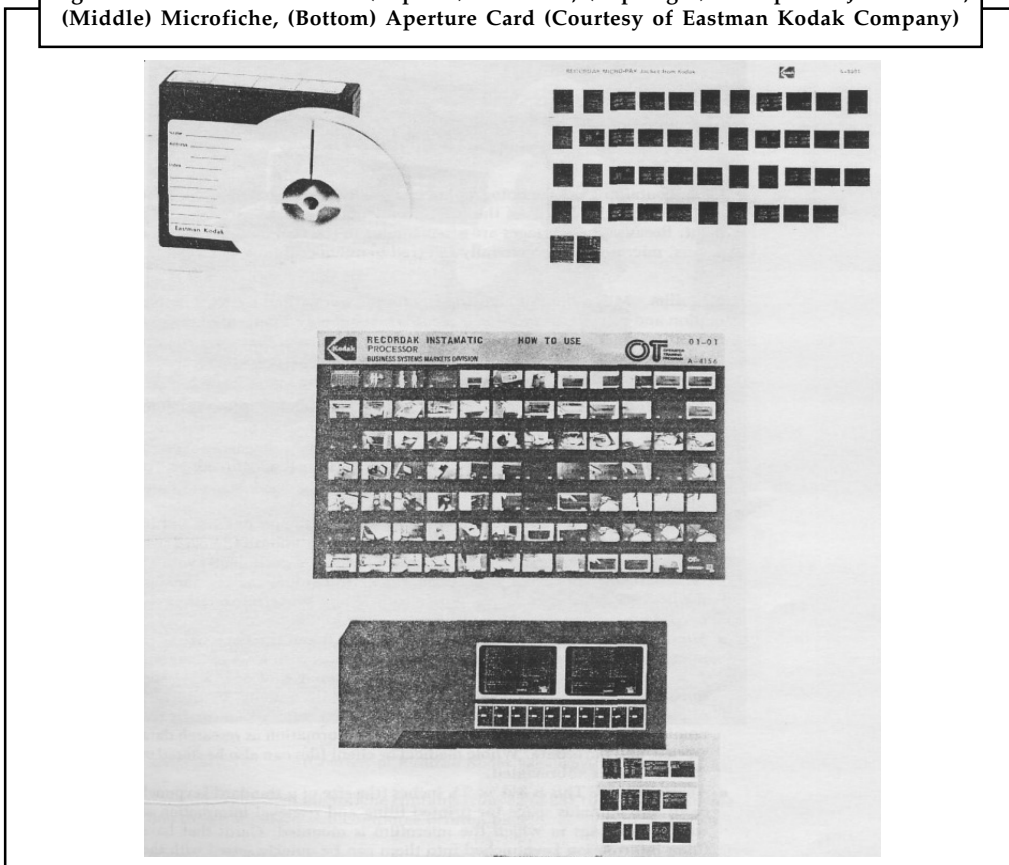
### 7.6.3 Micrographics

Micrographics are the production of microform and the preparation of enlarged, large copy from these forms. A microform is any form or type of film or paper containing microphotographic images. These images are small photographs where the details of the subject may not be visible without enlargement. Because these images are often similar to the film used in movie projectors, microforms are generally referred to as "microfilm."

#### Microfilm

Microfilm is used primarily for the storage and retrieval of information and records. Microfilmed records take up only 2 per cent of the space needed for paper records, reducing volumes of records that once required thousands of square feet of storage space to a few square feet, Microfilm is available in four forms:

Figure 7.10: Microfilm Forms: (Top-left) Roll Film, (Top Right) Transparent Jacket Film, (Middle) Microfiche, (Bottom) Aperture Card (Courtesy of Eastman Kodak Company)



- **Roll:** Most microfilm begins as a roll of 16 mm or 35 mm film. The information can be retained in the roll form or converted to other formats. A cartridge is a roll of film with a plastic cover, called a magazine. The cartridge provides faster access to a roll of film because it self-threads into the reader; a file label can also be directly applied to the 4x4x1 inch magazine.

Notes

- **Transparent Jacket:** This is a holder for individual images or strips of film, ranging in size from 3 × 5 inches to 5 × 8 inches (standard file-card size). A 4 × 6 inch jacket can hold 70 images of letter-size documents, with 100 jackets being approximately 1-inch thick. Individual jackets can hold medical case histories, stock portfolios, or any other information that needs to be updated continually.
- **Microfiche (pronounced "microfeesh"):** This is about the same size as the microfilm jacket but is a whole sheet of microfilm with rows of images. A 4 × 6 inch sheet of microfiche can hold 98 images of 8 1/2 × 11 inch documents, with up to 500 images of smaller documents. Ultrafiche is microfiche with a much greater image reduction. Microfiche can be economically mass-produced to distribute such information as research data, service, and parts data. Whole medical or client files can also be stored on "fiche," as it is abbreviated.
- **Aperture Card:** This is 3 1/4 × 7 1/2 inches (the size of a standard keypunch card) and contains space for printed filing and retrieval information as well as openings in which the microfilm is mounted. Cards that have filing information keypunched into them can be quickly sorted with the use of data processing equipment. Useful applications of aperture cards include the filing of engineering blueprints and patent information.

Figure 7.11: A Computer Output Microfilm Processor.  
(Courtesy of Eastman Kodak Company)



### Computer Output Microfilm

Computer output microfilm, abbreviated COM, is film produced by converting computer-generated signals into readable characters at high speeds. Using magnetic tape as input, a computer output microfilmer can translate data into microforms at speeds of up to 120,000 characters a second, or 342 standard-size computer pages a minute. Because no hard copy is produced unless needed, COM eliminates the space required to store massive amounts of computer-printout information. Each computer-generated microfiche contains from 72 to 288 times more information than a standard-size-computer printed page.



## Microform Readers

Notes

Microfilmed records are viewed through a machine called a microfilm or microform reader or a combination microfilm reader-printer. Reader-printers not only enlarge the microimage and project it onto a viewing screen, but also project the image on sensitized paper and process it to produce a paper printout.

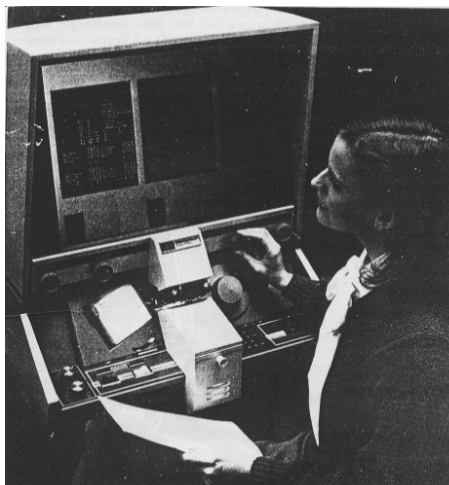
**Figure 7.12: A Microfiche Reader: The 3M Model 148.**  
(Courtesy of 3M Micrographic Products Division)



Several types of microfilm readers are available today, including lap readers, portable readers, desk readers, and free-standing units. Because each type is designed for one specific form of microfilm, your selection will depend on the type of microform used by your company.

At a bank on the East Coast, the adjustment and payroll departments use computer output microfiche and a reader-printer to answer inquiries about weekly payroll records or savings, checking, and loan accounts. Telephone inquiries are handled quickly because of the fast access to information, and the printer allows the operator to send a hard copy to the customer immediately. Each 4x6 inch sheet in the files next to the telephone contains 207 microimages, and the fiche is indexed by account number in a three-ring binder next to the reader-printer.

**Figure 7.13: A Reader-printer: The EF 6000 Page Search Reader-Printer.**  
(Courtesy of 3M Micrographic Products Division)



Notes



*Task* Survey several offices in your area. Which reproduction methods are most used? Combine your information with other members of the class and compile a short report listing the reprographics equipment, policies, and procedures used in local offices.

### Self Assessment

State whether the following statements are true or false:

15. In phototypesetting, a photographic technique is used to set the type; the phototypesetting machine takes pictures of each character one at a time and then prints them at high speeds onto photosensitive paper.
16. A facsimile machine is neither a scanner nor a recorder.



*Case Study*

### Quintiles Transnational

#### Background

Quintiles Transnational provides a full spectrum of product development and commercialization activities, from early compound development, laboratory services, and regulatory submission through sales and marketing. Headquartered near Research Triangle Park, North Carolina, Quintiles has over 16,000 employees and boasts offices in 50 countries.

#### Challenge

Specializing in product development services, commercialization, and pharma-bio development, Quintiles is a leading global pharmaceutical firm and member of the Fortune 1000. As such, they understood the need to create a more efficient and structured format for translating worldwide medical content.

- Quintiles' practice of pharmacovigilance involved using a unified set of global Core Operating Procedures to coordinate the clinical and post-marketing safety data collection, processing, and reporting of their marketed medicines. Translations.com was given the job of centrally translating this information into English for review.
- Many of the reports were hand-written and included medical shorthand, calling for qualified linguists with medical backgrounds.
- Hundreds of pages of medical reports containing complex medical terminology had to be translated and checked for accuracy, while technical notes needed to be deciphered and incorporated.

#### Solution

As a leader in the life sciences industry, Translations.com worked with Quintiles Transnational to create a solution that would accommodate their global growth.

- Translations.com assessed the exact requirements of the firm and developed a customized solution that would streamline the process and deliver the documents in the most functional format.

*Contd....*

- A system was developed to submit reports via a secure online portal, increasing overall efficiency and allowing for a full tracking report.
- Translations.com ensured medical consistency of language translations by using linguists with medical degrees in each respective branch of medicine.

Translations.com's strong partnership with Quintiles has resulted in the translation of reports from over ten different countries, including Argentina, Denmark, Hungary, the Netherlands, and Israel.

**Questions:**

1. Analyse the case and interpret it.
2. Write down the case facts

Source: [http://www.translations.com/casestudy/lspg/casestudy\\_02\\_ivr.html](http://www.translations.com/casestudy/lspg/casestudy_02_ivr.html)

## 7.7 Summary

- Various types of reproductions – photocopies, photographs, digital images and their paper copies – are available for publications.
- Reproductions are made for private use, research needs or publication activities requiring a high level of quality.
- Customers are also given the opportunity to carry out reprographic imaging with their own equipment.
- Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text.
- In the context of the translation process and end product, human translation contains many definitions and interpretations.
- Reprographics provides the copies needed in an office information system.
- Basic reprographic processes include carbon paper, automated typewriters, copiers, and duplicators.
- Special reprographic processes include phototypesetting, facsimile, and micrographics (the production of microforms).
- To choose a reproduction method, consider cost, convenience, and quality.
- The careful preparation of typewritten copy and attractive layouts will improve the quality of the final product.
- Appropriate paper choice, knowledge of typesetting capabilities, and printing assistance will further enhance your work.
- Reprographics systems can now be linked to word processing and data processing systems.
- With the addition of microprocessors and programming capabilities, reprographics has become part of the worldwide electronic communication network.

## 7.8 Keywords

*Copier:* A copier is a machine that reproduces copies directly from an original document; the copies are commonly referred to as photocopies.

**Notes**

**Copyright:** Sole ownership on any production or presentation.

**Copyright Law:** According to copyright law, copyrighted materials are "original works of authorship fixed in any tangible medium of expression.

**Interpreter:** An interpreter is one who is able to translate in both directions on the spot, without using dictionaries or other supplemental reference materials.

**Micrographics:** Micrographics are the production of microform and the preparation of enlarged, lard copy from these forms.

**Reprographics:** It refers to all means of copying and duplicating; it includes automated typewriting, phototypesetting, facsimile, and micrographics systems, as well as basic copying and duplicating systems.

**Thermography:** In thermography, a heat-sensitive sheet and the original arc exposed to infrared light. The heat-sensitive sheet is placed on top of the original before both are inserted into the machine.

**Translation:** Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text.

**Translator:** Translator is a person who performs the act of translation.

**7.9 Review Questions**

1. Define reprographics in general. Also describe function of reprographic in an office information system.
2. How does reprographics relate to word processing systems?
3. What constitutes copyrighted materials?
4. How can you obtain permission to reproduce copyrighted material?
5. Distinguish between "copying" and "duplicating" machines.
6. Define duplexing, collating, and halftone.
7. What is intelligent copier?
8. Briefly describe two types of electrostatic copying processes.
9. What is the difference between PPCs and CPCs?
10. What is thermography? Give an example of its use.
11. What is a master? Briefly describe several types of masters.
12. What questions should you ask to determine the appropriate reprographic process?
13. Define micro graphics and explain its importance.
14. Describe four different types of microforms.
15. Define facsimile and give an example of its use.

**Answers: Self Assessment**

- |                                |                                    |
|--------------------------------|------------------------------------|
| 1. Translation                 | 2. systematic                      |
| 3. services                    | 4. False                           |
| 5. True                        | 6. National Translation Centre     |
| 7. European Translation Centre | 8. British Lending Library, Boston |

- |                |            |
|----------------|------------|
| 9. False       | 10. True   |
| 11. False      | 12. True   |
| 13. Commercial | 14. Direct |
| 15. True       | 16. False  |

Notes

### 7.10 Further Readings



Books

- Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed. 3. ALA, Chicago.
- Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.
- Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.
- Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.
- Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.
- Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



Online links

- [books.google.com/books?isbn=8120346394](https://books.google.com/books?isbn=8120346394)
- [www.justdial.com/](http://www.justdial.com/)
- [www.thefreedictionary.com/reprographic](http://www.thefreedictionary.com/reprographic)
- [www.translations.com/services/legal-services/reprographics.html](http://www.translations.com/services/legal-services/reprographics.html)

## Unit 8: Encyclopaedia

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### Objectives

After studying this unit, you will be able to:

- Explain Meaning of Encyclopaedia
- Specify Characteristics of Encyclopaedia
- Understand Importance, Purpose and Uses of Encyclopaedia
- Describe different Types of Encyclopaedias
- Analyse Formats of Encyclopaedias

### Introduction

An encyclopaedia is a book, or series of books, that contains general information about many topics and subjects. While often found with dictionaries in resource libraries, encyclopaedias may be much longer and contain more information about the subjects within them. In the past, these works were collected in multiple published volumes. More modern publications, however, include digital formats such as software on a disc or websites with information on them.

## 8.1 Meaning and Characteristics of Encyclopaedia

Notes

An encyclopaedia is a type of reference work – a compendium holding a summary of information from either all branches of knowledge or a particular branch of knowledge. Encyclopaedias are divided into articles or entries, which are usually accessed alphabetically by article name. Encyclopaedia entries are longer and more detailed than those in most dictionaries. Generally speaking, unlike dictionary entries, which focus on linguistic information about words, encyclopaedia articles focus on factual information to cover the thing or concept for which the article name stands.

Encyclopaedias have existed for around 2,000 years; the oldest still in existence, *Naturalis Historia*, was written in ca. AD 77 by Pliny the Elder. The modern encyclopaedia evolved out of dictionaries around the 17th century. Historically, some encyclopaedias were contained in one volume, but some, such as the *Encyclopaedia Britannica* or the world's largest *Encyclopedia universal ilustrada europeo-americana*, became huge multi-volume works. Some modern encyclopaedias, such as Wikipedia, are electronic and are often freely available.

### 8.1.1 Definition and Scope

The word 'encyclopaedia' is derived from the Greek word 'enkyklios paideia' meaning 'general education'. It meant 'circle of knowledge' or 'circle of learning' or 'a complete system of learning'. The meaning of the term has undergone a considerable change during its long history. The term encyclopaedia is now applied to any reference work of one or more volumes consisting of articles pertaining to all branches or some special branch of human knowledge, usually arranged in alphabetical order. At the end of every article, it gives an exhaustive bibliography or references. It may also contain several illustrations, diagrams, photographs and sketches of notable persons, places or objects to assist the user in better understanding of the subject. A detailed index with cross-references helps tracing the spread over information in the articles easily and quickly.

The purpose of the modern encyclopaedia is to condense current and essential information in a short and simpler form to make it accessible to the non-specialist. It can be general information for the layman or subject information for specialists. Encyclopaedias are also called 'cyclopedias' when they are limited to a specific subject.

Twentieth Century has produced numerous encyclopaedias of all types and with many innovations in approach, coverage, readership, etc. The *Great Soviet Encyclopaedia 1926-47* appeared in sixty-five volumes. Many editions of the '*Encyclopaedia Britannica*' and the '*Encyclopaedia Americana*' have been published as they have won recognition in English speaking world. Many encyclopaedias have been published for children.



*Example:* '*The Book of Knowledge*', '*World Book Encyclopaedia*', '*Compton's Pichared Encyclopaedia*' and '*Britannia junior Encyclopaedia*' are a few popular.

### 8.1.2 Characteristics

The modern encyclopaedia was developed from the dictionary in the 18th century. Historically, both encyclopaedias and dictionaries have been researched and written by well-educated, well-informed content experts, but they are significantly different in structure. A dictionary is a linguistic work which primarily focuses on alphabetical listing of words and their definitions. Synonymous words and those related by the subject matter are to be found scattered around the dictionary, giving no obvious place for in-depth treatment. Thus, a dictionary typically provides limited information, analysis or background for the word defined. While it may offer a definition,

## Notes

it may leave the reader lacking in understanding the meaning, significance or limitations of a term, and how the term relates to a broader field of knowledge. An encyclopaedia is, allegedly, not written in order to convince, although one of its goals is indeed to convince its reader about its own veracity. In the terms of Aristotle's Modes of persuasion, a dictionary should persuade the reader through logos (conveying only appropriate emotions); it will be expected to have a lack of pathos and to have little ethos except that of the dictionary itself.



*Caution* It should not stir up irrelevant emotions.

To address those needs, an encyclopaedia article is typically non-linguistic, and covers not a word, but a subject or discipline. As well as defining and listing synonymous terms for the topic, the article is able to treat it in more depth and convey the most relevant accumulated knowledge on that subject. An encyclopaedia article also often includes many maps and illustrations, as well as bibliography and statistics.

Four major elements define an encyclopaedia: its subject matter, its scope, its method of organization, and its method of production:

- Encyclopaedias can be general, containing articles on topics in every field (the English-language Encyclopaedia Britannica and German Brockhaus are well-known examples). General encyclopaedias often contain guides on how to do a variety of things, as well as embedded dictionaries and gazetteers. There are also encyclopaedias that cover a wide variety of topics but from a particular cultural, ethnic, or national perspective, such as the Great Soviet Encyclopaedia or Encyclopaedia Judaica.
- Works of encyclopaedic scope aim to convey the important accumulated knowledge for their subject domain, such as an encyclopaedia of medicine, philosophy, or law. Works vary in the breadth of material and the depth of discussion, depending on the target audience. (For example, the Medical encyclopaedia produced by A.D.A.M., Inc. for the U.S. National Institutes of Health.)
- Some systematic method of organization is essential to making an encyclopaedia usable as a work of reference. There have historically been two main methods of organizing printed encyclopaedias: the alphabetical method (consisting of a number of separate articles, organised in alphabetical order), or organization by hierarchical categories. The former method is today the most common by far, especially for general works. The fluidity of electronic media, however, allows new possibilities for multiple methods of organization of the same content. Further, electronic media offer previously unimaginable capabilities for search, indexing and cross reference. The epigraph from Horace on the title page of the 18th century Encyclopédie suggests the importance of the structure of an encyclopaedia: "What grace may be added to commonplace matters by the power of order and connection."
- As modern multimedia and the information age have evolved, they have had an ever-increasing effect on the collection, verification, summation, and presentation of information of all kinds. Projects such as Everything2, Encarta, h2g2, and Wikipedia are examples of new forms of the encyclopaedia as information retrieval becomes simpler.

Some works entitled "dictionaries" are actually similar to encyclopaedias, especially those concerned with a particular field (such as the Dictionary of the Middle Ages, the Dictionary of American Naval Fighting Ships, and Black's Law Dictionary). The Macquarie Dictionary, Australia's national dictionary, became an encyclopaedic dictionary after its first edition in recognition of the use of proper nouns in common communication, and the words derived from such proper nouns.



There are some broad differences between encyclopaedias and dictionaries. Most noticeably, encyclopaedia articles are longer, fuller and more thorough than entries in most general-purpose dictionaries. There are differences in content as well. Generally speaking, dictionaries provide linguistic information about words themselves, while encyclopaedias focus more on the thing for which those words stand. Thus, while dictionary entries are inextricably fixed to the word described, encyclopaedia articles can be given a different entry name. As such, dictionary entries are not fully translatable into other languages, but encyclopaedia articles can be.



*Task* Using Internet trace out some of the more differences between encyclopaedias and dictionaries, other than listed in the text here.

In practice, however, the distinction is not concrete, as there is no clear-cut difference between factual, “encyclopaedic” information and linguistic information such as appears in dictionaries. Thus encyclopaedias may contain material that is also found in dictionaries, and vice versa. In particular, dictionary entries often contain factual information about the thing named by the word.

### Self Assessment

Fill in the blanks:

1. An ..... is a book, or series of books, that contains general information about many topics and subjects.
2. The word ‘encyclopaedia’ is derived from the Greek word ‘.....’ meaning ‘general education’.
3. A detailed ..... with ..... helps tracing the spread over information easily and quickly.

## 8.2 Importance, Purpose and Uses

The importance of an encyclopaedia can be realized from the fact that it is regarded as a backbone of reference service. These are most used reference books.

Encyclopaedia is best used for finding answers to background questions related to general information and self-education for both the specialist and the layman. The primary value lies in the fact that it provides an overview for various topics, which can be highly useful for one who is dealing with a subject about which he hardly knows anything. This may be true for a specialist in a subject of a student or a layman.

However the more specific uses of encyclopaedia are:

1. Encyclopaedias are looked for concise, digested and in some cases simplified account on a topic on which otherwise there may be abundance of available literature.
2. They attempt to provide essential historical background to the topic of enquiry.
3. References generally listed at the end of a brief or detailed description are selective and provide important help for further study of the topic.
4. Very often encyclopaedias are the only source for biographical information on another wise minor figure not covered in standard biographical dictionaries.
5. General encyclopaedia can serve as a gateway to understand the most profound or intricate knowledge human beings have yet produced.

Notes

6. **Special subject Encyclopaedia:** it is rather common for the reference librarian to receive queries regarding specific subjects. The answer of such queries can be searched from the subject encyclopaedias. A user frequently wants to know something 'on or about' a particular subject. He not only seeks detailed data on a specific subject but also expects well-organized overview for the purpose of research. A user may refer to general encyclopaedia for an introductory outline or concise account of a subject sufficient enough get familiarized with a subject. He can go for further information to a specialized subject encyclopaedia.
7. A librarian may guide a research scholar to a subject encyclopaedia as a stepping stone to a more extended research. The researcher can focus on the important aspects of the topic and can explore further on those guidelines. He can also refer to the sources mentioned in the bibliography appended to the article. But a research scholar should be cautious to not with care the year of publication of the reference sources as well as sources in the bibliography so as to refer to the latest publications to get updated and reliable information.



*Notes* The single volume subject encyclopaedia aims to bring together in a nutshell, all the points discussed in various sources. Hence, it become concise and handy reference tool to refer to narrow and specialized topics on which no books have been published. Subject encyclopaedia is valuable reference sources for the biographies of the subject specialists who have not gained enough popularity to be on international scene for inclusion in the general encyclopaedias.

### 8.2.1 Information that may be Located from Encyclopaedias



*Example:* A few examples:

- Oath of Hippocrates
- Information about Mormons (a religious sect)
- International date line
- Importance of vitamin D
- Total number of items in the British Museum
- Short description of radar

Short biographies of the following:

- (a) C.V. Raman
- (b) John Dewey
- (c) Rabindranath Tagore
  - ❖ Name of the country producing the largest amount of petroleum in the Middle East
  - ❖ Who was the first president of Royal Society, London
  - ❖ Where is Wall Street
  - ❖ Who was the first to fly an aeroplane
  - ❖ When did Fiji gain its independence

- ❖ Properties of heavy water
- ❖ Who were the first to manufacture paper
- ❖ Name for the scientist, who invented television in 1926
- ❖ How long is the day during summer at North Pole
- ❖ Summary of the work of Einstein

Notes

## Self Assessment

State whether the following statements are true or false:

4. Encyclopaedia is best used for finding answers to background questions related to general information and self-education for both the specialist and the layman.
5. An encyclopaedia cannot be regarded as a backbone of reference service.
6. Encyclopaedias are looked for concise, digested and in some cases simplified account on a topic on which otherwise there may be abundance of available literature.



Caselet

### Legal Encyclopaedias

#### What are Legal Encyclopaedias?

Legal encyclopaedias cover a wide range of topics that are arranged alphabetically. Within each topic, the discussion is arranged by sub-topics according to the legal principles involved. Footnotes provide excerpts from judicial decisions and statutes.

#### Why are Legal Encyclopaedias useful?

Legal encyclopaedias provide broad coverage of American law including state and federal law. They may be used to locate cases which support specific legal points. Unlike law reviews, they do not critique the law, and unlike Restatements they do not suggest legal reform.

It is helpful to use legal encyclopaedias at the beginning of a research project in order to obtain a broad overview of the area of law. You can easily move from sub-topic to sub-topic or to related areas of the law.

#### How do you research in encyclopaedias?

There are two ways of locating material in an encyclopaedia: the index and the topic list. Use the index volumes including the annual index supplement which can be found at the end of the set. Look up alternative terms, refer to cross-references, and read through entries and sub-entries. When you have found the appropriate topic, examine the more detailed subject index at the back of the volume containing that topic to find the appropriate section.

Source: <http://law.campbell.edu/assets/uploads/pages/library/guide-legal-encyclopedias.pdf>

## 8.3 Types of Encyclopaedias

In order to organize the collection in the reference section effectively, they are divided into two main categories, namely, general and special or subject encyclopaedias according to their scope,

**Notes**

purpose and coverage. The encyclopaedias can be further divided by using any one of the following basis: Single or multi volume; scope of coverage national or International, language, age group and the like. Now, let us discuss general and special encyclopaedias in detail with suitable examples.

**8.3.1 General Encyclopaedias**

General encyclopaedias cover all the existing branches of human knowledge. They are most popular and extensively used reference sources. They are classified into different categories according to format, user’s age, coverage and language. Some popular examples are mentioned below:

(I) *Comprehensive Multi-Volume Encyclopaedia for Adults - English Language*

The New Encyclopaedia Britannica. 15th ed. Chicago: Encyclopaedia Britannica, 1974. 30 volumes:

- (i) *Propaedia - 1 volume*: Propaedia, a guide to the set, gives outline of knowledge and is a schematic introduction to article in Macropaedia.
- (ii) *Micropaedia - 10 volumes*: Macropaedia, a study guide contains brief information for ready reference and acts as a detailed index to the set by giving volume and page reference to articles in the Macropaedia.
- (iii) *Macropaedia - 19 volumes*: Macropadia containing knowledge in depth has lengthy articles. It covers major topics of human interest and is intended to educate the serious readers. They are written by well-known experts and include selective and annotated bibliographies. It has international approach and universal coverage.



*Did u know?* Since 1938, every year ‘Britannica Book of the Year’ is published to update the information and it also follows policy of continuous revision.

The new edition was criticised for not providing an index to the set, hence in 1985 print, a two-volume index was also published making it a set of 32 volumes. The encyclopaedia volumes were also re-numbered as:

Propaedia	–	1 volume
Micropaedia	–	12 volumes
Macropaedia	–	17 volumes
Index	–	2 volumes

Encyclopaedia Americana. New York: Grolier, 1976.30 volumes.

The first edition was published in 1903-1904 as a 16 volumes set. The 1912 edition carried its title only “Americana”.

A completely new revised edition was published in 1918-20, which has become the basis for succeeding editions.

It is good, comprehensive multi-volume encyclopaedia for general use. Most of the articles are signed but bibliographies are not often updated. It has adopted the continuous revision policy. Every year some articles are revised but new editions are not published.

Since 1923, “American Annual: An Encyclopaedia of Events” has been published to record the events of the previous year.

- (II) **Popular Multi-volume Encyclopaedia for Adults:** These encyclopaedias are for high school and college students. They are written in simple language and popular style. They can be of great interest to the layman.



*Example:* Collier's Encyclopaedia with Bibliography and Index/ by William D, Halsay. New York: Macmillan, 1982. 24 volumes.

It was first published in 1949 in 20 volumes. It was continuously revised. It consists of 25,000 signed articles written by about 5000 contributors and editors. Biographies are exhaustive. The Index entries are clearly displayed. It contains illustrations and maps.

- (III) **Multi-volume Encyclopaedias for Junior and Children:** There are many junior and children encyclopaedias as they are mostly referred by school going children although these are also interesting and informative of adults.



*Example:* Oxford junior Encyclopaedia. Rev. ed. London: OUP, 1961. 12 volumes.

It was first published in 1961. It is designed for the inquiring minds of children over ten years. Each volume is of one particular subject arranged in alphabetical order. There are not bibliographies. Articles are in simple language.

Children's Britannica. London: Encyclopaedia Britannica, 1981. 19 volumes.

It was first published in 1960. The American edition is known as 'Britannica Junior'. It has been continuously revised and has lucid language, clear print, and illustrations. It is owned by many families as it is moderately priced.

The World Book Yearbook reviewing events of previous year is also published every year.

- (IV) **One and Two Volume Adult and Junior Encyclopaedia:** Since last half a century, publishers are concentrating on producing one and two volume encyclopaedias due to rising costs of production and advertising. They are arranged in alphabetical order and do not need to have an index. They contain brief information and universal facts. They are more reliable, economical, and handy to use. Example includes:

The New Columbia Encyclopaedia/ed. W.H. Harris and J.S. Levy. 4th ed. New York: Columbia University Press, 1975.

It was first published in 1935 as 'The Columbia Encyclopaedia'. It is a compact volume and planned for quick reference. It contains over 59,000 concise articles designed for use by families and small libraries. It includes short biographical sketches and geographical information. Each article has a short bibliography of two to three articles. It also contains maps and line drawings.

The Random House Encyclopaedia. New rev. ed. New York: Random House, [1983].

It is comparatively a recent addition to encyclopaedias. It is in two parts - Colorpedia and Alphapedia.

The Colorpedia consists of short articles grouped in seven sections. It includes many illustrations in four coloured photo plates and drawings. Every section progresses from broader to narrower subject, e.g., 'Universe' to 'Man and Machines'.

Notes

- (V) *General Encyclopaedia* - Hindi and other non-English Languages.



Example:

Der Grosse Brockhaus. Ed. 16. Wiesbaden: Brock Haus, 1952-63. 14 volumes.

This is the most recent complete edition of a standard German encyclopaedia, earlier editions of which influenced encyclopaedia-making in many countries of the world.

Hindi Visva-kosh. Varanasi: Nagri Pracharini Sabha, 1960-71. 12 volumes.

This is the only major Hindi encyclopaedia. However, its imbalanced as compared to other encyclopaedias as it has no bibliography at the end.

- (VI) *National and Regional Encyclopaedias*: It is common to have national and regional encyclopaedias for the citizens of the country in their own national-regional language. They are inclined to deal elaborately with the history, geography, art, customs, and culture, and social, political, and economic conditions of a particular country. General encyclopaedias of particular countries may also have national bias.

'Encyclopaedia Britannica', 'Encyclopaedia Americana', 'Encyclopaedia Francaise' cover more detailed information about their own nations than other general encyclopaedias. They have otherwise international coverage.

Cambridge Encyclopaedia of India, Pakistan, Bangladesh, Srilanka, Nepal, Bhutan and Maldives/ed. By Francis Robinson. Cambridge: University Press, 1989.

Encyclopaedia of India/ ed. By P.N. Chopra and Prabha Chopra. Delhi: Agam Prakashan, 1987. 2 volumes.

An effort has been made here to deal with all aspects of the country and the life of the people of India It deals with the flora, fauna, physiography, fairs and festivals, religion, literature, and famous people. At the end, gazetteer of India has been appended. A detailed chronology of events from pre-historic times to the present has also been given at the end.

### 8.3.2 Special or Subject Encyclopaedias

There are encyclopaedias for almost every subject. Modern subject encyclopaedias first became available in philosophy and religion. Rendolf Eisler published his *Worterbuch der Philosaphischen. Segriffe* in 1889 and *Encyclopaedia of Religion and Ethics* came out in 1908-27.

In the past, subject encyclopaedias used to be multi-volume sets in broad subjects namely science and technology, social sciences etc., but now, encyclopaedias are published for each discipline and are restricted to one or two volume sets which are handy to use. They are excellent ready reference aids for the specialists who want to trace information about a particular subject.

It is common for any reference librarian or the reader to turn to a general encyclopaedia for the information. But in order to get in depth information on any subject, it is better to refer to subject encyclopaedias.

A few important examples of special encyclopaedias available in big university and special libraries are listed here.

- (I) *Multi-volume Subject Encyclopaedias*: McGraw-Hill Encyclopaedia of Science and Technology. Ed. 6. New York: McGraw-Hill, 1987. 20 volumes.

Encyclopaedia of Library and Information Science / ed. By Allen Kent and Harold Lancour. N.Y.: Dekker, 1968-69. 35 vols. + supplements. Volumes 34 and 35 are author and subject index respectively.

## Notes

Supplements that are still in progress are designed to update existing articles, treat new topics, add biographies of important figures recently deceased, and to cover certain topics omitted from the main set because of late receipt. Each supplement volume is arranged in a separate alphabetical sequence.

Dictionary of Art. London: Macmillan, 1996. 34 volumes.

This dictionary is a monumental work prepared by 6700 scholars from 120 countries. It is claimed to have summed up current knowledge about everything from pre-historic cave paintings to multimedia installations of lesbian erotica. Texts have been translated from 26 languages:

Encyclopaedia of Indian Literature/ ed. By Amaresh Datta, [et al.]. New Delhi: Sahitya Akademi, 1987-92. 6 volumes.

This surveys literary movements, trends, and notes on established Indian authors and on significant books in 25 Indian languages.

Encyclopaedia of Indian Culture/ by R.N. Saletore. New Delhi: Sterling, 1981-85. 5 vols.

This is a story of Indian culture encompassed in about 400 articles, beginning from the earliest time to the 19th century. Every topic is discussed from three angles: Brahamical, Buddhist and Jain.

- (II) **One to Three Volume Subject Encyclopaedias:** Examples include: Bhartiya Itihas Kosh/ by Sachchidanand Bhattacharya; tr. By Gyanchand Jain, [et. al.]. Lucknow: Uttar Pradesh Hindi Sansthan, 1989.

This covers ancient medieval and modern periods of the Indian history. It also describes, in brief, people, places, and events of historical significance.

Encyclopaedia of Indian Archeology/ ed. By A. Ghosh. Lieden: Brill, 1990. Compiled under the auspices of the Indian Council of Historical Research.

Dictionary of Modern Indian History, 1707 - 1947/by Purshottam Mehra. New Delhi: Oxford University Press, 1987.

Golden Treasury of Science and Technology. Ed. 2. New Delhi: Council of Scientific and Industrial Research, 1993.

A book of alphabetically arranged entries on scientist, scientific discoveries, scientific terms and events explained in simple language. There are eight appendices: List of Nobel Laureates up to 1993; derived units; multiplication factors; conversion factors; Greek alphabets; physical constants; sub-atomic particles; amino acid.

## Self Assessment

Fill in the blanks:

7. In order to organize the collection in the reference section effectively, encyclopaedias are divided into two main categories, namely, ..... and .....
8. Special category is also known as ..... encyclopaedias.
9. .... encyclopaedias cover all the existing branches of human knowledge.
10. It is common for any reference ..... or the reader to turn to a general encyclopaedia for the information.

Notes

## **8.4 Format**

Some people can confuse an encyclopaedia with a dictionary, although they are inherently quite different. A dictionary offers definitions of words, occasionally accompanied by illustrations, to provide the reader with the meaning of individual's terms or phrases. On the other hand, an encyclopaedia explores topics in greater depth and more often includes illustrations, maps, and photographs. While most encyclopaedias are organized alphabetically, some are arranged by categories or cross-referenced articles to allow for easier reading.

Readers can find a wide range of subjects within these volumes, making them excellent research texts. Historical events, such as the dates and major battles of various wars; scientific information, like pertinent data regarding different theories; and popular culture, such as names and short biographies of various celebrities, can all be found in these volumes. As time goes on, publishers make revisions and release new volumes with more information, to keep them relevant.

### **8.4.1 Historical Encyclopaedias**

Pliny the Elder wrote the first documented encyclopaedia in the first century BC with the help of his nephew. This work consisted of 37 volumes and covered subjects ranging from anthropology and human physiology to agriculture, painting, and pharmacology. Through the following few centuries, encyclopaedias adopted a religious overtone. The first Christian edition was published in 560 AD, and the first Muslim volume came to light soon after.

One of the longest encyclopaedias ever was created in 1403 when the Yongle Encyclopaedia was published in China. It consisted of 11,000 handwritten volumes; most of the original work has been lost through the centuries, and less than 400 volumes survive today. The word "encyclopaedia" comes from the Greek *enkyklos paideia*, which means "a general knowledge." It has been in use for at least 500 years, since the publishing of *Encyclopaedia, or Knowledge of the World of Disciplines* in 1559.

### **8.4.2 Modern Formats**

In the 20th century, the *Encyclopaedia Britannica* became the most well-known western work of this type. Topical encyclopaedias also came into popularity, covering topics as varied as economics, bioethics, or Judaica. Toward the end of the century, many publishers began releasing them in digital formats such as Compact Discs (CDs) and Digital Versatile Discs (DVDs).

Some encyclopaedias have become entirely available online, with no corresponding print version. One of the most important advantages of online encyclopaedias is that they can be edited frequently, so they remain up to date. Traditionally, a single writer wrote an encyclopaedia alone or as a collaborative effort with peers, but a team of writers, who often have no face to face contact with each other, can now put together numerous volumes at a distance.

## **Self Assessment**

State whether the following statements are true or false:

11. A dictionary offers definitions of words, occasionally accompanied by illustrations, to provide the reader with the meaning of individual's terms or phrases.
12. An encyclopaedia presents topics in brief and more often excludes illustrations, maps, and photographs.
13. Most encyclopaedias are not alphabetically organized.
14. In the 20th century, the *Encyclopaedia Britannica* became the most well-known western work.



15. One of the most important advantages of online encyclopaedias is that they can be edited frequently.

Notes



Case Study

### Internet Encyclopaedias

Online alternatives to the Britannica include Wikipedia, a freely available Web-based free-content encyclopaedia. A key difference between the two encyclopaedias lies in article authorship. The 699 Macropaedia articles are generally written by identified contributors, and the roughly 65,000 Micropaedia articles are the work of the editorial staff and identified outside consultants. Thus, a Britannica article either has known authorship or a set of possible authors (the editorial staff). With the exception of the editorial staff, most of the Britannica's contributors are experts in their field—some are Nobel laureates. By contrast, the articles of Wikipedia are written by people with varying levels of expertise: most do not claim any particular expertise, and of those who do, many are anonymous and have no verifiable credentials. Another difference is the pace of article change: the Britannica was published in print every few years, while many of Wikipedia's articles are frequently updated. Robert McHenry, paid by the Encyclopaedia, stated that Wikipedia cannot hope to rival the Britannica in accuracy.

In 2005, the journal *Nature* chose articles from both websites in a wide range of topics and sent them to what it called "relevant" field experts for peer review. The experts then compared the competing articles—one from each site on a given topic—side by side, but were not told which article came from which site. *Nature* got back 42 usable reviews.

In the end, the journal found just eight serious errors, such as general misunderstandings of vital concepts: four from each site. It also discovered many factual errors, omissions or misleading statements: 162 in Wikipedia and 123 in Britannica, an average of 3.86 mistakes per article for Wikipedia and 2.92 for Britannica. In its detailed 20-page rebuttal, Encyclopaedia Britannica, Inc. called *Nature*'s study flawed and misleading and called for a "prompt" retraction. It noted that two of the articles in the study were taken from a Britannica yearbook and not the encyclopaedia, and another two were from Compton's Encyclopaedia (called the Britannica Student Encyclopaedia on the company's website). The rebuttal went on to mention that some of the articles presented to reviewers were combinations of several articles, and that other articles were merely excerpts but were penalised for factual omissions. The company also noted that several of what *Nature* called errors were minor spelling variations and those others were matters of interpretation. *Nature* defended its story and declined to retract, stating that, as it was comparing Wikipedia with the web version of Britannica, it used whatever relevant material was available on Britannica's website.

Interviewed in February 2009, the managing director of Britannica UK said:

Wikipedia is a fun site to use and has a lot of interesting entries on there, but their approach wouldn't work for Encyclopaedia Britannica. My job is to create more awareness of our very different approaches to publishing in the public mind. They're a chisel, we're a drill, and you need to have the correct tool for the job.

#### Questions:

1. What are the advantages and limitations of Internet Encyclopaedias?
2. Write down the case facts.

Source: [http://en.wikipedia.org/wiki/Encyclop%C3%A6dia\\_Britannica](http://en.wikipedia.org/wiki/Encyclop%C3%A6dia_Britannica)

## 8.5 Summary

- An encyclopaedia is a book, or series of books, that contains general information about many topics and subjects.
- The term encyclopaedia is now applied to any reference work of one or more volumes consisting of articles pertaining to all branches or some special branch of human knowledge, usually arranged in alphabetical order.
- Encyclopaedias can be general, containing articles on topics in every field.
- General encyclopaedias often contain guides on how to do a variety of things, as well as embedded dictionaries and gazetteers.
- There are also encyclopaedias that cover a wide variety of topics but from a particular cultural, ethnic, or national perspective, such as the Great Soviet Encyclopaedia or Encyclopaedia Judaica.
- Encyclopaedia is best used for finding answers to background questions related to general information and self-education for both the specialist and the layman.
- In order to organize the collection in the reference section effectively, they are divided into two main categories, namely, general and special or subject encyclopaedias according to their scope, purpose and coverage.
- Some encyclopaedias have become entirely available online, with no corresponding print version.

## 8.6 Keywords

**Encyclopaedia:** An encyclopaedia is a book, or series of books, that contains general information about many topics and subjects.

**General Encyclopaedia:** They can serve as a gateway to understand the most profound or intricate knowledge human beings have yet produced.

**Librarian:** A librarian is an individual who may be guide or a research scholar to a subject encyclopaedia as a stepping stone to a more extended research.

**Macropaedia:** It is a form of book containing knowledge in depth has lengthy articles. It covers major topics of human interest and is intended to educate the serious readers

**Micropaedia:** It is a study guide that contains brief information for ready reference and acts as a detailed index to the set by giving volume and page reference to articles in the macropaedia.

**National and Regional Encyclopaedias:** They are inclined to deal elaborately with the history, geography, art, customs, and culture, and social, political, and economic conditions of a particular country.

**Propaedia:** Propaedia is a guide to the set that gives outline of knowledge and is a schematic introduction to article in Macropaedia.

**Special Subject Encyclopaedia:** It is rather common for the reference librarian to receive queries regarding specific subjects.

## 8.7 Review Questions

Notes

1. Define the term encyclopaedia.
2. What is the need of having encyclopaedia?
3. Write down few characteristics of encyclopaedia.
4. Write the uses of encyclopaedia.
5. What are the major problems with encyclopaedia?
6. Explain the scope of encyclopaedia.
7. On what different basis encyclopaedias categorized?
8. What are the different types of encyclopaedias known to you?
9. What are general encyclopaedias?
10. What are special encyclopaedias?
11. Write down the history and development of encyclopaedia.
12. What is meant by format?
13. What are the past formats of encyclopaedias?
14. What are the recent formats of encyclopaedias?
15. What are the important advantages of online encyclopaedias?

## Answers: Self Assessment

- |                            |                      |
|----------------------------|----------------------|
| 1. Encyclopaedia           | 2. enkyklios paideia |
| 3. index, cross-references | 4. True              |
| 5. False                   | 6. True              |
| 7. general, special.       | 8. subject           |
| 9. General                 | 10. librarian        |
| 11. True                   | 12. False            |
| 13. False                  | 14. True             |
| 15. True                   |                      |

## 8.8 Further Readings



Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed. 3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

**Notes**

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



*Online links*

[education.yahoo.com/reference/encyclopaedia](http://education.yahoo.com/reference/encyclopaedia)

[en.wikipedia.org/wiki/Encyclopaedia](http://en.wikipedia.org/wiki/Encyclopaedia)

[www.britannica.com/](http://www.britannica.com/)

[www.nlm.nih.gov/medlineplus/encyclopedia.html](http://www.nlm.nih.gov/medlineplus/encyclopedia.html)

## Unit 9: Dictionaries

Notes

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### Objectives

After studying this unit, you will be able to:

- Define the term dictionary
- Explain the scope of dictionaries
- List the uses of dictionaries
- Analyse combination of dictionary and other reference sources
- Describe different types of dictionaries
- Explain Historical and Etymological Dictionaries

### Introduction

The use of the term “dictionary” in a title is sometimes misused. The work may be encyclopaedic in nature because it may give information about the thing as well as the words. Similarly, sometimes the term “encyclopaedia” in a title may be used for a work, which may be nothing

Notes

but a subject dictionary. Modern large dictionaries called unabridged dictionaries are encyclopaedic in nature, providing information about the thing and the word.

### 9.1 Definition and Scope

Dictionary is the most widely known and used reference book. The word 'dictionary' is derived from the Medieval Latin word 'dictionarium' – a collection of words. It originated from the term 'diction' meaning 'a mode of expression'. A dictionary generally deals with the collection of general words either of a language or of special terms of a particular subject. It usually defines terms and gives their alternate meaning, usage, etc. Some dictionaries give derivation and history of words too. The words are arranged in some definite order, usually alphabetical. Sometimes the entries are arranged in classified order and are presented in related groups. In a nutshell, a dictionary deals with words, their meaning and uses.

The science of compiling a dictionary is called lexicography. There are some reference books, which also deal with words but are known by various other names. They have identical purpose with a light difference in scope. They are known as:

**Glossary:** The word 'glossary' originates from the Latin word 'glossarium' meaning 'a collection of words peculiar to a field of knowledge'. Each entry in a glossary is known as a 'gloss' meaning 'a word', a comment', 'an explanation' or 'an interpretation'. It is an alphabetical list of terms and explanations often of specialised or technical nature such as a glossary of computer terms.



*Example:* Glossary of Indian Religious Terms and Concepts/Narendra Nath Bhattacharyya. Columbia: South Asia Pub., 1990. It seeks to explain the basic significance of various terms and concepts which characterizes different religious systems of India.

Glossary of Indian Medical Plants. New Delhi: CSIR, 1956; a supplement brought out in 1968. Scientific names of the plants together with their popular synonyms and medicinal value of each plant are described.

The A.L.A. Glossary of Library and Information Science Terms/edited by H. Young. Chicago: American Library Association, 1983.

**Lexicon:** It is derived from a Greek word 'Lexicon', meaning 'dictionary'. Each entry in the Lexicon is known as 'Lexis' meaning 'a word'. Lexicon is a dictionary of words of a language, arranged alphabetically giving meaning in another language. It is chiefly applied to dictionaries of Greek, Syrian, Arabic, Latin and Hebrew languages.



*Example:* English-Chinese Lexicon of Women Law/ed. By Sharon K Hom and Xin Chunying. Paris : UNESCO, 1995.

In recent years, the scope of a lexicon has been widened. There are two types of lexicon:

- (i) The lexicon of a language or dialect and
- (ii) The lexicon of writers or individual works.

The lexicon of a language or dialect is concerned with semantics and etymology. The lexicon of any language forms a complex system. Its words are linked with one another both, in sound form (i.e., homonyms and paronyms) and meanings (i.e., synonyms and antonyms).



*Example:* Longman Lexicon of Contemporary English/ed. By M.C. Arthur. London: Longman, 1981.

The lexicon of writers or individual works is the subject to stylistics and poetics. (It contains not only natural words but also obsolete words. It covers historical words, archaisms and neologisms.)

**Thesaurus:** The term 'thesaurus' has its origin in Greek. It means 'a storehouse' or 'treasury' or 'a repository'. Peter Mark Roget was the first person to use 'thesaurus' for English dictionary in 1852. The term is now used in two different senses.

Traditionally it was developed to aid literary men in finding the most appropriate alternate word to express an idea. The words in a thesaurus are, therefore, arranged by ideas. All other synonyms of an idea with varying shades and different grammatical form are brought together under one word in the first part. The second part is a list of words arranged alphabetically, but instead of giving meaning, it guides to the appropriate entry number in the first part.



*Example:* Roget's International Thesaurus. Ed. 3. New Delhi: Oxford and IBH, 1978.

The Original Roget's Thesaurus of English Words and Phrases revised and modernised new edition/by Robert A. Dutch. New York: St. Martins, 1965.

Spines Thesaurus: a Controlled and Structured Vocabulary for Information Processing in the Field of Technology for Development. Ed.2. Paris: UNESCO, 1988. 2v.

**Vocabulary:** The name 'vocabulary' originates from a Medieval Latin word 'vocabularium'. It is often used for a stock of words and phrases with brief explanations and meanings restricted to a single work or author. The entries are usually arranged in alphabetical order. It comprises words of language, words available to or used by an individual, words appropriate to a subject or occupation, word list developed for a particular purpose, a list or set of code words, gestures, symbols, style or colours.



*Example:* An International vocabulary of technical Theatre Terms in 8 languages. (American, Dutch, English, French, German, Italian, Spanish, Swedish). New York: Theatre Arts Books, 1959.

Consolidated Basic Hindi Vocabulary (Classes I to VIII)/Compiled by Uday Shankar and Jai Narain Kaushin. New Delhi: National, 1982.

### 9.1.1 Uses of Dictionaries

The common use of dictionaries are – these are usually used a quick reference tool, a language standardiser, a language recorder and a vocabulary builder. Bilingual and multilingual dictionaries facilitate in translation work.



*Did u know?* Subject dictionaries which include words, phrases, expressions, and technical terms of a particular subject, act as good sources of information for the translation for the translators and subject experts.

### Self Assessment

Fill in the blanks:

1. Dictionary is the most widely known and used ..... book.
2. The word 'dictionary' is derived from the medieval Latin word '.....' a collection of words.

**Notes**

3. The science of compiling a dictionary is called ..... A dictionary generally deals with the collection of general words either of a language or of special terms of a particular subject.
4. .... is a dictionary of words of a language, arranged alphabetically giving meaning in another language.
5. The common use of ..... are used a quick reference tool, a language standardiser, a language recorder and a vocabulary builder.
6. .... and ..... dictionaries facilitate in translation work.

## **9.2 Combination of Dictionary and Other Reference Sources**

Publishers have resorted to producing dictionaries which combine in them the features of (i) encyclopaedia (ii) thesaurus (iii) or even handbooks. This has resulted in various types of publications.

### **9.2.1 Dictionary-cum-Thesaurus**

Collins has merged two essential reference books into one by combining Collins English Dictionary and New Collins Thesaurus:

The Collins Dictionary and Thesaurus in One Volume/ed. By William T. Mcleod. London: Collins, 1986.

### **9.2.2 Encyclopaedic Dictionary**

Century Dictionary and Cyclopaedia with a New Atlas of the World/ed. By William Dwight Whitney, Rev. ed. N.Y: Century, 1911. 12 vols.

(It defines general, biographical and geographical terms and explains them with illustrations.)

The Oxford Reference Dictionary/ed. By Joyce. M. Hawkins. Delhi: Oxford University Press, 1986.

This new illustrated dictionary is both an up-to-date, authoritative dictionary and a concise encyclopaedia.

### **9.2.3 Subject Encyclopaedic Dictionaries**

We have some subject encyclopaedic dictionaries too.



*Example:* Encyclopedic Dictionary of Mathematics/ex. By Kiyosi Ito. 2nd ed. Cambridge: MITP Press 1986.

### **9.2.4 Dictionary and Handbook**

Dictionary and handbook of Nuclear Medicine and Clinical Imaging/by Mario Polturalde. Boca Raton, Fla: CRC Pr., 1990.



## Self Assessment

## Notes

State whether the following statements are true or false:

7. Publishers have resorted to producing dictionaries which combine in them the features of encyclopaedia thesaurus or even handbooks.
8. Collins has merged two essential reference books into one by combining Collins English Dictionary and New Collins Thesaurus.

## 9.3 Types of Dictionaries

Dictionaries can be divided into different categories according to their nature and scope of contents. Generally librarian's categories those into the following four groups, as it facilitate them in the organization of the reference collection. We shall discuss all these types briefly.

### 9.3.1 General Language Dictionaries

They are names so as they deal with the common words of a language. They are most popular and readily used dictionaries and may be classified into three groups according to the purpose, size, volume and user's age.

Purpose	(i) Prescriptive
	(ii) Descriptive
Size	(i) Unabridged
	(ii) Semi-abridged or Desk
	(iii) Abridged or Pocket
User's age	(i) children
	(ii) Junior
	(iii) Adult



*Task* Prepare slides presentations to classify dictionaries into three groups according to the purpose, size, volume and user's age. Consider suitable examples.

Dictionaries are compiled for two basic purposes. These are:

- (i) To set authoritative standards for spelling, pronunciation, meaning and usage.
- (ii) To record the worlds of a language with all their spellings, pronunciations, meanings and uses. The dictionaries compiled with the first purpose are known as 'prescriptive'. They contain only the standard and approved words worthy of use.



*Example:* Dr, Samuel Johnson's 'Dictionary of the English Language' is a very apt example of a prescriptive dictionary.

While the descriptive dictionaries are compiled with the purpose they include all the acceptable words used at the time of compilation.

## Notes



*Example:* Oxford English Dictionary' and 'Webster's Third New International Dictionary' fall in the group of descriptive dictionaries.

The following are some of the examples of dictionaries according to different sizes, volumes and user's age:

- Oxford family of English Dictionaries. Oxford: Clarendon Press.
- Webster Family of American Dictionaries. Springfield, Massachusetts: G.C. Merriam:
- Cassell's New Latin-English, English-Latin Dictionary/by D.P. Simpson. London: Cassell, 1959
- Allied Chambers Transliterated Hindi, Hindi-English Dictionary/Compiled by H.W. Wagenaar/ed. By S. S. Parikh, New Delhi: Allied Chambers, 1993.
- Modern Hindi-English-Hindi Dictionary/by C.B. Misra. Bangalore. Alok Bharti, 1991.

### 9.3.2 Special Dictionaries

The dictionaries, which are compiled for a special purpose of aspects of a language, are called special dictionaries. Most of these aspects of words, which are separately dealt with in special dictionaries, are also covered in general dictionaries. Hence, they are sometime known as supplementary wordbooks.

Broadly we can divide these into three groups according to their content and scope:

- (1) **Dictionaries covering Specific Linguistic Aspects of the Words:** These include dictionaries of the following kinds:
  - (i) *Dictionary of Punctuation:* Punctuation is one of the important aspects of written language which aids in understanding and correct reading of passages. It is set of conventional signs, spaces and various typographical devices used in written and printed texts.



*Example:* Punctuate it right/by Harry Show. New York: Bamed & Nobel, 1963.

- (ii) *Dictionary of Pronunciation:* Pronouncing dictionaries are exclusively with the pronunciation of words. They aid us in understanding the correct pronunciations of words, proper names of persons and places.



*Example:* How to pronounce it/by Alan Strode & Campbell Ross. London: Hamish Hamilton, 1970.

- (iii) *Dictionary of Spellings:* They include selected words giving priority to those which are difficult to spell. They cover words which their pronunciation.



*Example:* Cassell's Spelling Dictionary/comp. By Michael West. Longmans, 1964.

As the title suggests, it lists the American variations of British spellings in alphabetical order.

- (iv) *Dictionary of Synonyms and Antonyms:* Thesaurus, as discussed earlier is one of the well-known sources for synonyms. General dictionaries usually give synonyms and antonyms. There are numerous dictionaries devoted entirely to Synonyms and Antonyms. These dictionaries are very useful to authors and enthusiasts of crossword puzzles.



*Caution* They should be used with caution and checked with the other dictionaries for the difference in shades of meanings.



*Example: Webster's new Dictionary of Synonyms: A Dictionary of Discriminated Synonyms with Antonyms and Analogous and Contrasted Words/ed. By G & C Merriam Co., 1980.*

Hindi Paryayavachi Kosh/comp. By Bhola Nath Tiwari. Delhi: Prabhat Prakashan, 1990.

- (v) *Usage Dictionaries:* Some for the comprehensive dictionaries define varying usage of words by giving illustration in the form of sentences or quotations. Usage dictionaries deal extensively with grammar, syntax, style, idiom, and usage of right words.



*Example: A dictionary of Modern English Usage/by H.W. Fowler. Ed. 3/ed. By Robert William Brichfield. Oxford: Clarendon Press, 1996.*

Hindi Shabdavali aur Proyog/comp. By Sita Ram Shastri. Agra: Kendriya Hindi Sansthan, 1972. 2 Parts.

It is programmed dictionary prepared for non-Hindi speaking learners.

- (vi) *Etymological and Historical Dictionaries:* Etymology means the science of the origin and history of words. Etymological dictionaries give the history of words, their origin and derivation in the development of a language.



*Example: The Concise Oxford Dictionary of English Etymology/ed. By T. F. Hood. Oxford: Clarendon Press, 1986.*

- (2) *Dictionaries Covering a Special Type or Class of Words:* This group of special purpose dictionaries covers specific class of words. These words may or may not be included in the general dictionaries. They are of various types. Important types under this are:

- (i) *Dictionary of Slang Words:* Words that are commonly used in every day conversation with friends or colleagues but are not suitable for formal communication or good writing are called slang words.



*Example: A Dictionary of Slang and Unconventional English Colloquialisms and Catch Phrases, Solecism and Catechisms, Nicknames, Vulgarisms and Such Americanisms as have Naturalised/by Eric Partridge and Paul Beale. London: Routledge & Kegan Paul, 1984.*

Oxford Dictionary of Modern Slang/ed. By John Simpson and John Ayto. Oxford University Press, 1993.

- (ii) *Dictionary of Obsolete Words:* There are words, which were in use earlier but have disappeared from the current use of language. These words are known as obsolete and so are omitted from the modern English dictionaries. Dictionaries recording such obsolete words are termed dictionaries of obsolete words.



*Example: Dictionary of Early English/by Shipley. New York: Philosophical Library, 1955.*

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Dictionary of Archaic and Provincial Words, Obsolete Phrases, Proverbs and Ancient Customs from the 14th Century. 13 ed. London: Routledge & Kegan Paul, 1989. 2 vols.

- (iii) *Dialect Dictionaries*: A dialect is the variety of a language spoken by people in different areas with variations in pronunciation, vocabulary and phrases. Such dictionaries dealing with the dialect words are known as dialect dictionaries.



*Example*: American Dialect Dictionary/by Harold Wentworth. New York: Crowell, 1944.

It deals mainly with a dialect in the form of localisms and regionalisms. It gives more than 60,000 quotations showing their usage.

- (iv) *Dictionary of New Words*: Dictionaries are revised from time to time to make them up-to-date. Many new words are coined or borrowed from other languages and added to a language. Some dictionaries cover such new words, which are not included in the old dictionaries.



*Example*: Dictionary of New Words/by Berg. London: Allen & Unwin, 1953.

- (v) *Dictionary of Names, Surnames and Nicknames*: Dictionaries covering the personal names, nicknames or surnames are called dictionaries of names. Nickname is an altered name or a shortened name instead of the real name.

The Penguin Book of Hindu Names/by Maneka Gandhi. New Delhi: Viking, 1992.

In addition to explaining the meaning, the book also gives a list of sources from where the word has originated. It is useful for selecting a name for a new born baby. It attempts to cover all the names in use since 14th century.

The Oxford Mini Dictionary of First names/ed. By Hanks and Hodges. Oxford: University Press, 1986.

It is a guide to the meaning and origin of nearly two thousand names in common use in the English speaking world.

- (vi) *Dictionary of Crossword Puzzles*: These dictionaries are very useful for crossword enthusiasts in solving the crossword puzzles. The words are arranged according to the number of letters they contain with a brief definition.



*Example*: Longman crossword Solver's Dictionary/by Anne R. Poradford. Harlow: Longman, 1986.

Webster's Official Crossword Puzzle Dictionary/ed. By Merrian Webster, 1981.

- (vii) *Dictionary of Anagrams*: Anagram is the word made by changing the order of the letter in the given word, e.g., male-lame.



*Example*: Longman Anagram Dictionary/by R.J. Edwards. Harlow: Longman, 1985.

It lists over 2, 00,000 anagrams and phrases listed by length in alphabetical order. It is a comprehensive, computer compiled anagram dictionary ideal for solving crosswords, word puzzles, scrabble, etc. It is an ideal companion to "Longman Crossword Key" and "The Longman Crossword Solver's Dictionary".

- (viii) **Dictionary of Abbreviations and Acronyms:** Abbreviations are the shortened form of long words, viz., e.g., for example. Acronyms are the words formed from the initial letters of names.



*Example:* Acronyms, Initialism and Abbreviations Dictionary. Ed. 18/ed. By Jannifer Mossman. Detroit: Gale Research, 1993. 3v.

- ix) **Dictionary of Signs and Symbols:** This special dictionary does not deal with words but still it is a part of language dictionary as the signs have meanings.



*Example:* The Book of Signs/by Rudolph Koch. New edition. Constable, 1955.

It contains not only signs/but also symbols used from the earliest to Middle Ages by primitive people and early Christians.

- (3) **Dictionaries Dealing with Literary Aspects and Catering to Special Group of Persons:** This group deals with the literary aspects rather than language. Some of the important dictionaries under the group are discussed below:

- (i) **Dictionary of Quotations:** Quotation is pithy one or two sentence, made as a remark by an eminent person in course of lecture, speech or in a book of fiction or non-fiction. It describes a situation or characteristic of a person by type in a few words which, later on is used by others to describe similar situation or person. It is not uncommon for library user to come to the library seeking exact words or context or person with whom a particular quotation is associated.

The dictionary of quotation is a very useful aid of reference collection.



*Example:* Concise Oxford Dictionary of Quotations. New ed. Oxford University Press, 1982.

Oxford Dictionary of Quotations/ed. By A. J. Augarde. London: Oxford University Pr., 1991.

- (ii) **Dictionary of Proverbs:** Dictionaries of proverbs list proverbs in alphabetical order under the first significant key word with cross references to other important words.



*Example:* Concise Oxford Dictionary of Proverbs/comp. By John Simpson and Jennifer Speak. Ed. 2. London: O.U.P., 1993.

The Prentice-Hall Encyclopaedia of World Proverbs: A Treasury of Wit and Wisdom through the Ages. Englewood Cliff, N.J.: Prentice-Hall, 1986.

- (iii) **Dictionary of Foreign Terms:** This dictionary covers foreign words and phrases regularly used in English language. It is a very useful source of reference.



*Example:* A Dictionary of Foreign Words and Phrases in Current English/by Alan Joseph Bliss. New York: Dutton, 1966.

- (iv) **Dictionary of Phrases - Example Includes:** Brewer's Dictionary of Phrases and Fables/ by E.C. Brewer. Ed. 14/ed. By Ivon H. Evans. N.Y. Harper and Row, 1989.
- (v) **Dictionary of Idioms:** They are very useful for the writers to check the meaning and usage of idioms. Each idiom is defined and used in a sentence.

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*Example:* A Second Book of English idioms. Longman, 1956.

The Oxford Dictionary of Current Idiomatic English/by A.P. Cowie and R. Mackin. London: Oxford University Press 1975-83.

It is a very useful reference book for advanced students and teachers. It is comprehensive and gives detailed information on possible sentence patterns with illustrative quotations from a wide range of 20th century writing.

- (vi) *Dictionary of Rhyming Words:* These dictionaries are very useful to verse writers. They differ from the general dictionaries in the nature of arrangement. In this dictionary, all the rhyming words are grouped together.



*Example:* The Poet's manual and Rhyming Dictionary/by Frances Stillman. New York: Crowell, 1965.

- (vii) *Dictionary for Cliches:* Cliches are expressions or ideas which have become outdated due to their frequent use. They are the idiomatic phrases mostly found in writing rather than speech.



*Example:* A Dictionary of Cliches with An Introductory Essay/by Eric Patridge. 5th ed. London: Routledge and Kegan Paul, 1978.

It lists, defines and dates cliches which have been stereotyped by their repeated use.

- (viii) *Concordance:* A concordance is an alphabetical index of important words used in a particular work. Usually, it is followed by citation of the passages concerned.



*Example:* A Concordance of the Quran/by Hanna. E. Kassis. London: University of California Press, 1983.

Words are listed under roots from which they originate.

- (ix) *Gradus:* The word 'gradus' is used for a dictionary which aids in writing of poetry.



Caselet

### History of Tamil Dictionaries

**T**amil is the Dravidian language with the most ancient literary tradition in India, dating from the early centuries of the Common Era or before. It was one of the earliest languages learned by Europeans and is the first Indian language to appear in (western-style moveable-type) print (for example, the Vocabulario Tamulico com a Significaçam Portugueza [D255] of da Proença of 1679.) Because of its ancient literature and its spread both in ancient and recent times into Sri Lanka and southeast Asia, Tamil is important as a historical language in the area between the Indian Ocean and the South China Sea, and is studied by non-Tamils to a degree that is out of proportion to the size of its population of speakers.

The non-Tamil who learns an Indian language other than Sanskrit or Hindi is immediately aware of the problem of lack of adequate materials for learning the language, and especially the lack of decent reference works. A dictionary whose point of departure is the vernacular language (e.g. Tamil to English, Bengali to French) is usually more useful to a westerner

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## Notes

than are English-to-vernacular dictionaries, and this is certainly the case for Tamil. Excellent Tamil-English dictionaries of all sorts are available and in print, but English-Tamil dictionaries tend to be of use only to Tamils, since they list obscure English words of all sorts but give little information about the appropriate contextual usage of their Tamil equivalents.

The reason for this state of affairs can be traced to the history of lexicography in India, and in particular to the development of a lexicographic tradition, beginning with da Proença's Tamil-Portuguese dictionary, that departs, not unsurprisingly, from a strictly colonial point of view. This was a one-way dictionary, specifically designed for the use of Portuguese speakers wishing to know some Tamil, but not intended for Tamils wishing to know Portuguese. At no point did it seem to occur to anyone that the needs of Europeans and of Indians to learn each other's languages were mutual, and could benefit from being combined in the same volume. Speakers of 'vernacular' languages therefore developed their own dictionaries, and the two traditions never meshed.

After da Proença's initial effort at making the Tamil language more accessible to non-Tamils, other European missionaries followed suit. Beschi compiled (1742) though did not publish a Tamil-Latin dictionary [D247] and a Tamil-French dictionary (1744?) [D237], and de Bourges compiled (18th century?) a Tamil-French dictionary [D238]. These circulated in manuscript form and were widely known among Europeans studying Tamil. Predictably, they followed da Proença in being dictionaries of a one-way nature, i.e. Tamil-European language only.

In 1779 Johann Philipp Fabricius published his *Malabar and English Dictionary*, wherein the words and phrases of the Tamilian language, commonly called by Europeans the Malabar Language, are explained in English. [D225] Numbers in square brackets refer to items in Dhamodharan's bibliography of Tamil dictionaries, given in the bibliography. This dictionary formed the basis for several subsequent editions, most recently in 1972, and is still in print under the title *A Dictionary, Tamil and English* [D221], published by the Tranquebar Mission Press. It remains the best one-volume Tamil-English dictionary available today, although it does not always reflect modern usage, especially not the spoken language. Fabricius published an English-Tamil dictionary (*A Dictionary of the English and Malabar Languages* [D278]) in the same press in Vepery in 1786, and apparently intended that this companion volume would be bound together with the Tamil-English volume (Duverdier 1978) but for various reasons—war in Europe, and a severe paper shortage in India—this hope was not realized and apparently very few of the English-Tamil volumes ever appeared (or perished because of poor quality paper).

Today only very few copies of it are extant (Duverdier 1978:192, Shaw 1978:172) and it has lapsed almost completely into oblivion. The fact that the two volumes were never issued as one Tamil-English/English-Tamil Dictionary is significant and extremely unfortunate, because it established the tradition of publishing dictionaries of South Asian languages as either English-to-vernacular or vernacular-to-English that has persisted to this day. Usually the vernacular-to-English dictionaries have been prepared by indigenous South Asian scholars as an aid to people learning English. The result is a tradition of lexicography that fails to recognize that a one-way dictionary does not fulfil the needs of anybody, i.e. neither non-Tamils nor indigenous scholars. Following this tradition a number of English-Tamil dictionaries have been produced since the time of Fabricius, many of them building on his work, such as Knight and Spaulding 1842 Knight and Spaulding and Visvanatha Pillai have recently appeared in reprinted editions, by Asia Educational Services, New Delhi, 1989. [D281] (with revisions by Hutchings 1844 and Appaswamy Pillai 1888 [D290]), Ochterlony 1851 [D290], Brotherton 1842 [D 272], Anketell 1888 [D267], Visvanatha Pillai

*Contd....*

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1888 (revised 1963) [D319], Pope 1906 [D293], Mootoo-Tamby Pillai 1907 [D285], Sankaranarayana Chettiar 1908 (revised in 1909 and 1917 [D305]), Percival 1861 (rev. ed., 1935) [D292], and Chidambaranatha Chettiar 1965 [D273] (commonly referred to as the Madras University Dictionary).

Of these, only Percival and Chidambaranatha Chettiar are still in print but neither is conceived of in a way that takes into account the kind of information non-Tamils need to have access to, i.e., they (and their predecessors) do not give even the minimal information needed by a non-Tamil to determine which of a number of entries is the appropriate one for a specific context. A non-Tamil needs to know of a verb whether it is transitive or intransitive, what class (conjugation) it belongs to, something about appropriate contextual usage, and perhaps some synonyms. It would also be useful, in the case of verbs, to have some information about case-relations—whether the verb takes an accusative object, a postposition, or no object at all. None of the currently extant English-Tamil dictionaries gives this information—to check a verb’s class and transitivity, one must then consult a Tamil-English dictionary such as Fabricius (1972 ed.). Another problem that non-Tamils have with Tamil in general arises from diglossia: The existence of two versions or ‘styles’ of the language, one used for formal, written contexts and the other for informal spoken contexts. Tamils tend to think of the differences between LT and ST as trivial and predictable; non-Tamils see the differences as major, and not just confined to the phonological component of the language, but pervasive throughout the morphology, lexicon, and the syntax.

In Dhamotharan’s 1978 bibliography of Tamil dictionaries there are actually some 55 English-Tamil dictionaries or glossaries listed. All of these suffer from various faults, such as being intended for Tamil speakers only, for students (or children or tea planters) only, are extremely brief, or are simply out of print. Many of them list rare English words but do not give simpler or more colloquial items such as ‘come’ or ‘go’, or verb-particle combinations such as ‘come off’, ‘burn down’, etc. None of them gives information on Tamil spoken usage and pronunciation. The most modern and scholarly attempt, the three-volume Madras University English-Tamil Dictionary edited by Chidambaranatha Chettiar (1965), while containing much more information than the others, still does not list verb classes, transitivity status, or any spoken forms.

Although it has not been possible for this writer to examine all of the 55 dictionaries listed by Dhamotharan, of the currently available English-Tamil dictionaries, all suffer from the faults mentioned, and none of any of the serious works give spoken forms—only the guides for tea and rubber planters even attempt spoken forms, but in an unreliable English-spelling-based transcription that obscures the true phonetic forms of the Tamil words.

### 9.3.3 Dictionaries Useful for Translations

Dictionaries are used as an aid in learning a foreign language. They are also used in translating text of foreign language book, etc. in local language and vice-versa.

When a dictionary is compiled to give meaning of a word of one language into more than one language, such as a dictionary, as is evident, is known as multilingual. In bilingual dictionaries, word of one language is explained in the other language; sometimes such explanation may exceed even a sentence. Multilingual dictionaries restrict themselves to only providing with equivalent term in other languages. Such dictionaries also are made use of to provide descriptors for subject headings. They are also considered part of comparative linguistics.” Thus multilingual dictionaries may be grouped as:

- Bilingual; and
- Multilingual.



## Bilingual Dictionaries

## Notes

Bilingual dictionaries, giving meaning in one or two other languages.



*Example:* Harrap's a new Standard French and English Dictionary /edited by J.E. Mansion; completely revised and enlarged edition by R.P.L. Ledesert and Margaret Ledesert. London: Harrap; New York: Scribner, 1972-1980.

Part 1                  French into English                  Two Vols.

Part 2                  English into French                  Two Vols.

Harrap's Concise Student French and English Dictionary /by J. E. Mansion. New ed./by P.H. Collin and others, 1978.

Oxford University Press and Collins are also well-known for their bilingual dictionaries in important European languages in two sizes – unabridged and concise or pocket.

A Dictionary of English and Sanskrit /by Sir Monier Monier – Williams. Lucknow: Akhil Bharatiya Sanskrit Parishad, 1956.

The first edition was published in 1851. It was reprinted lithographically in India from the sheets of the first edition.

An English-Hindi Dictionary /by Father Kamil Bulke. 3rd ed. New Delhi: S. Chand, 1981.

Practical Hindi-English Dictionary /by Mahendra Chaturvedi and Bholanath Tiwari. Delhi: National, 1970.

India being a multi-lingual country, there are numerous bilingual and trilingual dictionaries offering Hindi or English as first language and their equivalents in any other Indian language and vice versa. These dictionaries are very useful to language learners and translators.

The Central Hindi Directorate, Department of Culture, Government of India has published more than twenty bilingual dictionaries, about half of them are Hindi-based and the other half are regional languages based.

The Directorate has also brought out Hindi based foreign and Indian language dictionaries and Indian and foreign language-based Hindi dictionaries.

Hindi-Chini Kosh, 1988

Hindi-Fransisi Kosh, 1988

German-Hindi Kosh. 2 parts 1990

In addition there are tri-lingual dictionaries brought out by The Central Hindi Directorate

Hindi-Gujarati-English, 1984

Hindi-Marathi-English, 1988

## Multilingual Dictionaries

Multilingual dictionaries giving equivalent words in three or more languages.

Such dictionaries are also known as polyglot dictionaries. They give equivalent words in three or more languages. The arrangement of entries in the polyglot dictionaries has not been standardized. They are arranged alphabetically by the main language with the equivalent words in the other language covered in a tabular form. Separate alphabetical indexes for each language represented are given as appendices at the end.

## Notes



*Example:* Twenty-one language Dictionary/by H.L. Ouseg – Owen, 1962.

It is a multilingual dictionary of a small number of common words and expressions covering 21 languages. It is arranged alphabetically by the English words and has equivalent words of 20 languages. It has twenty appendices – one for each foreign language. Each appendix has alphabetically arranged list of words with their appropriate English equivalent.

Yugarasmi's Illustrated English, Malayalam Tamil, Hindi, Arabic Dictionary. Trivandrum Yugarasmi Pub. Co., 1988.

### 9.3.4 Subject Dictionaries

Dictionaries dealing with the terms of a particular subject are known as subject dictionaries. The rapid development in all the fields of knowledge has necessitated in the compilation of subject dictionaries devoted to the specific subject fields, occupations and professions. They differ from general language dictionaries in two ways. These are:

- (i) They include specialized technical terms of a particular discipline not usually found in general dictionaries.
- (ii) They give detailed descriptions of words. They not only define the terms but explain and comment on them.

These dictionaries can be grouped on the following basis:

Some unilingual dictionaries are unabridged although examples of abridged dictionaries are also available.



*Example:* The McGraw-Hill Dictionary of Modern Economics: A handbook of Terms and Organizations/by Greenwald. 4th ed. New York: McGraw-Hill, 1983.

The Concise McGraw-Hill Dictionary of Modern Economics/ed. By Douglas Greenwald. New York: McGraw-Hill, 1984.

- **Unilingual** - Examples of this type are:

The American Dictionary of Economics/ed. By Douglas A L Auld and others. N.Y.: Facts on File, 1983.

Dictionary of Information Science and Technology/comp. By Walters. London: Academic Press, 1992.

- **Bilingual and Multilingual** - Examples of this type include:

German-English Technical and Engineering Dictionary/by L. De Vries and T.M. Herrmann. 2nd ed. New York: McGraw-Hill, 1968.

Elsevier's Dictionary of Television, Radar and Antennas in Six languages/by W.E. Clason. Amsterdam: Elsevier, 1955.

Subject dictionaries are not confined to major disciplines or subjects, Numerous dictionaries are compiled solely to deal with the vocabulary of specialised topics.



*Example:* Dictionary of Clocks and Watches/by E. Bruton Acro, 1962.

The Diamond Dictionary/by L.L. Copeland. Los Angels: Geological Institute of America, 1960.

Some of the leading publishers like McGraw Hill, Elsevier, Penguin, etc., have published popular series of subject dictionaries in various disciplines. They are the most well-known sources of reference in the academic and special libraries.

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## Self Assessment

Fill in the blanks:

9. Dictionaries can be divided into ..... categories according to their nature and scope of contents.
10. The dictionaries, which are compiled for a special purpose of aspects of a language, are called ..... dictionaries.
11. .... is pithy one or two sentence, made as a remark by an eminent person in course of lecture, speech or in a book of fiction or non-fiction.

## 9.4 Historical and Etymological Dictionaries

The diachronic or historical dictionary has a special class in it which can be called etymological. Although its focus is also to present the history of a lexical unit, its form and purpose are totally different from historical dictionary and it has a limited readership. Its word list is different from the general dictionaries, even from the historical dictionary and in this regard it comes under special type of dictionaries, described later.

The main function of both the historical dictionary and the etymological dictionary is to present the history of a lexical item. The difference lies in their approach. The historical dictionary records the development of a lexical item in terms of both the form and the meaning of the particular lexical unit, whereas the etymological dictionary presents the origin of words by tracing the present day words to their oldest forms.

The historical dictionary is concerned with a systematic study of changes affecting a lexical unit during its life i.e. within a period from which there is evidence, e.g. in OED from the days of King Alfred to the present time. In order to present these changes in the structure and meaning of a word the lexicographer traces it back to its earliest available occurrence in the literature of the languages and records its development in subsequent stages of the language. In order to do this the lexicographer makes use of all the available works of the language. All the occurrences of the lexical units in different contexts in all works are found out. These contexts are analysed and compared with each other. By doing this, the lexicographer finds out the different senses of a lexical unit and finer nuances of its meanings. Then these meanings and sub meanings are arranged in chronological order. As for the forms, the changes in their shape are also recorded chronologically. But this is by no means a simple task. The number of words in a language is very large and changes in case of all the words are difficult to record in all their minor details. Moreover, the semantic changes of individual lexical items are arbitrary and cannot be generalized. As a result the lexicographer has to analyse a large amount of data to find out the semantic changes of a lexical unit.

The problem arises as to whether a historical dictionary can cover all the works available in a language and give all citations for all the lexical items. No dictionary, whatever are its resources, can afford to give all this. The lexicographer has to choose some workable way for his dictionary. In order to do this, works are at first listed. Then a selection of works as to which of them would form the corpus of the dictionary is done. For selecting works for the dictionary, two considerations govern the decision of the lexicographer: (1) time and (2) the subject or theme. First, certain broad classifications can be made of the entire period. This classification is based on some criterion like some landmark in the history of the development of the language

**Notes**

e.g. some outstanding author or some notable literary or other event. Works from all the periods are selected for the dictionary. The lexicographer has to see that all the periods in the history of a language are given due and even attention.



*Notes* No period should be left without proper representation; otherwise it would be impossible to find a coherent semantic development of a lexical item.

It has been contended whether a dictionary like OED, which deals with all the periods of the history of the language, can be a true historical dictionary. It is suggested that it would provide more scientific and accurate account of the history of the words of a language if a particular period is taken up and a detailed analysis of all the works of that period is done, rather than taking total history and divide it into some periods and then making generalizations. For this Period Dictionaries dealing with some particular period may be prepared. A dictionary dealing with the entire period of the history of the language may not do justice in presenting full picture of the semantic history of the lexical stock of language.

The second point a lexicographer has to keep in mind while selecting works for a historical dictionary is to see that all the subject fields are equally and evenly represented in the corpus of the dictionary.



*Notes* For this representative works of all the branches of human knowledge available in the language should be analysed. Variation of region, style and subject matter should be carefully marked and entered in the dictionary.

The Sanskrit Dictionary (Poona) has used 1500 books as its source material. Malayalam Lexicon has utilized 7000 works in addition to manuscripts etc. besides these works; even the available dictionaries can be utilized. Kannada Dictionary (Bangalore) analysed 2000 books and all available inscriptional material.

The etymological dictionary, as stated earlier, traces the present word to its oldest form and gives the parent form. The interest of an etymological dictionary is primarily in the pre-history of the language. For arriving at the parent form the lexicographer takes recourse to historical comparative method, wherein on the basis of recurring correspondences of form and meaning of words in different cognate languages, the protoword form or etymon is reconstructed.

In some cases even when the dictionary does not give reconstructed protoforms it may be considered etymological. In these cases a particular point in the development of a language is fixed as a terminal point and the etymologies are traced back to that point. For Indo-Aryan languages this point may be Sanskrit hypothetical or reconstructed forms are given. Sometimes, though it is not scientific, the nearer attested forms are given as the source word.



*Did u know?* Some dictionaries give only the cognate forms e.g. Dravidian Etymological Dictionary.

The etymological dictionaries have been classified in several categories on the basis of the range of coverage, the number of languages covered etc. the most common is the one which classifies the dictionaries on the fact whether the focus of the dictionary is a single language or many languages. The dictionary with one language as focus deals with the lexical items of one language. The entry of the dictionary is given in that language. The origin of the words of this language is

traced back to the proto language. In this process cognate forms from related languages are cited. Since the help of comparative method is taken by giving cognate words such dictionaries develop into comparative dictionaries.

In the dictionary which has many languages as its focus the entry word is given in the proto language. The developed forms in different languages are given in the description part of the entry.

For borrowings in the language, the etymological dictionary gives the immediate source of the borrowing, its original meaning and forms in cognate languages. If the borrowing is through some other language, the name of the intermediate language and the form therein are also given.

The dictionary of borrowed or foreign word in a language can be included in the class of etymological dictionary, because by giving the origin of these words the dictionary provides clue to the etymology of these words.

Although the focus of the etymological and historical dictionaries is different, they are not opposed to each other. Each one, on the other hand, can be helpful for the other to get more reliable results. For an etymological dictionary the reconstruction of proto forms gets greater authenticity if they are attested by forms in the earlier stage of the history of the language. This information is made available by the historical dictionary. Again, it is in the historical dictionary that we find what new words are derived forms the original word and at what stage.

Most of the analytical and descriptive dictionaries contain some elements of an etymological dictionary is as far as they give what is the derivation or the origin of the word. In descriptive dictionaries, the etymological analysis helps in solving some of the basic problems of lexicography. Etymology helps in deciding the cases of homonymy and polysemy and in ordering the sequence of the meanings of the polysemous words by giving the original or basic meaning. Etymology also helps in solving the problem of unclear meanings of some lexical units.

The synchronic dictionaries are generally grouped into two classes, general and special. General dictionaries contain those words of the language which are of general use representing various spheres of life and presenting a complete picture of the general language. They are meant for the general user of the language. Special dictionaries either cover a specific part of the vocabulary or are prepared with some definite purpose. By general dictionary it should not be understood that it contains the entire lexical stock of the language. No dictionary, except the dictionary of dead languages wherein the possibility of creation of new words is severely restricted, can give all the words of a language. Although the general dictionaries contain general word list some of the special dictionaries with their focus on some particular purpose contain the general word lists. For example, the dictionaries of pronunciation, the reverse dictionaries, and the frequency counts have special purpose but their word list is general.

### Self Assessment

State whether the following statements are true or false:

12. The diachronic or historical dictionary has a special class in it which can be called etymological.
13. The historical dictionary is concerned with a systematic study of changes affecting a lexical unit during its life.
14. The main function of both the historical dictionary and the etymological dictionary is to hide the history of a lexical item.

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15. Neither historical dictionary nor etymological dictionary presents the history of a lexical item.



Case Study

**Casio Launches, for the First Time in India, the user Friendly Feature Packed Electronic Dictionary**



CASIO India Company Private Limited, a 100% subsidiary of the JPY 341.7 Billion consumer electronics giant Casio Computer Co. Ltd., Japan, today launched its much awaited product Electronic Dictionary.

An Electronic Dictionary is a small handheld device with an integrated reference material in digital form. These Electronic Dictionaries will provide grade degree of convenience in day to day life with variety of functions like finding word meaning of any English/French word, translation, finding correct spelling, checking plural, noun or past tense of verb. Additionally, it also finds grammatical information about a word. It also helps us in finding synonyms or antonyms of a word, collocations of a word, checking the parts of speech of a word. Inbuilt speaker of the dictionary helps us in pronouncing any desired word correctly.

Mr. Masayuki Uehara, Deputy Senior General Manager, Global Marketing Division-Tokyo, while talking about Casio global operations said, "Casio Electronic Dictionaries have presence in more than 8 countries and we have got very good response for these Electronic Dictionaries in all overseas markets such as Russia, Germany, China, Korea, France etc. We are presently No. 1 in Japan [Casio as #1 Electronic Dictionary brand in Japan, By GfK Japan (Jan-Dec. 2010)]. Based on our success in other markets, we are expecting to get good response from Indian Market as well."

Mr. M. Naka, Managing Director, Casio India, said, "India is going to become economic superpower; and hence the need of high quality writing and communication skills particularly in English is required at all levels. These products will definitely help Indian students and professionals in their concerned areas."

Speaking about the target audience for these Dictionaries stated Mr. Kulbhushan Seth, Head Sales and Marketing, Casio India Company, "This dictionary is ideally suited for variety of users like Language students, middle & high-class students, Students preparing for professional English language exams, language training for BPO employees, B.Ed. schools, professional and people travelling to overseas markets. Moreover, it is very useful teaching tool in English classes wherein teachers can give live examples to students by connecting this dictionary with Casio projectors."

Contd....

He added, "These dictionaries are highly portable and compact which fits in your pocket and enable quick consultation, even on the move."

The EW- B100C, priced at ₹ 7995, has content of eight complete Oxford Dictionaries for English. It has all types of searching features like headword search with example and idiom search. This electronic dictionary provides unique facility of jump search with spelling checker. This single model of dictionary operates the functions of multi dictionary search, which helps to locate the history of the word. The unique feature Wildcard search enables searching the meaning of a particular word by just typing only a part of the spelling of the word.

One of its unique features is the Vocabulary List function, which helps in making individual vocabulary list by saving referred words in any one of the lists available in the dictionary. This helps in developing vocabulary of words and further in revising these saved words from the list. Another important function is Text Marker Function, which helps in marking any word and its meaning in three different colours. These marked words could be saved in the vocabulary list for any future reference.

This dictionary is equipped with three zooming changeable font sizes. The Dictionary has inbuilt Calculator function for doing normal calculation. The display of the screen is colourful and easily readable for the eyes. The display for lines and characters is 15 \* 64 @12 font size.

The dictionary has total weight of mere 175g including the battery. It has got long battery life (up to 100 hours) and runs on both alkaline and rechargeable batteries.

Another high end model, EW- B2000C has twelve contents which include 11 complete Oxford Dictionaries of English and French and 1 Britannica Concise Encyclopaedia. Priced at ₹ 14,995, the EW B2000C along with above features also has useful features like speaking function that comes with USB cable and earphones. With this speaking function, the user can hear the accurate pronunciation of a word. It is also programmed with 100 works of world literature, which includes literary works of renowned author's like – Charles Dickens, George Elliot, O' Henry and many more. What's more, you can read, listen to remarkable speeches and words of famous personalities such as Barack Obama, Abraham Lincoln and William Shakespeare. It is also equipped with a Multilingual Word and Phrase bank, which helps in getting meaning of any key word or phrase in six different languages.

The size of the font is available with three different changeable sizes. The user can view the still images from the memory card and transfer the text file through a memory card or USB Port from a PC. After loading the text in dictionary through the Text Loader Software (installed in PC), can find the meaning of any word from the text.

It has brilliant colour display with high resolution LCD panels. The display for lines and characters is 23\*80@12 font size. It also has the ability of changing the layout of the words. This light weight dictionary including the battery weighs only 270g. It has got long battery life (up to 130 hours) and runs on both alkaline and rechargeable batteries.

This model is compatible with the Casio projectors and hence screen of the device can be projected through USB cable which comes along the dictionary. Teachers can easily explain the vocabulary to the students along with demonstrating actual pronunciation of that word.

These Electronic Dictionaries are TAF COT designed (totally advanced force control technology), which withstands impact caused by dropping; high pressure and any kind of vibration for worry free commuting to school or work. High strength side beams and super rigid aluminium alloy panels are built into the body to boost its rigidity and protect

*Contd....*

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the LCD and electronic components from the external pressures caused by bending and crushing.

**Questions:**

1. Analyse the case and interpret it.
2. Write down the case facts.

*Source:* <http://press-release.medianama.com/casio-launches-for-the-first-time-in-india-the-user-friendly-feature-packed-electronic-dictionary-223>

### 9.5 Summary

- Sometimes the term “encyclopaedia” in a title may be used for a work, which may be nothing but a subject dictionary.
- Modern large dictionaries called unabridged dictionaries are encyclopaedic in nature, providing information about the thing and the word.
- The word ‘glossary’ originates from the Latin word ‘glossarium’ meaning ‘a collection of words peculiar to a field of knowledge’.
- Each entry in a glossary is known as a ‘gloss’ meaning ‘a word’, a comment’, ‘an explanation’ or ‘an interpretation’.
- Lexicon is derived from a Greek word ‘Lexicon’, meaning ‘dictionary’.
- Each entry in the Lexicon is known as ‘Lexis’ meaning ‘a word’.
- Lexicon is a dictionary of words of a language, arranged alphabetically giving meaning in another language.
- Multilingual dictionaries may be grouped as: Bilingual; and Multilingual.
- The main function of both the historical dictionary and the etymological dictionary is to present the history of a lexical item.
- The historical dictionary records the development of a lexical item in terms of both the form and the meaning of the particular lexical unit, whereas the etymological dictionary presents the origin of words by tracing the present day words to their oldest forms.

### 9.6 Keywords

**Dictionary:** It is a form of reference that deals with words, their meaning and uses.

**Dictionary of Pronunciation:** Pronouncing dictionaries are exclusively with the pronunciation of words.

**Dictionary of Spellings:** They include selected words giving priority to those which are difficult to spell. They cover words which their pronunciation.

**Etymological Dictionaries:** Etymological dictionaries give the history of words, their origin and derivation in the development of a language.

**Etymology:** Etymology means the science of the origin and history of words.

**Gloss:** Each entry in a glossary is known as a ‘gloss’ meaning ‘a word’, a comment’, ‘an explanation’ or ‘an interpretation’.



**Glossary:** The word 'glossary' originates from the Latin word 'glossarium' meaning 'a collection of words peculiar to a field of knowledge'.

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**Lexicography:** The science of compiling a dictionary is called lexicography.

**Slang Words:** Words that are commonly used in every day conversation with friends or colleagues but are not suitable for formal communication or good writing are called slang words.

**Thesaurus:** The term 'thesaurus' has its origin in Greek. It means 'a storehouse' or 'treasury' or 'a repository'.

**Vocabulary:** The word 'vocabulary' is often used for a stock of words and phrases with brief explanations and meanings restricted to a single work or author. The entries are usually arranged in alphabetical order.

### 9.7 Review Questions

1. Define the term dictionary.
2. What is meant by glossary?
3. Write the differences between glossary, dictionaries and encyclopaedias.
4. On what basis dictionaries are classified?
5. What are multilingual dictionaries?
6. What is lexicon?
7. What are synchronic dictionaries?
8. Write the main function(s) of historical dictionary and the etymological dictionary.
9. What is thesaurus aimed at?
10. What is vocabulary means?
11. Write the uses of dictionaries.
12. Write the uses of thesaurus.
13. Describe different types of dictionaries.
14. Explain the importance of Historical and Etymological Dictionaries.
15. What are etymological dictionary aimed at?

### **Answers: Self Assessment**

- |                 |                            |
|-----------------|----------------------------|
| 1. Reference    | 2. Dictionarium            |
| 3. Lexicography | 4. Lexicon                 |
| 5. Dictionaries | 6. Bilingual, multilingual |
| 7. True         | 8. True                    |
| 9. Different    | 10. Special                |
| 11. Quotation   | 12. True                   |
| 13. True        | 14. False                  |
| 15. False       |                            |

Notes

**9.8 Further Readings**



Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed. 3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



Online links

[dictionary.reference.com](http://dictionary.reference.com)

<https://en.wikipedia.org/wiki/Dictionary>

[www.onelook.com/](http://www.onelook.com/)

[www.thefreedictionary.com/](http://www.thefreedictionary.com/)

## Unit 10: Directories

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### Objectives

After studying this unit, you will be able to:

- Discuss the meaning of directory
- Explain the evaluation of directory sources
- Identify the telephone directories
- Describe about reverse telephone directory
- Explain the publishing directories
- Discuss the web directories and specialized search engines

### Introduction

Directories provide information about organizations of different kinds covering learned bodies, scientific societies, professional bodies, trade associations, etc. For each organization, variety of information like names, addresses, list of office bearers, qualification of membership, etc., are

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included. Directories form the largest category of reference sources. It is not easily possible to estimate the number of directories published every year because many of these published locally may not be copyrighted. A collection of directories in print would easily fill a large library. Their number would be few hundred thousand volumes. Directories are a rich source of information. These vary in kinds, sizes and purposes. It may occur as a separate publication or as a part of another publication. The selection of directory sources may vary greatly from library to library, depending on size, mission, and users served. Some important criteria to consider in selecting a directory include the user community, cost, and uniqueness.

### 10.1 Meaning of Directory

A directory is defined in the Dictionary for Library and Information Science as “a list of people, companies, institutions, organizations, etc., in alphabetical or classified order, providing contact information (names, addresses, phone/fax numbers, etc.) and other pertinent details (affiliations, conferences, publications, membership, etc.) in brief format, often published serially.” Telephone books and titles such as *The Foundation Directory* and the *Million Dollar Directory* are examples of directory publications that are found in libraries of all types.



*Did u know?* Directories can cover a wide variety of topics and are available to libraries in print, microform, and electronic formats.

Directories have a long history of serving the human need to know about people and places. Early directory precursors were census-like compilations of property and persons that were used by ancient and feudal governments to account for wealth and taxes. Narrative ancestors of the directory were the travel and topographical histories of the early modern period.

Topographical histories provided geographical descriptions of places that often contained detailed notes about their history and lists of inns, establishments, township or other things that travellers would likely encounter on the road. Although these works had literary and historical value, they also served a practical purpose for educated travellers to find out what to expect when moving about the landscape.

Front 16th century England, John Leland's *Itinerary*, William Harrison's *The Description of England*, and John Stow's *A Survey London* are some of the more famous topographical histories. This type of guide served a few highly educated users who needed to know about a broader world. The topographical history was free of the pressure of having to constantly change because it served a slowly changing rural society that was not tied together by efficient communications.

More utilitarian classified listings of people and places began to emerge in the mid-19th century. The growth of cities and population spurred by the Industrial Revolution generated a need for more people to know about things beyond their immediate experience. The linkage of communications by telegraph, railroads, and later the telephone made knowledge of addresses, timetables and telephone numbers essential for transacting daily life. As economies of scale began to take shape, persons in businesses found it crucial to have a medium that would provide their contact information and serve as a place to advertise their goods and services. Publishers responded to these needs and produced the city directory.

The city directory of the 19th century is the direct precursor of the alphabetical and classified directories of today. These publications sought to be a means for promoting the advantages of doing business in a particular community. City directories also linked businesses, advertisers and customers, in an effort to market commercial activities in a given area. Typically, a city directory would have a local gazetteer and a classified listing of businesses. The classified listing

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would often be an alphabetical listing of businesses that could be arranged by street or district within the city or by the service offered by the business: brokerage house, insurance firm, blacksmiths, accountants, and so on. Many companies would be profiled with full-page spreads, and others might have drawings or photographs of their products.

To account for more frequent change, city directories were published annually. Some directories were supplemented at different times during the year to keep up with an even faster pace of change. Many city or local publishers produced these directories, but a few larger publishers tackled larger. Perhaps the best known are the *Polk City Directories*, which continue to be published to this day.

The emergence of city directories followed closely the early development of libraries. The information contained in early directories was in high demand, and a marriage between the directory and the library was a logical development. Libraries became important consumers of city directories and significant users or newer directory products that emerged in the later 19th century and first part of the 20th century. Telephone books, listings of professionals, guides to associations, and increasingly more specialized directories made their way into libraries. Directories rapidly became essential components of reference collections, often among the most consulted sources in libraries of all types.

For more than a century, library directory collections were almost exclusively made up of print publications. Many libraries kept long Miles of serial directory publications in their reference areas. Crowded shelves of multi-coloured directories were a common site in reference collections throughout most of the 20th century. Many of these collections became unwieldy to use and difficult to update and maintain. Some directory collections were put on microfilm or microfiche, allowing libraries to keep more extensive back runs of historical directory collections. However, the difficulties of reading this format and the expense of microform readers prevented microform from becoming a widespread option for libraries seeking to maintain large directory collections.

Since the 1980s, computer technology has made serious inroads into the primacy of print directory collections. The speed, storage, and computational advantages of computers were obvious to both librarians and users. In the past few decades, many directories have appeared as online databases, on CD-ROMs, and most recently, on the Web.



*Notes* Directories available commercially or for free on the Web are causing many librarians to look closely at their investment in print directories.

The shape of directory collections in libraries is changing rapidly, with many libraries opting to cancel print directories in favour of comparable electronic versions. Even subscription-based Web directories are feeling the pressure of resources that are freely available on the Web. For many questions, answers from freely available Web resources can suffice, leading to less reliance on subscription-based print and electronic resources.

## Self Assessment

Fill in the blanks:

1. .... rapidly became essential components of reference collections, often among the most consulted sources in libraries of all types.
2. The shape of directory collections in libraries is changing rapidly, with many libraries opting to cancel print directories in favour of comparable ..... versions.

## **10.2 Evaluation of Directory Sources**

Librarians have always placed a high priority on evaluating directory sources. In helping users find people, places, and organizations having suitable directory resources has always been critical. Criteria for judging directories are often similar to standards that are used for other types of reference sources. Some important criteria to consider in evaluating a directory include scope, currency, accuracy, and arrangement.

### **10.2.1 Scope**

Does this source include addresses and telephone numbers? Can we get Web sites and sales figures from this list of businesses? Will this directory of colleges include schools in Canada? These are all questions that deal with the scope of a directory.

What is covered or included should be one of the first things considered in deciding to use a specific directory to answer a user's question. The scope of directories can be looked at in terms of their *who, what, or where*. *Who* are the people covered by this directory? Does it even list or cover people? Is it covering lists of people who reside in a given area? The *what* of the directory refers to the things listed in the directory. What organizations, schools, agencies, businesses, or funding opportunities are listed in the directory? The *where* of the directory deals with the geographic coverage. Is it local, national, or international? Prefatory material in a print directory can be used to determine the scope and likely usefulness in a particular library setting. Scope can be more difficult to determine for electronic directories, and often librarians have to rely on vendor documentation or promotional material to get an idea of what a given resource may cover.

### **10.2.2 Currency**

How often is this directory published and updated? Does it come out annually, biannually, quarterly, weekly, or daily? These questions of currency are of critical importance. Users of directories are often trying to make connections with people and organizations outside their immediate community. Success in doing so often depends on having the most current available information.

Determining the currency of a directory can be less complicated for a print source. Print directories often follow an established publishing schedule, usually appearing annually with supplements at regular intervals. The print directory will have a lag in reporting changes in addresses or phone numbers, for example, until a supplement or new edition is published.



*Caution* This lag will limit the currency, and this caution should always be taken into account when using a print directory in a reference situation.

The currency of electronic directories can sometimes be problematic. They often have much more frequent updates than their print counterparts, with additions and changes being made several times a year or even more frequently.

However, despite frequent updates, the currency claims of electronic directories need to be viewed critically and with caution. Updating for many electronic directories consists of adding new material but not updating the entire database content. Some database vendors will keep separate schedules for adding new entries and for updating the remainder of the database.



*Caution* Librarians should be alert to these possible discrepancies and look for electronic directories that regularly update all entries.

### 10.2.3 Accuracy

The accuracy of information in directories should also be examined carefully. Is the information about people and organizations correct, reading the preface or the introduction in a directory can sometimes give clues about its potential accuracy. Introductory material can often reveal how the data compiled in the directory was collected, alerting librarians to potential inaccuracies.



*Example:* Did a representative of the organization provide the information compiled in its directory entry, or were other sources used?

Clearly, inaccurate information will limit the usefulness of a directory in a reference setting, and users should be made aware that sometimes information obtained from directories will have to be used with caution.

### 10.2.4 Arrangement

Does this directory have an index? Are the entries alphabetical or classified? Do subject categories appear at the top of the page? Does the electronic version of this directory allow one to sort results by city? These are some of the questions that address the arrangement of a directory. The arrangement determines whether access to the information in the directory will be simple or difficult.



*Caution* If a directory is poorly organized, users are not likely to find the information they need.

Electronic directories often have an advantage over their print counterparts in providing access options. Searching directories electronically allows users to take advantage of multiple access points, search multiple editions of a print counterpart and create customized lists for entries with common characteristics. Regardless of whether the source is print or electronic, knowledge of indexing schemes and access options will help get information to the user faster and more efficiently.



*Caselet*

#### Search Strategy: Directory of Directories

A user in a college library came to the information desk asking for a list of Army/Navy surplus stores. The user had been surfing all over the Web and had found only individual store sites. The user wanted a more systematic list that would list them by state. After failing with the online catalogue, the librarian decided to try the *Directories in Print* source in the reference collection. The librarian could not get a sense of where this might be in the *Descriptive Listing* volume of the source. The librarian decided to try the *Indexes volume* and, after striking out under "Army" and "Surplus," finally found an entry for the *Army & Navy Goods Retail Directory* under a heading for "Retail Stores." The

*Contd....*

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directory arranged the stores by geographic location and included contact information, name of owners, and number of employees. A search of the online catalogue found that the library did not have the directory, but a *WorldCat* search found that the local public library had the latest version of the directory, and the user was successfully referred to the public library.

Source:<http://books.google.co.in/books?id=1G2ZdLFFUr8C&printsec=frontcover&dq=Information+Sources+and+Services&hl=en&sa=X&ei=XpL4Ub2iLMiCrgEM6YHIDA&ved=0CDwQ6AEwAw#v=onepage&q=Information%20Sources%20and%20Services&f=false>

### Self Assessment

Fill in the blanks:

3. Some important criteria to consider in evaluating a directory include scope, currency, ....., and arrangement.
4. Scope can be more difficult to determine for ....., and often librarians have to rely on vendor documentation or promotional material.
5. .... directories often follow an established publishing schedule, usually appearing annually with supplements at regular intervals.
6. The ..... determines whether access to the information in the directory will be simple or difficult.

### 10.3 Telephone Directories

A telephone directory (also known as a telephone book, phone book, or white/yellow pages) is a listing of telephone subscribers in a geographical area or subscribers to services provided by the organization that publishes the directory. Its purpose is to allow the telephone number of a subscriber identified by name and address to be found. For most of the 20th century, print telephone directories were standard components of library reference collections. A successor to the 19th century city directory, telephone books provide important information about local communities. They can be used to answer such questions as the following:

- What's the phone number for Toe's body Shop'?
- I need to find my friend's telephone number and address in Delhi, India.
- Where can I go in town to get my bicycle repaired?

Along with the standard residential listings with addresses and phone numbers, telephone directories have maps, building guides, local calendars, and advertisements for business. The rise of the Internet and smart phones in the 21st Century greatly reduced the need for a paper phone book. Some communities, such as Seattle and San Francisco, sought to ban their unsolicited distribution as wasteful, unwanted and harmful to the environment.

Subscriber names are generally listed in alphabetical order, together with their postal or street address and telephone number. In principle every subscriber in the geographical coverage area is listed, but subscribers may request the exclusion of their number from the directory, often for a fee; their number is then said to be "unlisted" (American English), "ex-directory" (British English) or "private" (Australia and New Zealand).

A telephone directory may also provide instructions about how to use the telephone service in the local area, may give important numbers for emergency services, utilities, hospitals, doctors, and organizations who can provide support in times of crisis. It may also have civil defence or emergency management information. There may be transit maps, postal code guides, or stadium seating charts, as well as advertising.





*Did u know?* In the US, under current rules and practices, mobile phone and Voice over IP listings are not included in telephone directories. Efforts to create cellular directories have met stiff opposition from several fronts, including those who seek to avoid telemarketers.

## Notes

A telephone directory and its content may be known by the colour of the paper it is printed on.

- A white page generally indicates personal or alphabetic listings.
- Yellow pages, golden pages, A2Z, or classified directory is usually a “business directory,” where businesses are listed alphabetically within each of many classifications (e.g., “lawyers”), almost always with paid advertising.
- Grey pages, sometimes called a “reverse telephone directory,” allowing subscriber details to be found for a given number. Not available in all jurisdictions for reasons of privacy.

Other colours may have other meanings; for example, information on government agencies is often printed on blue pages or green pages.

Telephone directories can be published in hard copy or in electronic form. In the latter case, the directory can be provided as an online service through proprietary terminals or over the Internet, or on physical media such as CD-ROM. In many countries directories are both published in book form and also available over the Internet. Printed directories were usually supplied free of charge.

### 10.3.1 History

The first telephone directory, consisting of a single piece of cardboard, was issued on 21 February 1878; it listed 50 businesses in New Haven, Connecticut that had a telephone. The first British telephone directory was published on 15 January 1880 by the Telephone Company. It contained 248 names and addresses of individuals and businesses in London; telephone numbers were not used at the time as subscribers were asked for by name at the exchange. The directory is preserved as part of the British phone book collection by BT Archives.

In 1981 France is the first country to have an Electronic Directory on an Internet system called Minitel. The Directory is called “11” after its telephone access number. In 1991 the U.S. Supreme Court ruled (in *Feist v. Rural*) that telephone companies do not have a copyright on telephone listings, because copyright protects creativity and not the mere labour of collecting existing information. 1996 is the year the first telephone directories go online in the USA. Yellowpages.com and Whitepages.com, both see their start in April.

In the 21st century, printed telephone directories are increasingly criticized as waste. In 2012, after some North American cities passed laws banning the distribution of telephone books, an industry group sued and obtained a court ruling permitting the distribution to continue. Manufacture and distribution of telephone directories produces over 1,400,000 metric tons of greenhouse gases and consumes over 600,000 tons of paper annually.

### Self Assessment

Fill in the blanks:

7. A ..... is a listing of telephone subscribers in a geographical area or subscribers to services provided by the organization that publishes the directory.
8. A telephone directory is also known as a .....
9. Telephone directories can be published in .....

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## 10.4 Reverse Telephone Directory

A reverse telephone directory is sorted by number, which can be looked up to give the name and address of the subscriber. A reverse telephone directory is a collection of telephone numbers and associated customer details. However, unlike a standard telephone directory, where the user uses customer's details (such as name and address) in order to retrieve the telephone number of that person or business, a reverse telephone directory allows users to search by a telephone service number in order to retrieve the customer details for that service.



*Did u know?* A reverse telephone directory is also known as a gray pages directory, criss-cross directory or reverse phone lookup.

Reverse telephone directories are used by law enforcement and other emergency services in order to determine the origin of any request for assistance, however these systems include both publicly accessible (listed) and private (unlisted) services. As such, these directories are restricted to internal use only.

Publicly accessible reverse telephone directories may be provided as part of the standard directory services from the telecommunications carrier in some countries. In other countries these directories are often created by phone phreaker's by collecting the information available via the publicly accessible directories and then providing a search function which allows users to search by the telephone service details.

Printed reverse phone directories have been produced by the telephone companies (in the United States) for decades, and were distributed to the phone companies, law enforcement, and public libraries. In the early 1990s, businesses started offering reverse telephone lookups for fees, and by the early 2000s advertising-based reverse directories were available online, prompting occasional alarms about privacy concerns.

In 2001, a legal case Telstra Corporation Ltd vs Desktop Marketing Systems Pty Ltd was heard in the Australian Federal Court gave Telstra, the predominant carrier within Australia and the maintainer of the publicly accessible White Pages (residential) and Yellow Pages (commercial) directories, copyright over the content of these directories.

In February 2010 a Federal Court of Australia case Telstra Corporation Ltd vs Phone Directories Company Pty Ltd. determined that Telstra does not hold copyright in the White Pages or the Yellow Pages.

As it currently stands there is no legal way to ensure a particular number is not listed in the directories currently available.

In United States, landline phone subscribers can pay a small fee to exclude their number from the directory. This service is usually called "Your Listing Not Published" and the cost ranges from \$0.80 to \$1.50 for residential customers. However, it is a myth that delisting is possible for cellular numbers, because each cellular carrier has a separate database.

As cellular phones become more popular, there has been debate about releasing cell phone numbers into public 411 and reverse number directories (S. 1963, the "Wireless 411 Privacy Act" 9/2004). However, opposition led by leading consumer-protection organization Consumers Union presented several privacy concerns in their congressional testimony. Right now, cell phone numbers are not available in any public 411 or reverse number directories. However, several information companies provide reverse cell phone lookups that are obtained from utility resources, and are available online. Because there is no central database of cell phone numbers, reverse phone directories that claim to be free cannot return information on those numbers.

## Notes

In recent year's community web based services offer a reverse telephone directory of known telemarketers, debt collectors, fund raisers, and other solicitors which contact consumers by telephone. Users of these services can perform a search of the telephone number which showed up on their caller ID and read through user comments to find the identity of the calling company or individual.

There are several websites available which provide results such as the owner information, address and even the providing carrier of a landline number. Many of these websites charge a fee for this service.



*Did u know?* In the United Kingdom proper, reverse directory information is not publicly available. However, in the Channel Islands it is provided in the printed telephone directories.

Although the information is, of necessity, available to emergency services, for other agencies it is treated as 'communication data' in the RIPA regime and subject to the same controls as requests for lists of and content of calls.



*Task* Differentiate between the telephone directories and reverse telephone directories.

## Self Assessment

Fill in the blanks:

10. A ..... directory is sorted by number, which can be looked up to give the name and address of the subscriber.
11. Reverse telephone directories are used by ..... and other emergency services in order to determine the origin of any request for assistance.

## 10.5 Publishing Directories

As repositories of books and other materials, libraries are closely connected to the publishing industry. Both librarians and library users are interested in information about publishing and publishers. It is not surprising that questions about contacting and locating publishers would be common in the reference setting. Questions such as the following can be answered by having directories of publishers in the reference collection:

- What is the address of Yale University Press?
- Who publishes science books for children?

A good example of a comprehensive directory of publishers in the United States and Canada is the Literary Market Place. In its print form, in two volumes, *Literary Market Place* is an annual publication with more than 12,000 entries for various entities in the publishing industry. Volume 1 is the basic industry directory with information on publishers, literary agents, editorial providers, industry associations, and trade publications. Volume 2 is a directory of supporting services that includes entries for marketers, advertisers, promoters, and suppliers. The entries contain name, address, telephone number, fax number, e-mail address, and the site URI; key personnel; affiliated of files; and a brief descriptive annotation. Yellow page indexing coverage is provided for companies, personnel, sections and advertisers at the end of both volumes.

**Notes**

A companion directory to *Literary Market Place* is the *International Literary Market Place*. This annual directory covers the international publishing industry, with nearly 15,500 entries for entities in 180 countries. A single volume in print, *International Literary Market Place* is organized in broad sections: publishing, manufacturing, book trade information, literary associations and prizes, book trade calendar and library resources.

Entries are arranged alphabetically by country and contain basic contact information, key people, and a brief narrative description. An industry yellow pages section covering publishers and supporting companies is available at the end of the directory. Both *Literary Market Place* and *International Literary Market Place* can be found as a Web-based product called *LiteraryMarketPlace.com* from Information.

**Self Assessment**

State whether the following statements are true or false:

12. Both librarians and library users are interested in information about publishing and publishers.
13. An industry yellow pages section covering publishers and supporting companies is available at the start of the directory.

**10.6 Web Directories and Specialized Search Engines**

Web directories (or as they are better known – search directories) existed before the search engines, especially Google, became popular. As the name implies, web directories are directories where different resources are gathered. Similarly to desktop directories, where you gather files in a directory based on some criterion, Web directories are just enormous collections of links to sites, arranged in different categories. The sites in a Web directory are listed in some order (most often alphabetic but it is not necessarily so) and users browse through them.

Although many Web directories offer a search functionality of some kind (otherwise it will be impossible to browse thousands of pages for let's say Computers), search directories are fundamentally different from search engines in the two ways – most directories are edited by humans and URLs are not gathered automatically by spiders but submitted by site owners. The main advantage of Web directories is that no matter how clever spiders become, when there is a human to view and check the pages, there is a lesser chance that pages will be classified in the wrong categories. The disadvantages of the first difference are that the lists in web directories are sometimes outdated, if no human was available to do the editing and checking for some time (but this is not that bad because search engines also deliver pages that do not exist anymore) and that sometimes you might have to wait half an year before being included in a search directory.

The second difference – no spiders – means that you must go and submit your URL to the search directory, rather than sit and wait for the spider to come to your site. Fortunately, this is done only once for each directory, so it is not that bad.

Once you are included in a particular directory, in most cases you can stay there as long as you wish to and wait for people (and search engines) to find you. The fact that a link to your site appears in a respectable Web directory is good because first, it is a backlink and second, you increase your visibility for spiders, which in turn raises your chance to be indexed by them.



*Example:* There are hundreds and thousands of search directories but undoubtedly the most popular one is DMOZ. It is a general purpose search directory and it accepts links to all

kinds of sites. Other popular general-purpose search directories are Google Directory and Yahoo! Directory. The Best of the Web is one of the oldest Web directories and it still keeps to high standards in selecting sites.

Besides general-purpose Web directories, there are incredibly many topical ones.



*Example:* The Environment Directory lists links to environmental sites only, while The Radio Directory lists thousands of radio stations worldwide, arranged by country, format, etc.

There are also many local and national Web directories, which accept links to sites about a particular region or country only and which can be great if your site is targeted at local and national audience only. You see, it is not possible to mention even the topics of specialized search directories only because the list will get incredibly long. Using Google and specialized search resources like the Search Engines Directory, you can find on your own many directories that are related to your area of interest.

Search engine optimization (SEO) experts spend most of their time optimizing for Google and occasionally one or two other search engines. There is nothing wrong in it and it is most logical, having in mind that topping Google is the lion's share in Web popularity but very often, no matter what you do, topping Google does not happen. Or sometimes, the price you need to pay (not literally but in terms of effort and time) to top Google and keep there is too high. Maybe we should mention here the ultimate SEO nightmare – being banned from Google, when you simply can't use Google (or not at least until you are readmitted to the club) and no matter if you like it or not, you need to have a look about possible alternatives.

### 10.6.1 What are Google Alternatives?

The first alternative to Google is obvious – optimize for the other major search engines, if you have not done it already. Yahoo! and MSN (to a lesser degree) can bring you enough visitors, though sometimes it is virtually impossible to optimize for the three of them at the same time because of the differences in their algorithms. You could also optimize your site for (or at least submit to) some of the other search engines (Lycos, Excite, Netscape, etc.) but having in mind that they altogether hardly have over 3–5% of the Web search traffic, do not expect much.

Another alternative is to submit to search directories (also known as Web directories) and specialized search engines. Search directories might sound so pre-Google but submitting to the right directories might prove better than optimizing for MSN, for example. Specialized search engines and portals have the advantage that the audience they attract consists of people who are interested in a particular topic and if this is your topic, you can get to your target audience directly. It is true that specialized search engines will not bring you as many visitors, as if you were topping Google but the quality of these visitors is extremely high.

### 10.6.2 Specialized Search Engines

Specialized search engines are one more tool to include in your SEO arsenal. Unlike general-purpose search engines, specialized search engines index pages for particular topics only and very often there are many pages that cannot be found in general-purpose search engines but only in specialized ones. Some of the specialized search engines are huge sites that actually host the resources they link to, or used to be search directories but have evolved to include links not only to sites that were submitted to them. There are many specialized search engines for every imaginable topic and it is always wise to be aware of the specialized search engines for your niche. The examples in the next section are by no means a full list of specialized search engines but are aimed to give you the idea of what is available. If you search harder on the Web, you will find many more resources.

Notes



*Example:* Probably specialized search engines are not that numeric as Web directories but still certainly there is no shortage of them either, especially if one counts password-protected sites with database accessible only from within the site as a specialized search engine. As with Web directories, if there were a list of specialized search engines it would be really, really long (and constantly changing), so instead, here are some links to lists of search engines: Pandia Powersearch, Webquest, Virtual Search Engines, the already mentioned The Search Engines Directory, etc. What is common for these lists is that they offer a selection of specialized search engines, arranged by topic, so it is a good starting point for the hunt of specialized search engines.

**Self Assessment**

Fill in the blanks:

- 14. .... are just enormous collections of links to sites, arranged in different categories.
- 15. .... index pages for particular topics only and very often there are many pages that cannot be found in general-purpose search engines but only in specialized ones.



Case Study

**Federal Library & Information Network**

**Federal Library Directory**

FEDLINK has engaged the Federal Research Division (FRD) of the Library of Congress to compile a directory of all United States federal libraries and information resource centres (IRCs) worldwide. To this end, in the spring of 2011 FRD sent out surveys soliciting general information (name and government affiliation, contact information and location, collection and staff size, hours of operation, leadership, and circulation and reference services) to known federal libraries and information centres. FRD analysts then supplemented the data received from these surveys with research in order to compile as complete as possible a directory of federal libraries and IRCs. The current directory is comprised of approximately 1,111 entries. FEDLINK hopes this directory will raise the awareness of federal libraries and information resource centres and contribute to the more effective use of the resources these organizations maintain.

Note that each United States embassy maintains a library but, because of security concerns, the Department of State has asked that FRD not include the locations of these libraries in the directory. In addition, at the request of the Bureau of Prisons, FRD is providing limited contact information for any libraries or information centres located in federal prisons.

FRD is making every effort to maintain in this database accurate and up-to-date links to Library and Information Centre Web sites. However, FRD has no control over content and availability of those sites.

**Questions:**

- 1. Discuss about the Federal Library Directory.
- 2. What effort did FRD is making to maintain in this database accurate and up-to-date links to Library and Information Centre Web sites?

Source: [http://www.loc.gov/flicc/FLD/index\\_FLD.html](http://www.loc.gov/flicc/FLD/index_FLD.html)

## 10.7 Summary

Notes

- Directories form the largest category of reference sources. It is not easily possible to estimate the number of directories published every year because many of these published locally may not be copyrighted.
- Directories can cover a wide variety of topics and are available to libraries in print, microform, and electronic formats.
- Early directory precursors were census-like compilations of property and persons that were used by ancient and feudal governments to account for wealth and taxes.
- Criteria for judging directories are often similar to standards that are used for other types of reference sources. Some important criteria to consider in evaluating a directory include scope, currency, accuracy, and arrangement.
- A telephone directory is a listing of telephone subscribers in a geographical area or subscribers to services provided by the organization that publishes the directory.
- The first telephone directory, consisting of a single piece of cardboard, was issued on 21 February 1878; it listed 50 businesses in New Haven, Connecticut that had a telephone.
- A reverse telephone directory is a collection of telephone numbers and associated customer details.
- Both librarians and library users are interested in information about publishing and publishers. It is not surprising that questions about contacting and locating publishers would be common in the reference setting.
- Web directories existed before the search engines, especially Google, became popular. As the name implies, web directories are directories where different resources are gathered.
- Specialized search engines are one more tool to include in your SEO arsenal. Unlike general-purpose search engines, specialized search engines index pages for particular topics only and very often there are many pages that cannot be found in general-purpose search engines but only in specialized ones.

## 10.8 Keywords

**Desktop Directories:** In this you gather files in a directory based on some criterion.

**Directory:** It is a list of people, companies, institutions, organizations, etc., in alphabetical or classified order, providing contact information and other pertinent details in brief format, often published serially.

**Reverse Telephone Directory:** A reverse telephone directory is sorted by number, which can be looked up to give the name and address of the subscriber.

**Search Engine Optimization (SEO):** Search engine optimization (SEO) is the process of affecting the visibility of a website or a web page in a search engine's "natural" or un-paid ("organic") search results.

**Specialized Search Engines:** Specialized Search Engines index pages for particular topics only and very often there are many pages that cannot be found in general-purpose search engines but only in specialized ones.

**Telephone Directory:** A telephone directory is a listing of telephone subscribers in a geographical area or subscribers to services provided by the organization that publishes the directory.

**Notes**

**Web directories:** Web directories are directories where different resources are gathered. It is just enormous collections of links to sites, arranged in different categories.

**10.9 Review Questions**

1. What is directory?
2. “Narrative ancestors of the directory were the travel and topographical histories of the early modern period”. Elucidate.
3. Briefly explain the scope of directory sources.
4. Provide insight into the evaluation of directory sources.
5. What is telephone directory? Discuss the history of telephone directory.
6. Write down the meaning of reverse telephone directory.
7. Write short note on the meaning of publishing directories.
8. What are web directories? Give examples.
9. Write down the advantage and disadvantage of Web directories.
10. Explain the meaning of specialized search engines with suitable example.

**Answers: Self Assessment**

- |  |                           |
|--|---------------------------|
| 1. Directories                                       | 2. Electronic             |
| 3. Accuracy  | 4. Electronic directories |
| 5. Print   | 6. Arrangement            |
| 7. Telephone directory                               |                           |
| 8. Telephone book, phone book, or white/yellow pages |                           |
| 9. Hard copy or in electronic form                   | 10. Reverse telephone     |
| 11. Law enforcement                                  | 12. True                  |
| 13. False  | 14. Web directories       |
| 15. Specialized Search Engines                       |                           |

**10.10 Further Readings**



Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.



Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

**Notes**

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



Online links

<http://education.vermont.gov/new/html/maindirectories.html>

<http://www.directoryrate.com/education-directory-list.php>

[www.georgialibraries.org](http://www.georgialibraries.org) > Library Directories?

[www.spartacus.schoolnet.co.uk/REVwebdirect.htm](http://www.spartacus.schoolnet.co.uk/REVwebdirect.htm)

## Unit 11: Geographical Sources

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### Objectives

After studying this unit, you will be able to:

- State the meaning of geographical sources
- Contrast the types of geographical information sources
- Assess the information about maps, atlases, globes
- Describe gazetteers
- Recall travel guides or guidebooks

### Introduction

Geographical information can be located in a variety of sources of information. Each has its usefulness. There is much duplication of information in these sources. Therefore, a reference librarian should make use of wise and careful selection. Geographical sources consist primarily of graphic representations. Most of them are produced through team effort. These are made use of to find out answers to geographical questions. There are three main types of geographical sources. They provide information about places, including towns, cities, villages, rivers, mountains and lakes.

- **Maps:** These represent part of the three-dimensional world on a flat surface. There are many types, including physical, political and thematic maps.

- **Atlases:** These consist of maps, and indexes to help users find places on the maps. Types include atlases of the world, space, regions, countries, historical events, and road or street directories.
- **Gazetteers:** These are geographical dictionaries that list places, their locations, and other factual information. Recent editions provide up-to-date details, and older editions provide historical information. Entries may include pronunciation, location, area, population, geographical and physical descriptions and historical data.

Atlases, maps, gazetteers and guidebooks are all works that provide representations of boundaries of particular areas – countries, continents, cities or even the moon and relevant information. Guidebooks generally provide brief historical information about a particular place but also provide detailed descriptions of hotels, museums, restaurants famous sites and other information useful to travellers.

### 11.1 Meaning of Geographical Sources

The improvement in the means of communication has led to increase in mobility of the people. As a result, the people are becoming more interested in knowing about the places they would like to visit or have already seen. Emphasis is also increasing on the teaching of geography. These reasons have led to increase in demand for geographical information. In order to cater to the demands of the users, large university and public libraries are attempting to develop extensive collections of geographical sources of information.

Geographical sources consist primarily of graphic representations. These are used for finding out answers to geographical questions. These questions are generally concerned with information about places such as cities, towns, mountains, lakes, rivers, forests, etc., regarding their location, description, and other details. The problem about geographic facts is that some of these may have no firm basis.



*Example:* In a particular case, a place name may be spelled in a number of ways, if no standard method for transliteration from one language to another exists.

### **Self Assessment**

Fill in the blanks:

1. .... represent part of the three-dimensional world on a flat surface.
2. .... consist of maps, and indexes to help users find places on the maps.
3. .... are geographical dictionaries that list places, their locations, and other factual information.
4. .... generally provide brief historical information about a particular place but also provide detailed descriptions of hotels, museums, restaurants famous sites and other information useful to travellers.
5. Geographical sources consist primarily of .....

### 11.2 Types of Geographical Information Sources

Geographical information can be located in a variety of sources of information. Each has its own use. We may divide geographical information sources into two categories for convenience purposes:

1. General Reference Sources (covering geographical information as well)
2. Specific Sources (covering geographical information only)

Notes

### 11.2.1 General Reference Sources

Sources such as Biographies and indexes, Encyclopaedias, Dictionaries, Sources of statistics, and Biographical sources are all reference books in their own right that serve as information sources for geography. However, they also contain a lot of other information relating to other areas. The scope of all these sources goes beyond geographical information. Therefore, they are called general reference books containing useful geographical data.

### 11.2.2 Specific Reference Sources

Specialized geographical information sources used in reference work can be divided into three categories:

- Maps, Atlases, and Globes
- Gazetteers
- Travel Guides

The obvious advantages of these specialized geographical reference tools are:

- Giving information for smaller units not found in general reference books;
- Information given often is more precise; and
- These sources generally are limited to one area, and easier to use.

### Self Assessment

State whether the following statements are true or false:

6. Geographical information can be located in a variety of sources of information.
7. Giving information for smaller units not found in general reference books.

## 11.3 Maps, Atlases, Globes

Maps, atlases, and globes are the main sources of geographical information. Let us see what these sources how they are ways to in are.

- **Maps:** According to ALA Glossary of Library and Information Science (1983), “a map is a representation normally drawn to a scale and on a flat medium of a selection of material or abstract features on, or in relation to, the surface of the earth or another celestial body.”

The Library of Congress defines maps in a broad way as “All forms of cartographic materials normally added to the collections of the library including flat maps and charts, collection of maps in atlas form, terrain models, globes, etc.”

- **Atlas:** According to ALA Glossary, an atlas is, “a volume of maps, plates, engravings, tables etc., with or without descriptive letter press. It may be an independent publication or may have been issued to accompany one or more volumes of text.”
- **Globe:** The difference between a map and a globe is of form. A map is any geographic image of the earth drawn to scale on a flat surface whereas a globe is a spherical representation of the earth’s surface.



*Did u know?* It is a hollow ball of metal, bearing a word map on its surface and is mounted on an axle, which permits its rotation.

- **Uses:** Different types of maps serve different purposes:
  - (i) A physical map is usually referred to for visual location and identification of the world, country, region, city or town; mountain, river, lake, sea, ocean, gulf, bay, desert; or any other geographical formation.
  - (ii) Topographic maps trace details of geological, soil, forest, and other basic information and for historical, economic, political, or other types of development.
  - (iii) A route map shows roads, railroads, bridges, etc.
  - (iv) A political map normally limits itself to political boundaries of different countries, states, cities, towns, etc.
  - (v) The historical maps chart the flow of a given battle or event and its progress.
  - (vi) The economic and commercial atlases record general information on business facts, agricultural facts, communication, transportation, retails trade, exports and imports, etc.

### 11.3.1 Types and Examples

Maps and atlases may be grouped under broad following two types:

- (a) **General and Topographical Maps and Atlases:** General and topographical maps and atlases are further divided into three classes according to their area of coverage:
  - (i) **International Maps and Atlases:** International maps are the maps created according to international specifications and they are accepted globally. They list the entire nations with their specified key states and cities.



*Example:* The Times Atlas of the World. 8th comprehensive edition. London: Times Newspapers, 1990.

It is the revised edition of the single volume edition that was first published in 1967. The new edition has 47 pages of prefatory information; graphic size comparison of continents, oceans, river drainage basins, islands and inland water bodies; and eight pages of world thematic mapping. The scale used is 1:850,000 for Great Britain and 1:2500,000 for the rest of the world. The name index forming part 3 has about 210,000 entries.

National Geographic Atlas of the World. 6th ed. Washington: National Geographic Society, 1990.

The atlas displays the present countries of the world after the major changes consequent to the breakup of the USSR and changes in Eastern Europe. Using the newly adopted Robinson Projection, it contains a four-fold world map and a number of spacecraft images of the earth and the planets.

- (ii) **National Maps and Atlases:** Almost every country has a national cartographic agency. It produces maps that usually conform to a national specification.



*Did u know?* The official mapping organizations in India are the “Survey of India”, “National Atlas and Thematic Mapping Organization”, and “Geological Survey of India”.

They carry out surveying, data-collection, map-making, and publishing of national maps and atlases. Though some private and commercial sectors also publish maps, all of them are not authentic. National, regional, and local atlases deal with specific

Notes

nations, or area of the world or state-district, city, etc. They usually have base maps upon which topographical or thematic information is published. They are produced to give an overview of the national environment.



*Notes* They cover different features, viz., physical, industrial, socio-economic, historical, economical demographic, etc. They require careful planning and years of effort to compile accurate and reliable maps.



*Example:* The National Atlas of United States of America. Washington: U.S. Geological Survey, 1970.

It contains 765 maps, index of 41,000 entries, and sources of information referred, and used for the special subject maps. It is designed to be of practical use to decision makers in Government and business, planners, research scholars, etc.

An Atlas of India. New Delhi: Oxford University Press, 1990. (with 212 maps)

It claims to be the most comprehensive atlas of India in which each state and union territory has nine maps. All India maps cover physical, political, climate, soil, power projects, religious distribution, literacy area, and population. There are five tables one each on: rainfall, population, crop production, mineral production, and industrial location.

*National Atlas of India. Calcutta: National Atlas and Thematic Mapping Organisation, 1980. 2 Vol.*

This is the most comprehensive atlas of India and contains in all 264 plates. In the first volume, there are 109 plates depicting, administrative, physical, forest types, parliamentary constituencies, and physiographic divisions. There are insets for major cities of the country such as Delhi, Lucknow, Kolkata, Mumbai, Trivandrum, etc. The plates in the second volume begin from No. 110 and cover, among other topics, population, transport and tourism, posts and telecommunication, industry, foods crops, handicrafts, languages, and health.

*National Atlas of India. Calcutta: National Atlas and Thematic Mapping Organisation, 1984.*

A massive work, it took 25 years in the making (in 8 large loose leaf volumes): 1. General and political maps, 2. Physical and geomorphological, 3. Climatic and biogeographical, 4. Population and transport, 5. Land use and industrial region, 6. Agricultural and economic, 7. Social and regional, 8. Historical and cultural.

- (iii) *Local Maps and Atlases:* To portray the physical features and thematic specifications each country produces in addition to state or country maps, atlases and local maps.

Given below are some examples of such local atlases published by the different State Governments of India.

*Eicher City Map: Delhi, include Faridabad, Ghaziabad, Gurgaon, Noida. New Delhi: Eicher-Good Earth, 1996.*

The map in the format of A to Z books available for major cities of the world has a brief historical background of the city. Spread over 175 pages each, background of the city and the areas neighbouring Delhi have been shown (where the border of Delhi merges with part of the cities, falling in the National Capital Region). Separate alphabetical indexes are provided for each district separately and are, within each

district, arranged alphabetically under broad groupings such as 'industries' "colonies" "buildings", "institutions" etc. The maps have been drawn primarily to assist tourists and travellers.

*Maharashtra in Maps/by K.R. Dikshit: assisted by Charulata Patil. Bombay: Maharashtra State Board for Literature and Culture, 1986. 245p.*

This is a reference book including 67 maps of authentic statistical information about administrative divisions, sugar factories, places of tourist interest, population, growth of urban areas and towns, employment, production in various industries, etc.

- (b) **Special or Thematic Maps:** Thematic maps depict specific subjects, themes or types of development. Economic, political, land use surveys, rainfall, rail/road air routes, minerals, climate, and production of different crops, language, population, and religion – all fall under this category. Thematic maps contain useful data about a particular subject and need constant updating. Given below are some examples of thematic maps:

- (i) *Historical Atlases: Historical atlases are important to learn about the changing political boundaries of the world, progress of major wars and battles, and routes followed by explorers.*

*Muir's Historical atlas: Ancient Medieval and Modern/ed. By R.F. Treherne and H. Fullard. 10th ed. London: Philip, 1976. (2 vol. In one)*

*Covers historical changes in the world from 15th century BC to 1965.*

*Times Atlas of World History/ed. By G. Barclough. 3rd ed. (ed. By Normand Stone). Mapplewood: N.T: Hammond, 1989.*

Grouped in seven main sections, the atlas traces the history of mankind from the age of early man to the age of global civilisation. The chronology has been updated to include events up to 1989.

- (ii) *Economical and Social Atlases: 1983 World Bank Atlas: Gross National Product, Population and Growth Rates. Washington, D.C., World Bank, 1983.*

Published regularly, this includes data on population, Gross National Product (GNP), and per capita GNP in the U.S. dollars for most countries of the world. The 1983 edition covers data for the years 1980 and 1981. This thematic atlas also provides average annual growth rates of population and of per capita GNP in real terms for the period 1979-80.

*Basic Resources Atlas of Tamil Nadu/ed. By A. Ramesh and P.S. Tiwari. Madras: Dept. of Geography, University of Madras, 1983.*

*Planning Atlas of UP. Lucknow: Govt. of U.P., 1987.*

- (iii) *Demographic Atlases: India Census Atlas: National volume. 1981, New Delhi: Registrar general and Census Commissioner, 1988.*

Third in the series begun with 1961 census, it presents population profile of the people of India. The volume contains 93 plates with short research notes on each one supplemented by useful statistical tables and diagrams in four sections: 1. Physical aspects, 2. demographic structure and trends, 3. economic aspects, and 4. socio cultural aspects.

- (iv) *Anthropological Atlases: Examples include: An Atlas of Tribal India with Computed Tables of District Level Data and the Geographical Interpretations by Moons Raza and Aijazuddin Ahmad. Delhi: Concept, 1989.*

**Notes**

*Anthropological Atlas. Delhi: Oxford Univ. Press for Anthropological Survey of India, 1993.*

Forming vol. 11 of people of India national series, the maps in the atlas depict ecological and cultural traits, languages and linguistic traits, demographic traits, and biological traits.

- (v) *Tourist Atlases: Examples include: Tourist Atlas of India/by A.K. Kundu. Calcutta: National Atlas and Thematic Mapping Organisation, 1989.*

Presents a composite picture of transport network and information of interest to tourists. There are in all 20 pates. Explanatory notes on each map are virtually equivalent to directories. National parks and wild life sanctuaries are also depicted.

- (vi) *Religious Atlases: A Historical Atlas of Islam/ed. By William Brice. Leiden: Brill, 1981.*

Prepared as part of the Encyclopaedia of Islam, presents information in map form up to the First World War. Maps are arranged under nine sections. Sections 8 and 9 are devoted to India and the Far East.

**Self Assessment**

Fill in the blanks:

- 8. All forms of ..... normally added to the collections of the library including flat maps and charts, collection of maps in atlas form, terrain models, globes, etc.
- 9. Atlas may be a ..... or may have been issued to accompany one or more volumes of text.
- 10. The difference between a map and a globe is of .....
- 11. .... depict specific subjects, themes or types of development.

**11.4 Gazetteers**

A gazetteer is a geographical dictionary of places arranged alphabetically. It serves as a finding list for geographical places like towns, oceans, rivers, lakes, mountains, etc., giving indication about location usually in the form of exact latitude and longitude and a brief description such as pronunciation, populations, are historical and socio-economic information, etc.



*Caution* The ALA of Library and Information Science (1983) defines it as “a geographical dictionary”. Rather it has been called “Dictionary of Places”.

An index to any atlas can be considered a Gazetteer but former is different from index to the atlas.

**11.4.1 Types and Examples**

Gazetteers can be grouped on the basis of their scope of coverage as:

- (a) **International Gazetteers:** Examples include:

*The Statesman Year Book and World Gazetteer. 2nd London: MacMillan, 1979.*

A companion volume to Statesman Year Book, “gives brief information on places of size and importance. Some statistical tables and a glossary of 800 statistical terms are supplied”.



*Times London Index-gazetteer of the World. London: Times Publishing, 1965.*

Notes

About 3,45,000 geographical locations, countries, towns, villages, rivers, mountains, and other geographical features find place in this gazetteer. They provide map references to 1,98,000 locations given in the mind-century edition of Times Atlas of the World. It gives geographical equivalent in some fifty languages.

(b) **National Gazetteers:** Examples include:

**National Gazetteer of the United States of America: United States since 1990. Washington: U.S. Govt. Printing Office, 1990.**

A condensed version of the National Gazetteer of the United States of America volume set, (1983–1990. “Includes about 45000 entries for populated places, administrative areas and major physical features”.

**Gazetteer of India: The Indian Union/Central Gazetteer Unit, Government of India. Delhi: Publications Division, 1965–1978. 4 volumes.**

Developed on the pattern of the first four volumes of the Imperial Gazetteer, the volumes are titled as:

- (i) Country and People
- (ii) History and culture
- (iii) Economic structure and Activities
- (iv) Administration and Public Welfare

All the chapters in each volume have been contributed by a team of experts in the field and carry a bibliography at the end. Volumes have been reprinted from time to time; volume 2 had its fifth printing in 1997.

(c) **Local/District Gazetteers:** Most of the districts in India have gazetteers now. They could be called miniature encyclopaedias for each district. They contain extremely useful reference material for the administrator, the scholar and the layman alike.

Examples include:

*Orissa District Gazetteers/ed. By Nilamanisenapti. Koraput, Cuttack: Govt. Press, 1966.*

Andhra Pradesh District. Gazetteers.

The Gazetteer of the District of Hyderabad by M.V.S. Prasad Rau. Hyderabad: District Gazetteers Department, Andhra Pradesh.



**Task** Differentiate between the maps, atlases, and gazetteers.

## Self Assessment

State whether the following statements are true or false:

12. A map is a geographical dictionary of places arranged alphabetically.
13. Most of the districts in India have gazetteers now.
14. The ALA of Library and Information Science (1983) defines it as “a geographical dictionary”. Rather it has been called “Dictionary of Places”.

Notes

15. About 1,00,000 geographical locations, countries, towns, villages, rivers, mountains, and other geographical features find place in this gazetteer.

## 11.5 Travel Guides or Guidebooks

The main purpose of any guidebook or travel guide is to inform the traveller as what to see, where to stay, and how to reach a particular place.

The ALA Glossary of Library and Information Science defines a travel guide as a handbook for travellers that give information about a city, region or a country or a similar handbook about a building, museum, etc.

### Uses

Travel guides are meant for the people who want to visit various places in their own country or other parts of the world. These act as a one-stop shop information source for those who wish to know all sorts of information about any particular place.

### 11.5.1 Types and Examples

Travel guides may be grouped into two categories, viz.

1. **One-time Guides:** Guides prepared to introduce an area rich in history, ecology or even of monuments.



*Example:* Ghosh A. Guide to Nalanda. Delhi: Manager of Publications, 1950.

2. **Series Guides:** Guides prepared for tourists to assist them plan their travel program.



*Example:* Muirhead's Blue Guides. London: Ernest Benn.

Since 1918, these guides are renowned for detailed coverage of architecture, art, history, etc. They again are mainly restricted to Europe and the Near East and include both country guide and city guide. Some other well-known series are:

Nagel's Travel Guides (Geneva), Fodor Travel Guides (N.Y.: Mackay), Mobil Guides and Shell Guides. The last two are prepared mainly for motorists. Besides, there are other types of travel guides as well. Some of these have been listed below:

- **Travel Guides for Individual Countries: India:** *Nest and Wings Series/compiled by A.P. Agarwal. New Delhi: The Nest and Wings.*

The Nest and Wings have been bringing out titles for travellers to India. Some of their titles include:

- **Travel Guides for Individual Countries and Specific Purposes:** *FODOR'S India, Nepal and Sri Lanka, London: Hodder and Stoughton. 1196.*

This is useful for foreign travellers. It includes climates, expenditure, planning of travel, exchange, all air routes; accommodation, parks and garden, hill stations, beaches. It is arranged first by States – Tamilnadu, Karnataka, Andhra Pradesh and then by cities/ places of interest. It also includes tourist map of Southern India and coloured photographs.

- **Travel Guides by Government Departments:** Many governments of the world bring out travel guides through tourism departments to promote tourism. Such guides are also

produced for specific purposes, that is, about temples, health resorts, holy places, hotels and restaurants, etc., some examples of such guides are given below:

Notes

- *Murray's Handbook for Travellers in India, Burma and Ceylon, 21st ed. London: Murray, 1968.*

This handbook includes maps and town plans. The introductory section provides information about history and administration. In the text, India occupies the major portion. The arrangement of material is based on the route principle. A good, descriptive index is provided.

Hill Resorts of India/India, Ministry of information and broadcasting. New Delhi: Publication Division, 1961.



Caselet

### Romantic Representations in Guidebook Writing

**R**omance or reality: what do travellers really want to read in guidebooks? Cyprus is dotted with delightful villages of winding lanes and atmospheric stone houses sprawling down hillsides in woody valleys. Sturdy old ladies can be seen carting bundles of wood down the street on their backs and old men ride donkeys through town, the guidebooks tell us. And it's true. But unfortunately many of the villages are now ghost towns, their ramshackle old stone houses boarded up, their gardens unkempt, junk crowding their yards, and trash dumped down hillsides on the outskirts of town. The young people have moved to the cities or overseas to work and the few residents that are left are over 60, enjoying their last years in the village they have loved and known all their lives, and struggling alone to maintain their traditional way of life. Well, they're not so alone. It's not uncommon to see a wrinkled old lady in headscarf and apron sitting in her doorway, taking in some sun and watching the passing traffic – and next to her see a bored young Filipina or Indian woman, perhaps employed by the guilty son or daughter as a companion-cum-maid to watch over their abandoned parent. You don't read any of this in the guidebooks.

Source: <http://cooltravelguide.com/romantic-representations-in-guidebook/2008/03/17/>

### Self Assessment

Fill in the blanks:

16. The main purpose of any ..... is to inform the traveller as what to see, where to stay, and how to reach a particular place.
17. .... are the guides prepared for tourists to assist them plan their travel program.



Case Study

### Gazetteer in Karnataka

**G**azetteers are mostly mistaken for or confused with the Gazettes. They are indeed poles apart; however, the words Gazettes and Gazetteer are cognate terms. It appears that in Greek, 'Gaza' meant a treasury of news. Gazetteers are distinctly reference volumes of lasting value while the Gazettes are official newspapers or bulletins.

Contd....

Notes

Earlier, a Gazetteer signified a geographical index or geographical dictionary or guidebook of important places and people. But with the passage of time its range has vastly widened and it had come to mean a veritable mine of knowledge about the numerous aspects of life of the people and of the country or region they inhabit.

Some books of yore such as the work of Stephen of Byzantium of the 6th century AD. Domesday Book compiled for William the conqueror, Brihat-Samhita of Varaha Mihira, Vayu Purana, Abdul Fazl's Ain-I-Akbari are cited as having in them some resemblance to elements of Gazetteers. But the system of Modern Gazetteer literature arose in Europe in the wake of the new intellectual ferment brought about by the Renaissance and Industrial Revolution. Germany and France led the way in this respect. The colonial British administration in India took up military, revenue and statistical survey to help stabilize its position in the country.

The earliest Gazetteers to appear in India were the East India Gazetteer in 1815 and the Gazetteer of the territories under the Government of the East India Company in 1854 which were prepared by two private authors Walter Hamilton and Edward Thornton. A few years later, by 1866, Richard Temple published the first official Gazetteer of the Bhandara District of the central province. This set the pace and there appeared a number of Gazetteer volumes for the various parts of the country.

For the princely state of Mysore and Coorg, B.L. Rice published three volumes in 1877-78. They presented remarkable studies and served as a model. He revised the two volumes twenty years later. The subjects dealt were physical geography, flora including crops and cultivation, fauna, ethnography, history, religion, language, art and industry, administration, particulars of districts and important places, and they had maps and pictures. For the districts of Bombay and Madras Provinces, Gazetteers were brought out between the last quarter of the 19th century and the first decade of 20th century. In fact B. L. Rice has himself recorded in his preface to the Vol. I of Mysore and Coorg Gazetteer that the first Gazetteer for Mysore was compiled by Arthur Wellesley in 1867 and later K. Krishna Iyengar compiled and edited the Kolar District Gazetteer in 1869 which was the pioneering publication in this series. He further records that manuscripts were prepared for Tumkur District by Major C. Pearse, for Chitradurga district by Mr. Krishna Rao. Hassan by Major W Hill and Shimoga by Captain Gordon Cumming were compiled and edited but never published.

In the meanwhile the first edition of the Imperial gazetteer of India was published in nine volumes in 1881 under Sir. William Hunter. It was augmented to 14 volumes in 1885-87 and to 26 volumes in 1907-1909 when a provincial series was also issued. Likewise B.L. Rice had done a splendid job for Mysore and his work was extolled by Sir. William Hunter as "better than anything he himself had been able to do even for Bengal". The third decade of 20th century saw the publication of the Mysore Gazetteer in eight books under the editorship of Sri Hayavadana Rao and these also kept up a high standard. Later there were supplements issued for South Kanara and Bellary also.

For meeting the altogether changed national requirements there were immense need for preparation and publication of new Indian Gazetteers. Some of the States like the former Bombay and Madras, Bihar and Rajasthan undertook this work between 1949 and 1957, and others including Karnataka took up the task later according to an all-India plan formulated by the Central Government for preparation of the Gazetteers on reoriented lines on the basis of new knowledge, with uniformity of form and contents, but providing for variations and additions to meet local or special needs. This is a monumental task of immense complexity and magnitude and has to be carried out with patient labour, circumspection and thoroughness.

Contd....

## Notes

Various states and union territories have had published about 125 reoriented district Gazetteers and 12 of them belong to Karnataka up to the end of financial year 1973-74. In addition to the district series, there was also the State Gazetteer, one volume for each state. The work was coordinated by the Central Government that gave grants. There were State and Central Gazetteer Advisory Committee consisting of official and non-official members. In each district Gazetteer there were 19 chapters and in addition, general appendices, illustrations, a select bibliography, comprehensive alphabetical index, addenda and corrigenda, and maps are provided.

Broadly, the topics treated in the District series are: Physical features, flora, fauna, natural resources, history and archaeology, the people, their demography, languages, home life, social life, social structure, customs and religious beliefs, agriculture, horticulture, forestry, irrigation, animal husbandry, fisheries, old time industries and various kinds of present day industries, labour welfare, potentialities of development, banking and finance, co-operative movement, trade and commerce, transport and communications, miscellaneous occupations, economic trends, general administration, revenue, law and order and justice, Government Departments, local self-government, education, sports, art and culture, medical and public health, other social services, public life and voluntary social services and places of interest.

In short, nothing of interest pertaining to the district is left out, for instance, whether it is toponomy (i.e. study of place names) history of less known ruling families like Balam or Aigur Chiefs, Chautas, Kampili Rayas, agrarian movement, Aliya Santana system of heritance prevalent in coastal Karnataka and how it differs from Marumakkattayam of Kerala, the glories of Lakshmi Devi temple of Doddagaddavalli, Kalleshwara temple of Araguppe, Madanike figures of Kuravatti, Ibrahim Roza of Bijapur, Cathedrals of Mangalore, problems of recurrent famines in north-eastern districts, beneficial impact of the gigantic Tungabhadra project, prospects of the Vijayanagara steel mills and Kalinadi Hydro-electric project, food habits, types of dwellings, ornaments, local festivals, wedding customs and ceremonies of a particular section, new Mantr-Mangalya marriages, Huttari dance and peculiar social customs of the Kodavas, legend of the Cauvery, fascinating sunset of the Agumbe, natural bird sanctuary of Mandagadde, sandalwood carvings, beauty spots, pineapple cultivation and spicy mango pickles of Malnad, large sized black monkey of Sagar forests locally called Mushy, a buffalo race and Bhoota cult of South Kanara all such varied matters must find a place to give a whole picture of life in the territory as it was and is lived by the people with their natural and other resources, since a precise knowledge of the past is necessary to understand the present in the correct perspective.

The significant and stupendous all around changes and development that have been taking place in various spheres in India since the dawn of Independence called for production of re-oriented Gazetteers with a novel pattern to meet the new national requirements. A reappraisal of several other features in the light of the fresh data also became imperative. Because of the special position of the districts as a unit of administrative organization and in social and economic life of the people, a self-contained and comprehensive volume devoted to each one of the districts became highly desirable.

The first repatterned series after the attainment of Independence started rolling out in 1975. These new district Gazetteers are being published by the State Government in accordance with an all-India plan at the instance of the Central Government which gave grants for the purpose to all the state and union territories. These district Gazetteers were part of the Gazetteer of India and are hence superscribed as the Gazetteer of India.

In order to have a broad and basic uniformity in the pattern of the new Gazetteers, the Central Gazetteers Unit in consultation with the State Units devised a common plan of

*Contd....*

Notes

contents so as to enable a wide coverage of various aspects which would not be otherwise feasible in volumes devoted to the State or the country as a whole.

Ideas and ideals, perspective and approaches, values and aspirations have undergone great alterations. There is awakening of an unprecedented kind. A new epoch and a new age have dawned. Since the days when a Gazetteer meant only a geographical index, the concept has vastly widened and the Gazetteers of the present age have to cover large dimensions and have to give, in a new perspective, an integrated and objective picture without losing sight of the greatly changed social values; this demands a great deal of caution and circumspection. Laborious and time consuming processes are involved in the production of these Gazetteer volumes, which is an overwhelming task. The present Gazetteers are the most comprehensive single source of knowledge about the districts. They can serve also an integrated sample survey of districts of moving and developing India. For the country as a whole and for the States, reference works on various subjects are available for both the specialist and general readers, but scarcely are there standard reference works focusing on individual districts. The District Gazetteers fulfil this great need by delineating an all-round picture of individual districts in unfolding the panorama of the life of the people they inhabit.

**Question:**

What are the main objectives of gazetteer in Karnataka?

Source: <http://karunadu.gov.in/gazetteer/Pages/home.aspx>

### 11.6 Summary

- Geographical sources consist primarily of graphic representations. Most of them are produced through team effort. These are made use of to find out answers to geographical questions.
- Atlases, maps, gazetteers and guidebooks are all works that provide representations of boundaries of particular areas – countries, continents, cities or even the moon and relevant information.
- Geographical sources consist primarily of graphic representations. These are used for finding out answers to geographical questions.
- Geographical information can be located in a variety of sources of information. Each has its own use. We may divide geographical information sources into two categories for convenience purposes: General Reference Sources (covering geographical information as well) and Specific Sources (covering geographical information only).
- A gazetteer serves as a finding list for geographical places like towns, oceans, rivers, lakes, mountains, etc., giving indication about location usually in the form of exact latitude and longitude.
- Gazetteers can be grouped on the basis of their scope of coverage as: International, National and Local.
- The main purpose of any guidebook or travel guide is to inform the traveller as what to see, where to stay, and how to reach a particular place.
- Travel guides are meant for the people who want to visit various places in their own country or other parts of the world. These act as a one-stop shop information source for those who wish to know all sorts of information about any particular place.

## 11.7 Keywords

**Atlases:** These consist of maps, and indexes to help users find places on the maps.

**Gazetteer:** A gazetteer is a geographical dictionary or directory, an important reference for information about places and place names, used in conjunction with a map or a full atlas. These are geographical dictionaries that list places, their locations, and other factual information.

**Geographical Sources:** Geographical sources consist primarily of graphic representations. These are used for finding out answers to geographical questions.

**Globe:** A globe is a spherical representation of the earth's surface.

**Maps:** These represent part of the three-dimensional world on a flat surface.

**One-time Guides:** Guides prepared to introduce an area rich in history, ecology or even of monuments.

**Series Guides:** Guides prepared for tourists to assist them plan their travel program.

**Thematic Maps:** Thematic maps depict specific subjects, themes or types of development.

**Travel Guides or Guidebooks:** A guide book or travel guide is a book for tourists or travellers that provide details about a geographic location, tourist destination, or itinerary.

## 11.8 Review Questions

1. What are geographical sources?
2. List the various types of geographical information sources.
3. "Maps, atlases, and globes are the main sources of geographical information". Elucidate
4. What are the different types of maps?
5. Write down the meaning of general and topographical maps and atlases. Also discuss the three classes according to their area of coverage.
6. What is special or thematic map?
7. Give some examples of thematic maps.
8. Define gazetteer. Write down the types of gazetteer.
9. What is the purpose of any guidebook or travel guide?
10. Write down the uses of guidebook or travel guide.

### **Answers: Self Assessment**

- |                            |                           |
|----------------------------|---------------------------|
| 1. Maps                    | 2. Atlases                |
| 3. Gazetteers              | 4. Guidebooks             |
| 5. graphic representations | 6. True                   |
| 7. True                    | 8. Cartographic materials |
| 9. independent publication | 10. Form                  |
| 11. Thematic maps          | 12. False                 |

- Notes
- |     |               |     |                           |
|-----|---------------|-----|---------------------------|
| 13. | True          | 14. | True                      |
| 15. | False         | 16. | Guidebook or travel guide |
| 17. | Series Guides |     |                           |

### 11.9 Further Readings



#### Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



#### Online links

[http://www.cgrer.uiowa.edu/servers/servers\\_geodata.html](http://www.cgrer.uiowa.edu/servers/servers_geodata.html)

[http://www.cgrer.uiowa.edu/servers/servers\\_references.html](http://www.cgrer.uiowa.edu/servers/servers_references.html)

<http://www.geo.ed.ac.uk/agidict/welcome.html>

<http://www.what-is-the-capital-of.com/>



## Unit 12: Bibliographical Sources

Notes

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### Objectives

After studying this unit, you will be able to:

- Discuss the definition of bibliography
- Explain the functions of bibliographical sources
- Identify types of bibliographical sources
- Describe the importance of bibliographical sources
- Explain the concept of bibliographic control
- Compare and contrast of INB and BNB

### Introduction

With the tremendous growth of knowledge and wide variety of information available, it has presently become difficult for our users to keep themselves up-to-date. This problem can be overcome with proper keys or aids to access the vast amount of available information.

## Notes

A bibliography acts as a key to the large mass of information that exists today. The libraries can bring to the attention of their users the relevant information and knowledge with the help of bibliographies. Bibliographies are thus a useful tool for study and research. The present day information organizations cannot function without effective bibliographical tools. Before we actually discuss formally the concept and types of bibliographies, let us understand what we are focusing at in this part. We would be focusing on various aspects of bibliographies, such as its types, need, control, etc.

### **12.1 Definition of Bibliography**

Let us understand the meaning of bibliography. The word “bibliography” has originated from the Greek terms – “biblion” meaning a book and “graphien” meaning to write. Bibliography, thus, means “writing of books” which later on changed to “writing about books.”

The bibliography is the chief class or form of reference and information access tools. It is a systematically produced descriptive list of records. Thus, a bibliography is systematic list of documents prepared for a particular purpose on the basis of some criteria. These criteria may be documents on a subject, of a country or of the whole of available knowledge.

There are number of definitions available for the term bibliography. Some of the popular ones are given below:

Bibliography is the art or science of correctly describing books (their literary contents, physical make up).

Bibliography is the art of recording books and the science of making of books and their record.

The earlier meaning of bibliography, which is the study of books as physical entities, has shifted to the identification of the thought content in books. At present, to a library and information professional, a bibliography means the art of preparing a systematic list of books and the name of the list itself. A bibliography is different from catalogues and indexes.

The reference source that comprises bibliography of any type is called a bibliographical source.

### **12.2 Functions of Bibliography**

The chief function of a bibliography is to help the users in locating the required information source in the fastest possible manner. Some of the functions of a bibliography are listed below:

- It is a systematic guide to the literature of the subject.
- It locates a title on a given subject and identifies the bibliographical details on it (author, publisher, date and place of publications, etc.).
- It serves as a selection tool in acquiring materials for the library.
- It saves the time and effort of researches as it helps in selecting the relevant and specific documents from the large universe of documents and provides direction to the researcher by indicating the area where total research in a subject areas stand and its progress.
- It is useful for carrying out retrospective search for the purposes of research.
- It facilitates users in locating documents of their interest;
- Identifying and verifying bibliographic information of documents;
- Locating information (material) through the publishers or other libraries;

- Avoiding duplication in research and access to materials of interest can be provided especially to researchers;
- Bibliographic control over the existing literature.

## Self Assessment

Fill in the blanks:

1. The reference source that comprises bibliography of any type is called a .....
2. Bibliography is a systematic guide to the ..... of the subject.

## 12.3 Types of Bibliographical Sources

There are several types of bibliographies. Most bibliographies are subject bibliographies but there cannot be effective subject bibliographies unless there are wide-ranging and efficient general bibliographies. Besides the subject bibliographies, the national bibliographies, also referred to as current bibliographies, are very popular as they can be used for searching current and retrospective information. The other types of known bibliographies are the trade bibliographies and the universal bibliographies. Let us have more details about the various kinds of bibliographies.

### 12.3.1 Subject Bibliographies

The subject bibliographies form the largest group of enumerative bibliographies.

Ranganathan defines a subject bibliography as the one that is a document bibliography confined to a specific subject field, instead of covering the entire universe of subjects.

Depending on the contents of subject bibliographies, they can be divided into several categories, a few of which are given below:

- **Reference Bibliographies:** The subject bibliographies, which are mostly used for reference, fall into this category. These bibliographies are considered exhaustive bibliographies. However, it is often quite impossible to compile exhaustive bibliographies. These types of publications therefore only aim to be exhaustive within chosen limits, which should be made clear by the bibliographers.



*Notes* Material published in foreign languages is also a major limitation.

- **Reading Lists:** Large sized subject bibliographies are important, especially when they have a wide coverage. But they are not enough, as anyone wishing to study a particular subject, at whatever level, needs a carefully prepared select bibliography of it. The reading lists are quite common and produced by people who know or should know the literature they recommend. Teachers often prepare the reading lists for distribution to students. A bibliography or a reading list supporting a research article or a review article is usually very valuable for reference purpose as lot of effort goes into preparation of such lists.
- **Subject Indexes and Abstracting Services:** A helpful scanning of literature can be carried out by searching the indexes of books and periodicals. There are also serials available, called indexing services, which include all details of the published documents in a helpful sequence. In some cases, the entries also include summaries of the texts; these are known as the abstracting services.

## Notes

Most of the periodicals of reference value usually have their own indexes. Cumulated indexes, for example, ten-year or five-year cumulations are also available in many cases.



*Did u know?* Presently, computerized indexes on microfiche or electronic media are also available.

- **Bibliographic Reviews:** Bibliographic reviews perform a combined function of providing information and judgments about the items reviewed and therefore, serve as useful bibliographic contributions made to a particular subject field. These can be in the form of current advances, annual reviews or state-of-the-art on a subject area.



*Example:* A good example for this is Annual Review of Information Science and Technology, 1966.

### 12.3.2 National Bibliographies

The national bibliographies are serial publications, which are current, and attempt to list the publications of a particular country. They can be used to find current and retrospective information. A national bibliography can be defined as a list of books, documents, pamphlets, serials, theses, dissertations, or other printed material produced in a country, in the language of the country, by the people living in the country or elsewhere within a stipulated time limit.

As national bibliographies record the intellectual input of nations, these are an authoritative source for informing about the documents produced in a country. According to Dr. Ranganathan, they serve cultural, economic, and social purposes.

The national bibliographies have several uses which include aiding libraries booksellers, publishers and users too, to select and by the recent books. They are useful aid for bibliographical control of documents of a nation and act as guides to the book trade. As already mentioned, the national bibliographies may be current and retrospective.



*Example:* Following are the examples of National Bibliographies:

- Indian National Bibliography (INB). Calcutta: Central Reference Library, 1957–Monthly.
- British National Bibliography. London: British Library Bibliographic Services Division, 1950–Weekly.

National bibliographies produced by different countries are also useful for knowing and selecting latest books in the country.



*Example:* British National Bibliography is useful for knowing latest publications published in U.K.

### 12.3.3 Trade Bibliographies

A trade bibliography is a list of books and other materials, which are printed and available in a country for sale, through publishers, booksellers, or trade agencies. Their main function is to promote book trade. They serve commercial purposes and thereby help in boosting sales.

The trade bibliography can be defined as the one that is a list of books and other reading materials available for sale by the booksellers, printers, publishers and distributors of such publications. They can be national or international in scope.



*Example:* Following are the examples of Trade Bibliographies:

- *Indian Books in Print. Delhi:* Indian Bureau of Bibliographies, 1955.
- *Indian Book Industry. Delhi:* Sterling, 1969.
- *British Books in Print. London:* Whitaker, 1965.

Also called Trade catalogue, a list of books in print comprise ones published in a country and frequently of books published abroad for which the home publishers are agent. Usually, firms engaged in book trade publishing, distribution or sale of books issue such bibliographies. Government being a major publisher in most countries of the world catalogues of government publications also fall under this category.

Trade catalogues issued by Indian Publishers sometimes lack bibliographical information such as number of pages, full name of the author or year of publication; trade bibliographies issued by foreign publishers or distributors generally contain complete bibliographical details about the publication along with the ISBN and Index to Authors and Titles.

### Types of Trade Bibliographies

We shall see these trade bibliographies under following groups:

#### *Commercially Produced Bibliographies and Trade Catalogues*

- (a) **Commercially Produced Bibliographies:** Cumulative Book Index: a world list of books in English language. New York: Wilson, 1898 – to date. Monthly.

Popularly referred to as BI in library circles, entries in Cumulative Book Index are arranged in alphabetical order by author, title, and subject headings put in one sequence. Each monthly issue carries at the end a directory of publishers and distributors. Subject headings are taken from the LC Subject Headings list. No issue is published for the month of July and August each year. From 1969, annual cumulation is also being published.

- (b) **Booksellers' Catalogues:** Renowned booksellers in India and abroad bring out catalogues of books and other material available in their ready stock mentioning the current prices of the publications. These are very useful for book selection. Catalogues produced by world known booksellers prove to be standard bibliographies on a specific subject.



*Notes* Some booksellers specialize in rare and out of print publications. Catalogues of rare booksellers such as B.H. Blackwells, Oxford are very useful for collection development.

- (c) **Commercially Produced Trade Bibliographies:** The two major commercially produced trade bibliographies – ABPR and Whitaker's Books of the Month also produce annual cumulation with some modification and editing of the title included in monthly publications. The annual volumes include only those titles that are still available with the publishers. Appropriately these annual cumulations Book in Print (New York: R.R. Bowker), 1948 – Annual, Books in print 1957 – brought out by the same publisher are indexes of books published and can be purchased from American Publishers.

## Notes

Books in Print Plus, is a computer file available from 1979. It is a machine-readable version in CD-ROM, updated bimonthly.

The British counterpart to the Books in Print is Whitaker's Books in Print that was started as British Books in Print in 1974 but changed its title in 1988, to be known by its new name. It is published in four volumes, two each for authors and for titles.

### *Trade Catalogues for Government Publications*

- (a) **India: Catalogue:** Publications and Periodicals Corrected up to 1993 (Delhi: Controller of Publications), claimed to be updated by annual and monthly supplements is a list of official publications brought out by the various Ministries and Departments of the Government of India.

List of fresh Arrivals of Government of India Publications and Periodicals Released during the Month...(Delhi: Dept. of Publications) is a mimeographed monthly list.

Government of India Books in Print 1994 compiled by J.S. Khurana and M.S. Khurana (New Delhi: Book well, 1994) covers books in print from 1980 onwards. It also contains a section for listing publications of such autonomous Departments as Election Commission, Lok Sabha and Rajya Sabha Secretaries, Supreme Court of India.

- (b) **United Kingdom:** Catalogue of United Kingdom Official Publications in a CD-ROM records publications of 12 major international organisations from 1980 to the present.
- (c) **United States:** Monthly Catalogue of United States Government Publications, 1985- (Washington: Government printing Office) is the most comprehensive list of government publications currently issued.

### **12.3.4 Universal Bibliographies**

A universal bibliography is one that includes everything that is published, issued, or processed in the field of knowledge from the beginning to the future. Dr. Ranganathan defines a bibliography to be universal when it includes all published materials, whether books or part of them or periodicals or articles in them or combination of them, on all subjects, in all languages, in all countries, at all times. In other words, a universal bibliography is one that records all documents, produced in all languages in all countries of the world, without restriction of the theme. The preparation of a universal bibliography of the above nature appears to be a mammoth task almost impossible to achieve.

There are no known published universal bibliographies but some possible examples in this direction can be published catalogues of British Library Reference Division, British Library (UK), Library of Congress of US, and Bibliotheque Nationale of France.

### **12.3.5 Statistical Bibliographies**

A statistical bibliography is prepared in order to shed light on the process of written communication and of the nature and cause of development of a discipline by means of counting and analysing the various facets of written communication.

There are very few examples of this type of bibliography. One representative example is Abstract of British Historical Statistics by B.R. Mitchell and Phyllis Deane published in 1962 by Cambridge University Press.



Caselet

### Citing in the Text and Footnotes

**R**esearcher acknowledges all documents except what he has himself developed. For this purpose he resorts to citation and footnotes. The reason for giving citation or footnotes ranges from 'presenting a well-documented report' to 'enhance authenticity of the work'.

When the footnotes are used or when the relation between a piece of information on a page (or pages) is to be shown with its source, or when the author of the report wants to refer the reader from a particular point in the text to another point (in the text or footnote or list of references or the bibliography at the end), some system of symbols or numerals, etc., has to be used.

The most common is the use of numerals at the point in the text (which may be superscribed or given in parenthesis) referring to the same number of footnote on the page or to the same number of entry in the list of references or in the bibliography. In place of numerals some other symbols like star mark, etc., are also used to refer to a footnote on the same page. Even 'author and year' system is also common. This is used in the text to refer the reader to the complete bibliography at the end of a document or chapter. In such a case bibliography is arranged alphabetically by author. Often, to give prominence to the year, in the bibliography 'year' is placed immediately after the name of the author.

A few words about some Latin abbreviations used in footnotes and references may be relevant here. Now a day there is a trend to avoid Latin words, e.g. et al is replaced with the words 'and others'. But some of these are still used, for they help to avoid repetition of a reference or a part of it, again and again, especially on the same or facing page. A few of them used commonly are:

- Ibid (i.e. ibidem - the same work)
- Idem (i.e. idem - of the same author)
- Loc cit (i.e. loco citato - in the place cited)
- Op cit (i.e. opera citato - work quoted)

*Ibid* and *idem* are used in relation with the immediately preceding entry. In contrast loc cit and op cit are not used in relating with the immediately preceding entry.

Source: [earxiv.uniraj.ac.in/arxdata/42/paper.doc](http://earxiv.uniraj.ac.in/arxdata/42/paper.doc)

### Self Assessment

Fill in the blanks:

3. .... bibliographies are considered exhaustive bibliographies.
4. A ..... bibliography is a list of books and other materials, which are printed and available in a country for sale, through publishers, booksellers, or trade agencies.
5. A ..... is one that includes everything that is published, issued, or processed in the field of knowledge from the beginning to the future.
6. A ..... is prepared in order to shed light on the process of written communication.

## 12.4 Importance of Bibliographical Sources

Bibliographies of rare and old books include Book Prices Current. The Cumulative Book Index is a monthly bibliography of books in the English language that cumulates annually. The Cambridge Bibliography of English Literature is useful for British publications, and the Bibliographic Guide to the Study of the Literature of the U.S.A., by C. L. Gohdes, for American works. The Bibliographical Index, which is cumulative, and World Bibliography of Bibliographies are useful compilations. Bibliographies help you:

- identify important and relevant sources on a topic
- find what research has already been done on a topic
- find articles and books written by or about a particular person
- find out where to look for relevant information

The importance of bibliography in research paper writing cannot be denied. Bibliography is the key to describe that research was genuine. References show the hard work of the author. It is not easy to write this part of research paper. Research paper service can help you to write this section easily. Whenever you will be assigned a research paper topic, number of sources will be given to you. Your instructor will assign you these sources and you will have to gather the information from these sources. If you are using any research paper service you have to give this information to them. Otherwise, you will not fulfil the requirement of your teacher. Sometimes your instructor gives you additional advice.



*Example:* Your teacher wants you to use only books and articles for your research not web. Moreover, they can ask you to stick with the certain period of time. Like use the books of 1990. In this condition you have to tell the requirement briefly to the research paper service providers. They will work according to your demand.

If you are not confident about research paper bibliography then, contact to a research paper service. There are so many research paper service providers who offer their services on affordable price.

Bibliography is the important part of research paper writing. It shows the originality of research work. We have discussed the importance of bibliography.



*Caution* While placing your order to research paper service providers make sure that your given information also contains the bibliography.

Sometimes, insignificant-looking things prove to be valuable or it causes considerable losses in our life. For instance, we ignore a minor traffic rule and meet with an accident, or we refuse to join a friend group during night and next morning we hear that they met with an accident. Exactly the same types of situations occur when you take care of or ignore bibliography page of thesis or dissertation.

The bibliography (also called references) is a list of referred, used, or quoted resources, sources, or materials. You, as the thesis writers, enlist all resources that have their “influences” in your paper by one way or the other. The term influence leads us to understand the real value of the bibliography, as bigger as that of the plagiarism.

As you know, the plagiarism is a copying or reproduction of a written material or ideas with the claim as if it is one’s own creation. But, to escape from plagiarism, there is no need to refrain from others’ materials or the bibliography page.





*Caution* In fact, you can and should use them freely depending on your requirements—but by following the established mode of conduct.

As a rule of academic writing, the students ought to admit the truth whenever they use others' ideas, viewpoints, data, information, written stuff, audio-visual sources, etc. And, when you directly use a quotation or copied portion, you will have to cite the source. The academic arrangement in this regard is called the bibliography without which the truth remains the secrets.

Three situations are very determinants. First, the student takes for granted with a thought of who is going to check. Second, s/he certainly forgets to include a particular source in the bibliography. And, third, s/he continues to be under the wrong impression that there is no connection between his/her writing and the particular source. Whether intentional or unintentional, all of the three situations indicate nothing but the plagiarism.

For bibliography page, please bear in your mind that the people examining your papers are the real scholars and experts with plenty of papers already examined. And, you cannot befool them. Because you better know, there is no need to go into details regarding the consequences of plagiarism detected in your papers.

So, make your bibliography perfect with all objects that have influenced your writing. For citation, follow appropriate styles as suggested by your academic institution. These include the MLA, APA, Chicago, Harvard, etc.; however, the commonly known things need no citation.

Above all, the bibliography is a fairly honest system for giving credits to the real helpful scholars or organization.

### Self Assessment

Fill in the blanks:

7. The ..... is a list of referred, used, or quoted resources, sources, or materials.
8. The ..... is a copying or reproduction of a written material or ideas with the claim as if it is one's own creation.

### 12.5 Bibliographic Control

According to UNESCO/Library of Congress Survey, bibliographic control means "the mastery over written and published records which is provided by and for the purpose of bibliography". Effective bibliographic control should be made at subject and national level. Bibliographical control would also be difficult if it were concerned only with writings printed as separate entities. Nevertheless, it is also concerned with those published as parts of separate publications articles in periodicals and chapters, or sections in books with multiple contributors.

Bibliographical control can be defined to mean the mastery over written or published records, which is provided by and for the purpose of bibliography. Bibliographical control is synonymous with effective access through bibliographies. The purpose of bibliographical control is location of information source or of materials and the speed with which it can be located. Therefore, the librarian should be able to have access to complete records of human civilization and culture and then the ability to organize them effectively for use.

**Notes**

**Bibliography of Bibliographies**

These are lists of bibliographies to help users in choosing bibliographies. They help in tracing bibliographies. The bibliographic control of bibliographies presents many difficulties due to many reasons, one of them being the huge number of total number of usable bibliographies. Besides this, it is difficult to find out whether or not a bibliography exists on a given topic, suitable for a particular user, and whether it is worthwhile getting hold of it if not in the stock. The last reason is the cost, as the major bibliographies are expensive to buy and house.

**National Bibliographic Control**

The national library ensures the bibliographic control of all the books or book-like documents published in that particular country. It has the provision of legal deposit by a host of different programs such as a cataloguing in publication service or similar mandatory practices. By cataloguing in publication service, the Library of Congress gives a complete catalogue entry of a book to any publisher who sends a final draft or some form of galley proof of a book currently in production.

**Universal Bibliographic Control**

The bibliographic control of documents at the international level has always been a problem. Librarians have been concerned about this problem, which is increasing over the last five decades due to enormous increase in number of publications as well as variety of publications. There are no known universal bibliographies as such. However, after the Second World War, UNESCO took leadership and emphasized that if all nations maintain their current national bibliographies, it might lead to having an effective control on the publications universally. Many years have passed but still nothing concrete has come out of this.

The Universal Bibliographic Control (UBC) program sponsored by IFLA in 1974, appeared to be far more realistic, as it was based on the recognition of the fact that effective bibliographic control must begin within individual countries, and that the exchange of bibliographic information between them is facilitated if there is international agreement on bibliographical description. The UBC program has since been merged with IFLA's another program christened the international MARC and is presently known as UBCIMP.

**Bibliographical Activities in India**

In India, presently a large number of organizations are engaged in providing bibliographic services at various levels. At the national level organizations like National Library, Calcutta, erstwhile INSDOC (now NISCAIR) in Science and Technology, National Medical Library in Medical Information, and NASSDOC in Social Sciences are carrying out various bibliographic activities that involve international and national information sources. The National Library is bringing out the Indian national Bibliography since 1957. The Association of Indian Universities (AIU) has been bringing out a series of bibliographies on Doctoral Dissertations accepted by Indian Universities since 1957. NASSDOC has brought out bibliographies on various subjects/topics in social sciences. Catalogues of Scientific Serials from various regions of India by erstwhile INSDOC are some initiatives either direction.

New ideas are generated in each and every branch of human activity from time to time. Apart from new ideas we give new interpretation to old ideas, at times we also borrow ideas from other discipline and try to apply them in a new content. As a result more and more information are produced in a variety of forms leading to information explosion.



*Caution* There is a need to keep track of this information explosion by way of bibliographic control.

## Self Assessment

Fill in the blanks:

9. .... can be defined to mean the mastery over written or published records, which is provided by and for the purpose of bibliography.
10. The ..... ensures the bibliographic control of all the books or book-like documents published in that particular country.

## 12.6 Comparative Study of INB and BNB

In this section, only two National Bibliographies which are most important shall be discussed in detail.

### 12.6.1 Indian National Bibliography (INB)

The Indian National Bibliography has been conceived as an authoritative bibliographical record of current Indian publications in Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telugu and Urdu languages, received in the National Library, Kolkata under the Delivery of Books and Newspapers, (Public Libraries) Act, 1954 (Act No. 27 of 1954 as amended by Act No. 99 of 1956). Indian National Bibliography (INB) reflects the cultural heritage of our country. In this knowledge based society, INB has a major role to play. The types of publications, publishing process in general, the format of national bibliographies from the printed version to CD-ROM and online versions etc. has much changed the scope of the national bibliography.



*Notes* The following types of publications are excluded:

- (a) Maps
- (b) Musical scores
- (c) Periodicals and Newspapers (except the first issue of a new periodical and the first issue of a periodical under a new title)
- (d) Keys and Guides to Textbooks
- (e) Ephemeral and other such materials.

The main entries are in Roman Script and the collations and annotations, if any, are in English. The classified portion follows the Dewey Decimal Scheme of Classification but the numbers from the Colon Classification scheme are assigned to each entry at the bottom right hand to facilitate the use of the Bibliography and libraries, arranged according to the Colon Schemes of classification.

At the beginning of its compilation, the problem of multilingual characteristics of the nation was overcome with the scholarly opinion of Dr. Suniti Kumar Chatterji by adopting Roman

## Notes

script with diacritical marks. The standardization of the transliteration table made at that time was helpful while developing software standards for Indian language scripts. Today this has been made possible by CDAC GIST and is used to enter language data at present.

Before commencing regular publication, two experimental fascicules one with entries arranged according to Dewey decimal classification and the other employing Colon Classification were issued and circulated among experts at home and abroad for opinions and comments. After continuous 15 months of hard work finally on 15th August 1958 the INB covering the last quarter of 1957 made its appearance as a quarterly with annual cumulation. Its first issue was released by Pandit Jawaharlal Nehru, the first Prime Minister of Independent India.

INB records from since inception has been converted into electronic data. Almost 6 lakhs bibliographical records belonging to different Indian Languages is available with CRL now. This is inclusive of all the data belonging to the period for which printed INB is not available. Efforts are being made to make these data available online. Thereafter latest information on the books received at the National Library under will be available without delay.

### INB Consists of 3 Parts – Classified, Author & Title Index and Subject Index

In the Classified part, the entries are arranged according to the Dewey Decimal system of subject classification (22nd edition). The corresponding Colon Classification (6th Edition) is also assigned at the right hand corner below each entry. Chain Procedure is using for subject headings. If more than one entry comes under the same classification number, the entry is arranged according to the alphabetical order of the author. If there are two or more works by the same author under the specific classification number, the name of the author is not repeated and the works are arranged alphabetically by their titles under the specific DDC number.



Example:

#### **891.441-Bengali Poetry- contd.**

Ṭhākur, Rabīndranāth, 1861-1941

Fruit gathering / translated by  
the author.- New Delhi : Niyogi  
Books, 2012.- 63 p. ; 18 cm.

ISBN 978-93-81523-17-9 :

Rs. 95.00

(eng) O157,1M61

Gitanjali / translated by the  
author.- New Delhi : Niyogi  
Books, 2012.- 62 p. ; 18 cm.

ISBN 978-93-81523-18-6 :

Rs. 75.00

(eng) O157,1M61

Sometimes, verbal extension is used where the DDC number is not available for a specific subject and also gives emphasis on the particular subject by naming the further divisions in words.



Example:

294.5211-Gods, Goddesses and  
other Divinities  
294.5211(1)-Durga  
Jhā, O. P.  
Goddess Durga.- New Delhi :  
Diamond Pocket Books, 2012.-  
63 p.: ill.; 18 cm.  
ISBN 978-81-288-3885-9 :  
Rs. 30.00  
(eng) Q2

### Author and Title Index

In Author and Title Index, the entries are arranged according to the alphabetical order. When the author of the book is known, it can be traced using Author and Title Index. If the information in the index entry is found inadequate and more information is required, it refers to the entry in the classified part with the help of the class Number assigned at the end of the Author Index Entry. If there are two or more works by the same author under the specific classification number, the name of the author is not repeated and the works are arranged alphabetically by their titles. Author and Title Index entries are made under distinctive titles, editors, compilers, translators, commentators, illustrators, series etc. Reports and transaction of societies are entering under the name of the corporate bodies. In certain cases, entries are made under the name of countries, cities and institutions which are considered to be the authors of their official publication. Periodicals, anonymous works, compiled and edited works etc. are entered under the title.

Textbook of mass communication.  
See Sirṁha, Jitendrakumār  
Thaker, Sandhya B., jt. auth. See  
Cauhān, Rameśasirṁha M.  
Ṭhākur, Karūṇes  
Nadiyom̄ bichaḍe nīr.(hin)  
891.433  
Ṭhākur, Rabīndranāth  
Fire flies.(eng) 891.441  
Fruit gathering.(eng) 891.441  
Gitanjali.(eng) 891.441

### Subject Index

To find the books in a particular subject, one can take the help of Subject Index which is separately printed after the Author and Title index and then refer to the classified part by the means of DDC Number assigned against the name of the subject.

Notes



*Example:* In the Subject Index under India, all the subjects related to India have been brought together.

India:Asia:Economic Planning	338.954
India:Asia:Economic Planning: Economics	338.954
India:Asia:Legends	398.220954
India:Asia:Social Role and Status of Women:Women	305.420954
India:Astronautics:Other Branches of Engineering: Engineering	629.40954

**Standardization**

Standardization of bibliographic information is very essential in a national bibliography. Standardization helps in easy retrieval, depth of access, ensures uniformity, reliability, quality and copy cataloguing which is a recognized way of economical cataloguing. A library can make use of the work already done by another library by copying the bibliographic record and make a few changes to the record if needed. Standardization in case of INB result in

- Offering better services to the users
- Avoiding the duplication of effort
- Saving the time and manpower
- Enhancing cooperation amongst libraries
- Establishing effective networks

National Bibliographic agency is responsible to standardize the author and publisher by maintaining an authority file.

*Notes* Author authority should include personal author, corporate bodies, ministries, institutions and other official organizations within the country.

In a Multilingual country like India, Author authority is very much essential. Generally the INB transliterate the name, according to the region and language it represents. For that purpose, concerned language divisions of INB standardize the author belonging to the concerned language; other language divisions use that data.



*Example:* **Rabindranath Tagore** appears differently in various languages. It appears as **Rabindranath** Tagore in English, **Ravindranath** Tagore in Malayalam, Marathi, Hindi languages etc. (some Indic languages).

## History of INB

## Notes

The Government of India set up an interim commission in 1949 and its first conference was inaugurated in 1954. The culture sub-commission of the national commission recommended the formation of a sub-committee for libraries and bibliographies of documents. "It also recommended:

- The national commission and the Indian Government should prepare comprehensive lists of outstanding works of arts in India for transmission to UNESCO.
- A national programme of translation of foreign works into Indian languages and of works from one Indian language into another should be formulated and implemented as soon as possible."

Influenced by Paris Conference of UNESCO in 1950, Government of India took serious initiatives for the development of the bibliographic services. The Government of India enacted the Delivery of Books [Public Libraries] Act, in 1954. The Act made it obligatory for the publishers in India to deposit a copy of each book published to the National Library, Calcutta (now Kolkata) and three other public libraries. The three other public libraries are Connemara Public Library, Madras (now Chennai), Central Library, Bombay (Now Mumbai) and Delhi Public Library, New Delhi. The publishers are supposed to send their copy of publication to these libraries within thirty days from the issue of the publication at their own expenses. The copy deposited in the National Library is passed on to the Central Reference Library, Kolkata for the compilation of the Indian National Bibliography. The Act was amended in the year 1956 so as to include Periodicals and Newspapers. This Act was a step forward in the direction of bibliographic control of Indian publications. It made it possible to plan the compilation of a comprehensive National Bibliography in thirteen Indian languages, recognized by the Indian Constitution, and English.

In 1955, the then Ministry of Education appointed a committee of the Indian National Bibliography consisting of seven members headed by late B.S. Kesavan, the first Librarian, National Library of Independent India, Calcutta to make initial plans for a National Bibliography. The committee laid down general structure and the principles for governing the compilation of Indian National Bibliography. They are concerned with the coverage, script, classification, cataloguing, periodicity etc. The INB unit started functioning from August 1955 in the premises of National Library Kolkata. In 1970, CRL started to function as a separate subordinate office of the Department of Culture, Govt. of India, headed by a full-fledged Librarian.

The aim of INB is to publish an accurate and comprehensive bibliographical records of current Indian publications in major fourteen Indian languages of India [Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, Telugu and Urdu] received at the National Library, Kolkata under the provisions of the Delivery of Book [public libraries] Act, 1954. The first volume of the INB appeared as quarterly with annual cumulations from 1958 to 1963, and its periodicity was changed to monthly in 1964 and continued up to 1977. After a few years, it became irregular. Only annual volumes were published during 1978 and 1979. 1980-81 was published as cumulative volumes in two parts. Since January 1984, the periodicity of this publication became monthly. This continued till 1993. Again from 1994, monthlies could not be published. June 2000 is the landmark in the history of Indian National Bibliography when its compilation was completely computerized. Up to today, all the monthly issues are being published regularly.

### 12.6.2 British National Bibliography (BNB)

The British National Bibliography (BNB) is the national bibliography of the United Kingdom. It lists and describes the books and serials newly published or distributed in the United Kingdom

## Notes

and Republic of Ireland that are received by the British Library under legal deposit as provided for in various Acts of Parliament. It also includes information on forthcoming titles supplied under the British Library's Cataloguing-in-Publication Programme. The British National Bibliography (BNB) lists the books and new journal titles published or distributed in the United Kingdom and Ireland since 1950. It also lists forthcoming book titles and hand-held electronic publications e.g. CD-ROMs, deposited with the Legal Deposit Office since 2003.

The BNB was established in 1949 in response to the recommendations of Lionel McColvin who had undertaken a survey of the UK's public library service in 1942 which resulted in the McColvin Report. McColvin concluded that it was inefficient for libraries to produce their own catalogues and that where catalogues did exist they only provided brief descriptions of library holdings rather than all available books of potential interest to users. McColvin identified a requirement for a detailed weekly list of bibliographic descriptions for new books which could be used by libraries to develop their catalogues by cutting and pasting the printed entries on to their catalogue cards.

The Council of the British National Bibliography was established in March 1949 and the new national bibliography commenced full operations in 1950. It consisted of weekly lists of all books and first issues of new serial titles published in Great Britain catalogued in accordance with the Anglo-American Code and classified according to the Dewey decimal classification system. Author/title indexes were provided every four weeks and the lists were cumulated into an annual volume.



*Did u know?* A pilot issue number 0 was produced in December 1949 and issue Number 1 was published on 4 January 1950. It contained just 25 entries.

The British Library took on the responsibility for the production of the BNB following its foundation in 1973 and still produces a weekly printed version of the BNB together with interim cumulations and annual volumes. However, the average weekly issue now contains around 3,500 entries in line with the huge increase in publication that has occurred over the last 60 years. This period has also seen numerous other developments for the BNB resulting in a database of over 3 million bibliographic records.

Coverage of the BNB has always been selective; the emphasis being on titles available via normal book buying channels. A weekly BNB data service began in January 1969 using the (then) innovative combination of the new UKMARC bibliographic data and ISO2709 MARC record exchange formats with magnetic computer tape. BNB MARC records were first made available online in 1977 with the introduction of BLAISE, the British Library Automated Information Service. Distribution of BNB records via FTP began in 1998 and eventually replaced the tape service and the Library moved to the MARC21 format in 2004.

Following a pilot CD-ROM produced in co-operation with the Bibliothèque Nationale in 1988, BNB on CD-ROM was launched in 1989. It originally consisted of a two-disc backfile covering the period 1950 to 1985 and a single disc current subscription service covering records created from 1986 updated quarterly. A new MS Windows version of the BNB on CD-ROM was produced in 1996 by which time current file discs were updated monthly and the backfile had been compressed on to a single disc. Production of BNB on CD-ROM ceased in December 2008 when the database became available for searching on the British Library's Integrated Catalogue as a subset search.

The British Library coordinates the UK Cataloguing in Publication (CIP) Programme and has included advance notification publication records in the BNB since the 1980s. Information on new titles appears up to 16 weeks ahead of the announced publication date. Advance information on over 60,000 titles each year is provided in this way via the BNB.



## Notes

In addition to Dewey decimal classification several other forms of subject access to the BNB have been used over the years, ranging from international standards such as Library of Congress Subject Headings (LCSH) to in-house systems such as PRECIS and COMPASS.

BNB development continues and in October 2009 it was added to the British Library's new Primo based catalogue again as a catalogue sub-set search. A pilot is also under way for a free Z39.50 based BNB MARC record download service for non-commercial use. However, the final innovation launched in January 2010 is another pilot of a new, weekly, PDF based BNB e-journal version, initially for existing subscribers to the printed product. This new service will bring the story of the BNB full circle by enabling the British Library to deliver a 'printed' BNB to customers with improved currency and greater functionality while also saving paper.

The objects of the British National Bibliography are to list every new work published in Great Britain, to describe each work in detail and to give the subject matter of each work as precisely as possible. The work is carried out at the British Museum, where copies of all new books must be deposited by law. It is done by a team of fully qualified bibliographers with the resources of the British Museum at its disposal and every endeavour is made to ensure the accuracy of the information given.



*Task* In the era of information society, the information explosion necessitates the Bibliographic control. Comment on this statement.

### Self Assessment

Fill in the blanks:

11. INB consists of 3 parts: ....., Author and Title Index and Subject Index.
12. In Author and Title Index, the entries are arranged according to the ..... order.
13. To find the books in a particular subject, one can take the help of ..... which is separately printed after the Author and Title index.
14. .... agency is responsible to standardize the author and publisher by maintaining an authority file.
15. The Council of the British National Bibliography was established in ..... and the new national bibliography commenced full operations in 1950.



*Case Study*

### Indian National Bibliography – "Today and tomorrow"

**A** National Bibliography reflects cultural heritage of the nation and preserves it for the future generation. It also plays a major tool for national bibliographic control. Government of India entrusted Central Reference Library (CRL), Kolkata, Govt. of India, Ministry of Culture, to publish the Indian National Bibliography (INB), an authoritative bibliographical record of current Indian publications. INB is unique when compared with other National bibliographies since 14 languages come under one umbrella. This case study analyses the role of Information Communication Technology (ICT) in contributing to the INB to reach its present position. Also discusses about the problems

*Contd....*

**Notes**

faced in alphabetical arrangement of INB, while integrating Indian language scripts having the heterogeneous characteristics in one sequence. In the initial stage CDAC's GIST technology was used for entering the language records. Now INB records are entered using UNICODE and follow the MARC 21 standards. As per the guidelines of International Conference on National Bibliographic Services (ICNBS) 1998, CRL started to record the bibliographic details in the original script of the document and transliterated all the fields for the National Bibliography. Thus Central Reference Library is in a position to publish INB in Roman script as well as 14 language bibliographies in their language scripts simultaneously after the implementation of UNICODE compliant software.

India is a multi-religious, multi-cultural and multi lingual country where linguistic diversity is a part of the historical cultural heritage and an integral part of nation building philosophy. 29 languages are spoken by more than a million native speakers and 122 languages by more than 10,000. These are classified, belonging to four distinct linguistic families: Indo-Aryan, Dravidian, Tibeto-Burman and Austro-Asiatic, all of which have some tribal speech communities. 22 languages are listed under 8th schedule of the Indian constitution [which includes two tribal languages-Santhali and Bodo]. The scripts of South and Southeast Asia have many structural similarities: most are phonetic, most are written from left to right, most use spaces or marks between phrases, and so on. Most of these scripts are derived from the ancient Brahmi script. Urdu, Sindhi and Kashmiri are usually written in Perso-Arabic scripts. Sometimes they are written in Devanagari also. Apart from Perso- Arabic scripts, the remaining ten scripts have evolved from the ancient Brahmi script, and have a common phonetic structure, which allows a common character set among these scripts.

**Users**

User groups and their context of use are changed in National Bibliographies from time to time. National Bibliography is considered as the most important information resource for the general public. Librarians, research scholars, publishers, booksellers, cataloguers etc. are the main users of National Bibliography. Cataloguers use National Bibliography for their cataloguing purpose. If the book is same, one can use the copy cataloguing facility from an online National Bibliography. National bibliography can be a source of data about country's publishing output for official statistics. The Indian National Bibliography has been serving scholars, librarians, publishers, book sellers and those interested in the book world as a valuable tool of reference.

**INB: Computerisation Project**

Up to May 2000, entries for INB are catalogued manually. The irregular appearance of INB has reduced its importance and a lot of thought has been put in for the revival of the project. Therefore, in 1998, authorities of the Central Reference Library submitted a proposal for the automation of the compilation of Indian National Bibliography to the Department of Culture, Government of India, and the same was approved. Department of Culture entrusted the Educational Consultancy Ltd., a Government of India undertaking to advice on the matter. The first computerized INB monthly June 2000 came out using TLMS software. The authority decided to adopt customized version of LibSys IV software for its compilation. Transliteration of Indian language scripts is done through GIST technology of C-DAC, Pune.

The software was running in UNIX platform and dumb GIST terminals were used for typing the language script. So it was very much time consuming to type in language script but generation of the bibliography was very easy and having the facility to generate the classified part, Author and title index and Subject Index automatically. Customisation of LibSys IV software took more than a year. The main problem faced at that time was that

*Contd....*

the arrangement of multilingual INB records. Finally the software became stabilized. Thus backlog works were cleared. INB became up-to-date. Now all the data from 1958 is available on machine-readable format. All the language divisions enter data on the computer using LibSys software from manually prepared datasheet. If there is any Class number, which does not exist in the Subject Directory, the same has to be added in the subject directory. Next step is generation of INB and taking print out language wise. After proof reading and online editing of data by all language divisions, print out in all languages together has been taken again. General editing is done by rotation basis. After the proof reading and on line correction of data, the camera-ready copy of INB is generated. This is then sending to press for multiple copies.

Over the years, unprecedented growth has occurred in publication output of regional languages in India; it is of utmost importance to document all the resources published in vernacular languages. The multilingual situation in India required a general bibliography in Roman script and language bibliographies separately in concerned languages. The language bibliographies were sent to the respective state to print and publish. But it did not work for a long and most of the language bibliographies perished. CRL authority has seriously thought about the revival of language bibliography. So it was decided to upgrade the LibSys software (LS Premia). CRL has adopted the internationally accepted MACR 21 and UNICODE compliant system. UNICODE is used for entering language script.

#### **Issues of Language and Script**

India is a multilingual nation with various scripts. At the beginning stage one of the major problems faced by the INB unit was that of scripts. Dr. Suniti Kumar Chatterjee, a well-known scholar, suggested the roman script with diacritical marks and thus name of authors and titles in Indian languages are transliterated into roman script with diacritical marks wherever necessary. In the case of English books, only Indic authors are transliterated into roman script. Foreign authors remains as the same international standard. It was a far sighted decision which promoted its national and international usefulness. In the initial stage, CDAC's GIST technology was used for entering the language records, which employs the extended ASCII codes for coding Indian language characters (ISCII). But ISCII had limitations in bibliographic data handling and management.

As per the International Conference on National Bibliographic Services (ICNBS) 1998 "The national bibliography should include records for materials in all languages and/or scripts in which publications are produced within a state; and wherever possible these records should include the languages and/or scripts in which the publications originally appeared." Based on that, from 2010 onwards INB has also adopted the system of entering the records in the language of the publications and the system is automatically generating the 880 tag (roman transliteration) for every field. If required, one can edit the 880 tag and this can be saved. Now INB in roman script as well as language bibliographies can be generated simultaneously. Thus we get two products - Indian National Bibliography and language bibliography by entering one record. This is a landmark for a multilingual country like India.

India, being a multilingual country, it is very essential to retain the option of romanizing bibliographic records for Indian National Bibliography.

INB is unique when compared with other National bibliographies, since 14 languages come under one umbrella. A lot of problems were at the time of computerization. The main problem was that the arrangement of multilingual INB records, since integrating Indian language scripts having the heterogeneous characteristics in one sequence is not an easy task. Author and title has to be arranged according to the alphabetical order irrespective of the diacritical marks.

*Contd....*

Notes

**Cataloguing-in-Publication Project: Problems and Solutions**

Cataloguing-in-publication (CIP) in India is a free cataloguing service offered to Indian Publishers by the Ministry of Culture, Government of India for the books which are in the process of being printed. Each CIP entry will be added to the National CIP database which will be freely accessible online by users, publishers, librarians and all those interested in Indian publications. On 8th November 2009, the advisory Board of the National Library of India discussed the importance of Cataloguing-in-publication programme at its meeting. After this meeting, the Ministry of Culture constituted a committee to prepare a report for the implementation of CIP in India. The chairman submitted the report to the Ministry of Culture on 30th April 2010. The then Joint Secretary in the Ministry of Culture facilitated the processing of the report and its approval. The CIP agency selected to prepare CIP records in different parts of India will be required to use the following standards like MARC 21, AACR II, Dewey Decimal Classification (DDC), LCSH and special internationally known Subject Thesauri and UNICODE. It is decided that, in the first phase, CIP records in the computerized form will be created in the 12 languages (Assamese, Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Tamil, and Telugu) besides English. The CIP programme was first started by the Library of Congress and was followed by the British Library. There are twenty-five active CIP programmes at present in the world. But CIP programme in India is in initial stage only. There is no decision at governmental level regarding the co-operation between CIP programmes and INB. Most of the countries, the National Bibliographic Agency is responsible for creating the CIP data and that data is also included in the National Bibliography. If INB also include the CIP data, definitely it will also become more comprehensive and current. But in India, the Raja Ram Mohan Roy Library Foundation (RRRLF), an autonomous body under ministry of Culture, Government of India is the main agency responsible for CIP.

**Problems and Solutions**

A national bibliography should contain an authoritative and comprehensive records of all publication published in a country and publish those records with shortest possible delay with the accepted international standards. Characteristics of a national bibliography are that it provides a current, timely, comprehensive and authoritative list of all titles published in a country. In the case of Indian National Bibliography, it is totally depending upon the books received from National Library under the Delivery of Book Act and at present there is no control over the Delivery of Books Act. Some of the publishers are not at all aware of the Act and some send their books very late to National Library and it takes minimum three months to reach in the Central Reference Library. This affects the currency of INB. The legal deposit legislation needs to be strengthened to make the publishers aware of their obligations. There is very less effort for the amendment of the act at the government level. Many developed nations amended their legal depositary Act so as to include digital materials in their National Bibliographies as per the recommendations of the ICNBS, 1998. So Delivery of Books Act needs to be changed in its totality. National Bibliography should provide information as quickly as possible to the users who need it for collection development, cataloguing purposes and information search. Being a National Bibliographic Agency, CRL has to take necessary steps for the cooperative arrangements with publishers, booksellers for the improvement of timely publication of the INB. Criticism is there regarding the INB, in its lack of on-line accessibility. Efforts are going to upload the data. National Informatics Centre has been entrusted for INB online. As an experimental basis, some of the data is available on the net. A country with one language and single script has many advantages in uploading the record in the net than a country with several languages and multiple scripts. Therefore these problems crop up often. Future of INB is very promising. But since it has to depend on the flow of book from the

*Contd....*

## Notes

National Library its status is sometimes very much shaky. There is need for INB since India is a multilingual country and comprehensive databases of the book published in various languages are to be prepared. In some countries, the national bibliography no longer is issued in paper form at all, but is published as a DVD. Many countries have online versions of their national bibliographies. All of these new formats are giving a new significance to the national bibliography as a cultural heritage of the literary output of the country. It is concluded that the current format used in INB is at par with the international standard and it is very much apt for publishing the language bibliographies and roman bibliography at a time. 22 languages are included in the 8th schedule of the Indian constitution and all languages are having the same status in INB. Thus INB reflects the culture of Indian community – multilingualism.

**Question:**

What necessary steps are taken for making INB available online?

Source: <http://library.ifla.org/119/1/143-ahas-en.pdf>

**12.7 Summary**

- A bibliography acts as a key to the large mass of information that exists today. The libraries can bring to the attention of their users the relevant information and knowledge with the help of bibliographies. Bibliographies are thus a useful tool for study and research.
- The present day information organizations cannot function without effective bibliographical tools. Before we actually discuss formally the concept and types of bibliographies, let us understand what we are focusing at in this part.
- In this Unit we have focused on various aspects of bibliographies, such as its types, need, control, etc. The bibliography is the chief class or form of reference and information access tools.
- While defining the term Bibliography, it is stated that a bibliography is the art or science of correctly describing books (their literary contents, physical make up). The reference source that comprises bibliography of any type is called a bibliographical source.
- While focusing on the utility aspect of the bibliographical sources, it is pointed that the chief function of a bibliography is to help the users in locating the required information source in the fastest possible manner.
- The Unit discusses in detail the types of bibliographies. There are several types of bibliographies. Most bibliographies are subject bibliographies but there cannot be effective subject bibliographies unless there are wide-ranging and efficient general bibliographies.
- Besides the subject bibliographies, the national bibliographies, also referred to as current bibliographies, are very popular as they can be used for searching current and retrospective information.
- The other types of known bibliographies are the trade bibliographies and the universal bibliographies.
- The aim of INB is to publish accurate and comprehensive bibliographical records of current Indian publications in major fourteen Indian languages of India received at the National Library, Kolkata under the provisions of the Delivery of Book [Public Libraries] Act, 1954.
- The BNB was established in 1949 in response to the recommendations of Lionel McColvin who had undertaken a survey of the UK's public library service in 1942 which resulted in the McColvin Report.

Notes

- The British Library took on the responsibility for the production of the BNB following its foundation in 1973 and still produces a weekly printed version of the BNB together with interim cumulations and annual volumes.

## 12.8 Keywords

**Bibliographical Control:** Bibliographical control can be defined to mean the mastery over written or published records, which is provided by and for the purpose of bibliography.

**Bibliography:** A list of the written sources of information on a subject. Bibliographies generally appear as a list at the end of a book or article. They may show what works the author used in writing the article or book, or they may list works that a reader might find useful.

**British National Bibliography (BNB):** The BNB is the national bibliography of the United Kingdom.

**National Library:** The national library ensures the bibliographic control of all the books or book-like documents published in that particular country.

**Plagiarism:** The plagiarism is a copying or reproduction of a written material or ideas with the claim as if it is one's own creation.

**Subject Bibliography:** Subject bibliography as the one that is a document bibliography confined to a specific subject field, instead of covering the entire universe of subjects.

**Trade Bibliography:** A trade bibliography is a list of books and other materials, which are printed and available in a country for sale, through publishers, booksellers, or trade agencies.

**Universal Bibliography:** A universal bibliography is one that includes everything that is published, issued, or processed in the field of knowledge from the beginning to the future.

## 12.9 Review Questions

1. Define bibliography.
2. What are the functions of a bibliography?
3. Briefly explain the various kinds of bibliographies.
4. What is a subject bibliography? List the various kinds of subject bibliographies.
5. Explain about national bibliography.
6. What is trade bibliography? Explain the types of trade bibliographies.
7. What are various types of bibliographical sources? List them and specify what purpose each of them serves?
8. Write down the importance of bibliographical sources.
9. What do you understand by Statistical Bibliographies? What kind of information queries you can serve from such resources?
10. How are national bibliographies different from subject bibliographies?
11. What is bibliographical control? Explain bibliography of bibliographies.
12. Make comparison of Indian National Bibliography and British National Bibliography.

**Answers: Self Assessment****Notes**

- |  |                             |
|--|-----------------------------|
| 1. Bibliographical source                | 2. Literature               |
| 3. Reference                             | 4. Trade                    |
| 5. Universal bibliography                | 6. Statistical bibliography |
| 7. Bibliography (also called references) | 8. Plagiarism               |
| 9. Bibliographical control               | 10. National library        |
| 11. Classified                           | 12. Alphabetical            |
| 13. Subject Index                        | 14. National Bibliographic  |
| 15. March 1949                           |                             |

**12.10 Further Readings****Books**

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.

**Online links**

[www.iva.dk/bh/.../articles%20a-z/bibliographic\\_control.htm?](http://www.iva.dk/bh/.../articles%20a-z/bibliographic_control.htm?)

[www.slideshare.net/jayatungaa3/bibliographic-control?](http://www.slideshare.net/jayatungaa3/bibliographic-control?)

[www.vanschaik.com/book/4e9597ee79964/?](http://www.vanschaik.com/book/4e9597ee79964/?)

## Unit 13: Indexing Services and Abstracting (I&A) Periodicals

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### Objectives

After studying this unit, you will be able to:

- Define the concept of Indexing and Abstracting
- Functions of Indexing and Abstracting Periodicals
- Identify the need and Purpose of I & A periodicals
- Explain the features of I & A periodicals
- Identify the importance and Presentation
- List the types of Indexing and Abstracting
- Explain the uses of Indexing and Abstracting Periodicals



## Introduction

Notes

Indexing and abstracting sources are called secondary publications. They are the access tools to already published primary documents such as, articles/papers in newspapers and periodicals, research papers, reports, patents, conference proceedings and so on. They are also referred to as indexing and abstracting services as they are used to provide information services.

Because of growing increase in the volume of literature, published specially in periodicals, the indexing and abstracting periodicals have proliferated. Consequently, the need to have bibliographical control and easy access to the ever-growing universe of information and knowledge is also increasing. The number of indexing and abstracting periodicals is continuously on the increase; so is the number of articles and the documents covered by these periodicals.

In order to bring out the indexing and abstracting periodicals, a large volume of literature is collected, processed, organized and stored in a machine-readable form. Such stored information is now days commonly known as databases, which are used for search and retrieval of information. They are available in different media and physical formats such as floppy discs, microforms, CD-ROMS, Digital Versatile Discs (DVDs) and are accessible via Internet as well.

It may be pointed out here that, often you might find reference in different sources indicating Indexing and abstracting (I&A) periodicals in place of I&A sources, which may primarily be attributed to the fact that contains of most of the I&A sources are based on primary sources with special reference to periodicals.,

Broadly we shall be discussing here what of indexing and abstracting (I & A) sources along with their scope, utility. Besides, we would also attempt to enumerate different types of I & A services.

### 13.1 Definition of Indexing and Abstracting

The word "index" is derived from the Latin word 'indicare' meaning 'to point out' or 'to show'. An indexing periodical is an access tool to a systematically arranged list of periodical literature providing complete bibliographical references of already published individual items of primary documents, which are published at regular intervals. It is organized in a convenient manner to search the location of entries. An Index can be alphabetical, classified, chronological, geographical or numerical. They are access tools to identify and locate the required information, which appeared in a particular periodical.

An "abstract" according to ALA Glossary (1983) is "an abbreviated, accurate representation of a work, usually without added interpretation or criticism, accompanied by a bibliographical reference to the original work when appearing separately from it." An abstracting periodical, in addition to having the above-mentioned features of an indexing periodical, gives the information content of the primary documents in a condensed form.



*Did u know?* The major difference between indexing and abstracting services lies in the form and content.

### **Self Assessment**

Fill in the blanks:

1. Indexing and abstracting sources are called ..... publications.
2. .... periodical is organized in a convenient manner to search the location of entries.

Notes

3. An ..... periodical gives the information content of the primary documents in a condensed form.

### **13.2 Functions of Indexing and Abstracting Periodicals**

The functions of indexing and abstracting periodicals are many. Some of the important functions are listed below:

- To keep scholars and information users abreast of current literature in their fields of interest. They can be benefited from scanning the issues of indexing and abstracting periodicals.
- To find information on the literature of the subject fields as and when need arises. The indexing and abstracting periodicals are key tools to librarians and information workers for day-to-day reference and bibliographical work, though research scholars also use them extensively.
- To provide bibliographical control of literature output either by country or by subject or by kind of materials, if the aim of the indexing and abstracting services is exhaustive coverage.
- To obtain correct and complete bibliographical details of particular items of literature, when there is any doubt.
- To help users to get information this is otherwise scattered in other sources.

### **13.3 Need and Purpose of I & A periodicals**

The I & A periodicals are convenient tools to provide scholars a bird's eye view of literature of their specific interest easily and quickly. They cover information from vast volume of primary literature scattered in a numerous sources in fewer pages. The abstracting periodicals help users in further reducing the effort of scanning by giving an idea of the information content of documents and its relevance to the purpose. The I & A periodicals also fulfil the requirements of scholar who needs to scan information from the earlier literature on the subject for a problem undertaken from study or research.

The library to fulfil the demand of users subscribes to a representative collection of I & A periodicals in various disciplines. These periodicals are used for identifying documents that contain specific information needed to answer numerous enquiries of users and for developing a state-of-art review compiling a bibliography on a specific topic. Libraries and information centres generate many information services and products based on the materials contained in the I & A periodicals.

#### **Self Assessment**

Fill in the blanks:

4. I & A periodicals obtain correct and complete ..... details of particular items of literature, when there is any doubt.
5. .... fulfil the requirements of scholar who needs to scan information from the earlier literature on the subject for a problem undertaken from study or research.

## 13.4 Features of I & A Periodicals

Notes

The essential features of I & A periodicals should be assessed in term of the features described here.

- **Coverage:** In order to fulfil the functions enumerated, the I & A periodicals should, as far as possible, be comprehensive in reporting the literature so that they can be relied upon as an exhaustive source of information. It is necessary, at least to specify and maintain consistency in the scope and criteria of coverage to ensure the user as to what to expect.
- **Time Lag:** The indexing and abstracting periodicals should report literature with as little time lag as possible after publication of the original, otherwise the very purpose of this type of reference source gets defeated
- **Indexes:** The indexing and abstracting periodicals should have high retrieval efficiency through provision of quality indexes.



*Caution* The search should yield optimum recall and relevance of desired information.

- **Bibliographic Description:** The citation should be accurate and according to established standard practices.



*Caution* The abstract should be of a high quality in scientific and textual presentation.

- **Ease in Consultation:** The indexing and abstracting periodicals should be easy, convenient, and quick to consult.

### Self Assessment

State whether the following statements are true or false:

6. It is not important to specify and maintain consistency in the scope and criteria of coverage to ensure the user as to what to expect.
7. The indexing and abstracting periodicals should be easy, convenient, and quick to consult.

## 13.5 Importance and Presentation

Now let us discuss the importance and presentation of I & A periodicals.

### 13.5.1 Importance

I & A periodicals point out only to the existence of source of information and do not carry actual information. Indexing periodicals give bare bibliographical description of primary documents. They are not, therefore, substitutes for the original documents. On the other hand, abstracting of documents helps the users to have an idea of the thought content of the documents and its relevance to their research interest. Many times they substitute the original documents various aspects like coverage and arrangement of entries, indexes that are provided and other helpful features are dealt with in this unit.

## Notes

I & A periodicals attempt to cover current literature with as little time lag as possible. Because of time and effort involved in production, speed of reporting literature is not a foremost consideration as in the case of current awareness type publications.

I & A periodicals may be exhaustive or selective in coverage of literature depending upon the purpose. Indexing periodicals, because of comparative ease in production, may aim at an exhaustive coverage of literature.

I & A periodicals may cover all kinds of primary documents such as books, journal articles, pamphlets and bulletins, reports, patents and standard specifications. In some cases, the coverage may be limited to a particular kind of documents. There are also I & A periodicals devoted to unpublished literature and sources such as research reports, university theses and dissertations, proceedings of conferences, seminars, meetings, etc., are also covered therein.

### 13.5.2 Presentation

The important consideration in the matter of presentation of entries in indexing and abstracting periodicals is maintaining uniformity and consistency in rendering the bibliographical description throughout. For each document, sufficient and adequate bibliographical description is given for easy identification and location. The minimum details required for the purpose are author(s), title and locus that are source from where the document has appeared. The indexing and abstracting periodicals usually follow established standards for the purpose. A few additional details which the indexing and abstracting periodicals have found it worthwhile to include are: name of the institution where the work reported upon has been done, address to authors, translated title and the language of the original document. Although some services provide class number to the entries according to the chosen scheme of classification but the entries bear a running serial number, which also serves as index number. It is obvious that abstracts are an additional feature of abstracting periodicals. In the presentation of abstracts also, standard practices are followed.



*Did u know?* There are different types of abstracts such as indicative, informative and detailed abstracts.

Two most common methods of arrangement of entries in indexing and abstracting periodicals are grouping the entries according to broad subjects and within them by author or chronological order and backed up by a table of contents and several indexes as well as by alphabetical subject headings. In some cases, a classified arrangement may be followed.

The provision of various types of indexes enhances the retrieval efficiency of indexing and abstracting periodicals. Considerable care and attention are, therefore, paid to the preparation of indexes. The common types are: author and subject or keyword indexes. Some may include title index also. A few other helpful features of Indexing and Abstracting periodicals are detailed contents page, list of journals covered, list of standard abbreviations used and explanatory note on how to use and find out from the periodicals.

The periodicity of the indexing and abstracting periodicals is mostly dependent upon the volume of literature that would be available for coverage in a year.



Caselet

## Finding Periodical Articles Using Print Indexes

**P**rinted periodical indexes and online periodical databases are tools that provide subject access to articles in periodicals. Some cover a wide range of subjects (general indexes); others cover specialized journals in a particular field or discipline, and sometimes in books. Some periodical indexes may include abstracts (summaries of articles).

**Printed periodical indexes** allow you to:

- Search by subjects and sometimes by authors;
- Search for historical information published in years before online databases became available, as well as current information
- Find articles from periodicals for which an online database may be unavailable (e.g., Art Index covers some periodicals that are not included in the online databases accessible through the CCSF Libraries.)

### **General Indexes**

Readers' Guide to Periodical Literature is an example of a general index, one that leads you to articles in popular magazines covering all subject areas. The Rosenberg Library has the Reader's Guide from 1890 to the present. Once you learn how to read a citation from Readers' Guide, you will know how to read citations in many specialized indexes as well.

A citation is the information you need to identify and locate a work. For a periodical article, it includes the author, article title, periodical title, date, page number, and sometimes volume and issue numbers.

### **Specialized Indexes and Abstracts**

Specialized indexes lead you to periodical articles in a particular subject area. Some of the subject indexes available at the Rosenberg Library include:

#### *Current Subscriptions*

- Art Index (1935-38, 1941–present)
- Biography Index (1946–present)
- Black Periodicals, G.K. Hall Index to (1907–present)
- Book Review Digest (1905–present)
- Cumulative Index to Nursing and Applied Health Literature (1985–present)
- Short Story Index (1890–present)

#### *Non-current Subscriptions*

- Applied Science & Technology Index (1985–2001)
- Education Index (1947–1999)
- Essay & General Literature Index (1900–2001)
- General Science Index (1993–2001)
- Humanities Index (1974–2001)

Contd....

## Notes

- Psychological Abstracts (1998–2000)
- Social Sciences and Humanities Index (the International Index) (1940–1974)
- Social Sciences Index (1974–2001)

### *Newspaper Indexes*

Some newspapers publish their own indexes. The Rosenberg Library owns the following:

- Christian Science Monitor Index (1965–1992)
- San Francisco Chronicle Index (1904–present)
- New York Times Index (1939–present)
- Wall Street Journal Index (1965–present)

Source: <http://www.ccsf.edu/Library/printindexes.pdf>

## Self Assessment

State whether the following statements are true or false:

8. I & A periodicals point out only to the existence of source of information and do also carry actual information.
9. I & A periodicals may be exhaustive or selective in coverage of literature depending upon the purpose.
10. The provision of various types of indexes enhances the retrieval efficiency of indexing and abstracting periodicals.
11. The periodicity of the indexing and abstracting periodicals is mostly dependent upon the volume of literature that would be available for coverage in a year.

## 13.6 Types of Indexing and Abstracting

I & A services are usually brought out with the scope narrowed down to particular subject, country or kinds of documents. The scope is defined in relation to purpose. Overlapping in coverage is not uncommon or easy to control within these different types if I & A periodicals.

### 13.6.1 Comprehensive Services

Centralized agencies in countries such as the former USSR, France, Japan and China have been attempting comprehensive I & A services to cover all types of literature in the entire field of science and technology. The main purpose is to overcome language barrier in the matter of providing access to world information to their scientists, of which a significant part would be in foreign languages. Even though these services are produced by a centralized agency, they are brought out in a number of series devoted to the main subject areas on consideration of ease in physical production and convenience of use.



*Example:* Following are the example for comprehensive services:

- *Referativnyi Zhurnal, 1953* - periodically varies. Published in more than 40 separate series, each devoted to specific field in science and technology. Published by the All Union Institute for Scientific and Technical Information (VINITI), Moscow.

- *Pascal Explore, 1985* - (Supersedes Bulletin Signaletique, 1961–1984) 10-issues/year. Published in several series according to major subjects. Published by the centre National de la Recherche Scientifique, Centre de Documentation et technique, Paris.

Notes

### 13.6.2 Citation Indexes

Citation indexes are unique from the point of view of technique followed. They are based on citations made in current documents. They follow a novel method of detecting subject relationship of documents through citations, and are claimed to be a useful tool for subject retrieval.



*Notes* Citation Index is the brought out by “Institute for Scientific Information” (ISI), Philadelphia, USA, and its founder is Eugene Garfield.



*Example:* Following are the example of citation Indexes:

- Science Citation Index
- Social Sciences Citation Index
- Arts and Humanities Citation Index. Philadelphia: ISI 1978

#### Science Citation Index

- (a) *Science Citation Index (SCI). Philadelphia: ISI, 1965:* It provides access to 3300 leading scientific and technical journals of the world in all disciplines. Apart from journals some books are also covered. It is available in various physical formats and media. Printed from is published 53 times a year. Back issued are available in annual, five year and ten year cumulations through 1965 from ISI, Philadelphia. DD-ROM version is published since 1988, 4 times a year. Fourth disc is an annual cumulation. Back volumes are available through 1980.



*Notes* The SCI comprises several parts like citation index, source index, the permuterm subject index and the corporate index.

The ‘Citation Index’ provides access to full bibliographic data. It is arranged alphabetically by cited author.

The ‘Source Index’ is an alphabetical list of authors accompanied by co-authors. It provides standard bibliographic details of the source items, viz., name of the journal, volume and issue numbers, year of publication, number of references, accession number of the document assigned in ISI collection, language etc.

The ‘Permuterm Subject Index’ - it indexes the articles by subject mainly the significant key world in the title.

The ‘Cooperate Index’ is arranged under the name of the organizations. It provides citation for all items attributed to the organization and published during the period indexed.

- (b) *Science Citation Index with Abstracts, 1992 - Monthly:* CD-ROM Format is available in eleven cumulative updates with an annual cumulation. Back volumes are available through 1991.

Notes

- (c) *Science Citation Index - Journal Citation Reports (JCR), 1974 - Annual*: This publication is a unique cito-analytical product, and functioning as a mine of information for all-important scientific and technical journals of the world. It provides ranked list of journals by total citations, impact factor, immediacy index, and the number of previous two years citations in the references of the current year issues of SCI source journals. It also provides lists of SCI journals by category, ranked by impact factor besides other parameters, the journal Half-life package section comprises cumulative chronological distributions of citations from citing to cited journals, and journals ranked by half-life. Citing and cited journal listings along with the distribution of citations in various journals over different years are also given. JCR is also available in CD-ROM (Annual) and Microfiche (Annual) formats.

### Social Sciences Citation Index

- (a) *Social Sciences Citation Index (SSCI), Philadelphia: ISI 1973*: It provides access to over 1700 leading Social Sciences journals in various disciplines as well as selected relevant items from over 3300 leading scientific and technical journals of the world. It also covers some monographs. Indexes are on the pattern of SCI. It is available in various physical formats and media.
- (b) *Social Sciences Citation Index with Abstract, 1992 - Monthly (12/year)*: CD-ROM Format in eleven cumulative updates with twelfth disc as an annual cumulation. Back volumes are available through 1992.
- (c) *Social Sciences Citation Index-journal Citation Reports*.

JCR is also available in CD-ROM (Annual) and Microfiche (Annual) formats.

All these three important citation indexes are available under one umbrella online.

### Arts and Humanities Citation Index. Philadelphia: ISI 1978

It provides access to over 1150 leading arts and humanities journals and includes individually selected items from over 6,800 relevant science and social science and journals in a broad range of several disciplines. Print form is published six times a year and CD ROM three times a year. First issue of CD-ROM was produced in 1992.

### 13.6.3 Current Contents

*Current Contents (CC) and Current Contents with Abstracts (CCA)* of all subjects are available in a varied range of physical formats. CCs are published every week in paper format and diskettes. CCAs are available in diskettes as well as CD-ROMS. Each issue of CCs and CCAs has a table of contents.



Example:

- Current Contents Abstracts: Agriculture, Biology and Environmental Sciences, 1970
- Current Contents with Abstracts: Clinical Medicines, 1973
- Current Contents with Abstracts: Engineering, Computing and Technology
- Current Contents with Abstracts: Life Sciences, 1958
- Current Contents with Abstracts: Physical/Chemical and Earth Sciences, 1961
- Current Contents Abstracts: Social and Behavioral Science, 1969



### 13.6.4 Coverage by Geographical Area

Notes

There are indexing and abstracting services with coverage limited to literature of a particular country. Many countries bring out national I & A services with a view to achieve bibliographical control of domestic literature and to disseminate them.

I & A services are also devoted to particular kind of documents of a country.



*Example:* Following are the examples of Coverage by geographical area:

- **Indian science Abstracts. New Delhi:** Indian National Scientific Documentation Centre, 1965. Fortnightly.
- **Indian psychological Abstracts and Reviews. New Delhi:** Sage Publications India, 1972.
- Indian Literary Index. New Delhi: Sahitya Akadami, 1988- Semi-annual.

### Coverage by Specific Subject



*Example:* Following are the examples for coverage by specific subjects:

- Agricultural and Environmental Biotechnology Abstracts, Bethesda, US: Cambridge Scientific Abstracts, 1993.
- Biological Abstracts. Philadelphia: Biosciences Information Service, 1926 – Semi-monthly. It abstracts and indexes current published research from biological and biomedical periodical literature published worldwide.
- Chemical Abstracts and Indexes. Columbus, US: Chemical Abstracts, Service, 1907 – Weekly. Subject covered is chemistry and allied disciplines.
- Library and Information Science Abstracts (LISA). Ticeherst, Great Britain: Worldwide Subscription Services, 1969- Monthly. It covers about 600 periodicals, books and other literature dealing with Library and information science. Subject classifies abstracts in the main section.
- Humanities Index – It has been produced by three publishers varying in physical formats, number of updates and LAN users simultaneously.
- Wilson Humanities Index provides 2,84,800 records from over 350 English language periodicals of the world. It includes feature articles, interviews, bibliographies, reviews of motion pictures, operas and ballets, short stories, plays, poems and book/reviews.
- H.W. Wilson Co., Bronx. US. – Print form (4 times per year) including annual cumulation. CD-ROM (1983) (12 times per year). It is available for single users as well as for 2 and 3 users.
- Silver Platter Information B.V. Amsterdam, NL – CD-ROM and Internet (1984) (12 times per year). They are available for single user and on LAN for 2-4, 5-8 and 9-12 multiple users at a time.

Notes

**Coverage by kind of Documents**

- **Patents**



*Example:* Following are the examples of coverage by kind of documents:

- (i) Indian Chemical Patents: Pune: National Chemical Laboratory
- (ii) German Patents Gazette: London Derwent Publication, 1968. 26 issues a year.

- **Translations**

- (i) *National Index Translations. New Delhi:* Indian National Scientific Documentation Centre, (INSDOC), 1982. 12 times per year.
- (ii) *World Translations Index, Delft:* International Translations Centre, 1978. 10 times per year.

- **Theses/Dissertations**

- (i) Dissertation Abstracts - It is produced in varied physical formats by three publishers  
A. University Microfilms International, Ann Arbor, US
- (ii) Dissertation Abstracts International – A, B & C, – Print form – 28 times per year  
CD-ROM (1993). (4 times a year). First issue published in 1986. Back files available from 1861-1981, 1982-1987. It is available for single user as well as on LAN for 2-3 and 4-6 users.
- (iii) Indian Dissertation Abstracts. New Delhi: Indian Council of Social Science Research (ICSSR), 1973. 4 times per year.
- (iv) Bibliography of Doctoral Dissertations of Indian Universities. New Delhi: Association of Indian Universities. Annual

**Periodical Literature**

- (i) Index to Indian Medical Periodicals. New Delhi: National Medical Library, DGHS, 1959. 4 times a year.
- (ii) Guide to Indian Periodical Literature. Gurgaon: Indian Documentation Service (1964). 4 times a year. Bound as annual cumulations.

**Newspaper Indexes**

- (i) **Indexing Single Newspapers**

- (a) *Index to Times of India. Bombay:* Bennett Coleman, 1973. 3 times a year.
- (b) *New York Times Index. New York:* New York Times, 1913. 24 issues a year. Annual cumulations available from 1948.

- (ii) **Indexing Multiple News Papers**

- (a) *Newspaper Index. Wooster, Ohio:* Bell & Howell, 1972. 12 issues a year with annual cumulations.
- (b) *Indian Press Index: Delhi:* Delhi Library Association, 1968 - 12 times a year.

## Conference Proceedings

Notes

- (i) Index to Conference proceedings. Boston Spa: U.K. British Library Bibliographic Division, (1970)
- (ii) Forthcoming International Conference on Military Science and Technology. Delhi: DESIDOC

## Report Literature

- (i) *Report Index, Leatherhead, Great Britain*: Longley Associates Print form (1979-). 6 times per year; CD-ROM, 3 times per year. The subjects covered are economic situation and theory.

## Self Assessment

Fill in the blanks:

- 12. .... indexes are unique from the point of view of technique followed.
- 13. .... provides access to 3300 leading scientific and technical journals of the world in all disciplines.
- 14. .... are published every week in paper format and diskettes.

## 13.7 Uses of Indexing and Abstracting Periodicals

Library and information workers acquire skill in using the I & A periodicals as part of their professional training and later by field experience.



*Caution* Information users would require special training and orientation in the use of I & A.

### 13.7.1 Services Available

- (i) International Federation for Documentation: Abstracting Services. Vol. 1, Science, Technology, Medical and Agriculture, vol. 2. Social Sciences, Humanities. The Hague, 1969.
- (ii) Ulrich's International Periodicals Directory: carries a list of abstracting and indexing services in addition to other primary reference sources)

### 13.7.2 Selection

A single abstracting and indexing services may not be relied upon to provide coverage of all literature of interest and there may be a need to consult many services. While selecting a specific I & A periodical, it is worthwhile to find out its extent of coverage of literature and adequacy for searching for required information. There is usually a 'how to use' section in the preliminary pages of I & A periodicals.



*Notes* You should read this carefully before consultation of the tool.

**Notes**

As the cost of International abstracting periodicals is exorbitant, many librarians in India depend on these periodicals available in other libraries rich in their collection, in nearby location. Such resource sharing programmes are encouraged due to establishment of city Library Networks in India.

**13.7.3 Use**

The indexes are the keys of I & A periodicals. Without them, consultation would be difficult and uncertain. After making up your mind about a specific approach, you should consult the most suitable type of index for locating the information. The keywords you are familiar within the subject may be different from the index terms used for the same concept in abstracting and indexing services.

There is usually delay, especially in the case of abstracting periodicals; in reporting literature after it has been published. For that matter, the indexing and abstracting periodicals cannot be expected to be up-to-date wherein the usual time-lag is six months or more.



*Task* Make a difference between indexing and abstracting periodicals.

**Self Assessment**

State whether the following statements are true or false:

15. While selecting a specific I & A periodical, it is worthwhile to find out its extent of coverage of literature and adequacy for searching for required information.
16. There is usually delay, especially in the case of abstracting periodicals; in reporting literature after it has been published.



*Case Study*

**Periodicals Index Online**

**P**eriodicals Index Online (PIO) (formerly, Periodicals Contents Index (PCI)), is the leading multidisciplinary index to the arts, humanities, and the social sciences. Over 6,000 journals are included, with around one million records from new journals added yearly. Complete runs of these titles are indexed, from first issue to 1995 or ceased date.

The scope is international, including journals in English, French, German, Italian, Spanish, and most other Western languages. Over 30% of the content indexed is from non-English scholarly titles.

For more than 200 years, periodicals have been a vital resource for scholars. However, if researchers need to find articles in periodical back volumes, they have to search through dozens, if not hundreds, of printed subject indexes and bibliographies. Even if their library holds these indexes, searches can be time consuming and incomplete.

PIO now makes it possible to search back volumes of journals with the same ease and convenience as searching the latest issues. It fills an enormous gap in access to scholarly, periodical literature for the humanities and social sciences.

*Contd....*

PIO enables users to search for articles by words or phrases in the titles, by author, and by journal title. The search can be restricted by the language of the article, the journal's subject, the year of publication, or a range of dates. Boolean operators can be used for more complex searches, and truncation can also be used to find variant forms of a word. Sophisticated post-search sorting and filtering are new features which support fast, convenient, and reliable results.

Bibliographic information can be searched separately for every journal indexed in PIO. In addition, researchers can access a list of issues for each journal and a table of contents for each issue.

Periodicals Index Online is fully Open URL and Z39.50 enabled, allowing the index to function as a high-quality finding aid to all available full-text sources. There is direct linking to Periodicals Archive Online for mutual customers, as well as JSTOR linking.

Durable URLs across all content, an Information Resources area, citation software support, and COUNTER-compliant usage statistics are some of the tools available for this optimized resource.

**Questions:**

1. Explain the meaning of Periodicals Index Online (PIO)?
2. Discuss the use of PIO.

Source: [http://www.proquest.com/enUS/catalogs/databases/detail/periodicals\\_index.shtml](http://www.proquest.com/enUS/catalogs/databases/detail/periodicals_index.shtml)

### **13.8 Summary**

- A detailed description of another types of reference sources christened Indexing and Abstracting Sources has been provided in this Unit. Indexing and abstracting sources are called secondary publications.
- They are the access tools to already published primary documents such as, articles/papers in newspapers and periodicals, research papers, reports, patents, conference proceedings and so on.
- They are also referred to as indexing and abstracting services as they are used to provide information services.
- The functions of indexing and abstracting periodicals are many, which make such sources indispensable.
- The I & A periodicals are convenient tools to provide scholars a bird's eye view of literature of their specific interest easily and quickly.
- They cover information from vast volume of primary literature scattered in a numerous sources in fewer pages.
- The abstracting periodicals help users in further reducing the effort of scanning by giving an idea of the information content of documents and its relevance to the purpose.
- The I & A periodicals also fulfil the requirements of scholar who needs to scan information from the earlier literature on the subject for a problem undertaken from study or research.
- While deliberating on the essential features of such sources, it is stated that features like vast coverage, no time lag: quality indexes: accurate bibliographic description (using standard practices): ease in consultation: are the core competencies of Indexing and Abstracting (I&A) sources.

Notes

- The scope, presentation and various types of I&A sources have also been comprehensively covered in this Unit.

### **13.9 Keywords**

**Abstract:** Abstract is an abbreviated, accurate representation of the contents of a document, preferably prepared by its author for publication with it.

**Abstracting Periodical:** An abstracting periodical gives the information content of the primary documents in a condensed form.

**Citation Indexes:** They follow a novel method of detecting subject relationship of documents through citations, and are claimed to be a useful tool for subject retrieval.

**Cooperate Index:** The 'Cooperate Index' is arranged under the name of the organizations. It provides citation for all items attributed to the organization and published during the period indexed.

**Index:** In general, Index usually refers to a system used to make finding information easier.

**Indexing Periodical:** An indexing periodical is an access tool to a systematically arranged list of periodical literature providing complete bibliographical references of already published individual items of primary documents, which are published at regular intervals.

**Permuterm Subject Index:** It indexes the articles by subject mainly the significant key word in the title.

**Secondary Source:** A secondary source is a document or recording that relates or discusses information originally presented elsewhere.

### **13.10 Review Questions**

1. What is indexing and abstracting?
2. "An Index can be alphabetical, classified, chronological, geographical or numerical". Discuss.
3. Clearly bring out need and features of Indexing and Abstracting Sources.
4. Elaborate the functions of indexing and abstracting periodicals.
5. What are the purpose of I & A periodicals?
6. What is the importance of indexing and abstracting periodicals?
7. Discuss the presentation of indexing and abstracting periodicals.
8. Write down the various types of indexing and abstracting periodicals.
9. Briefly explain the uses of indexing and abstracting periodicals.
10. "I & A periodicals may be exhaustive or selective in coverage of literature depending upon the purpose". Comment.

### **Answers: Self Assessment**

1. Secondary
2. Indexing
3. Abstracting
4. Bibliographical

- |                                  |                           |       |
|----------------------------------|---------------------------|-------|
| 5. I & A periodicals             | 6. False                  | Notes |
| 7. True                          | 8. False                  |       |
| 9. True                          | 10. True                  |       |
| 11. True                         | 12. Citation              |       |
| 13. Science Citation Index (SCI) | 14. Current Contents (CC) |       |
| 15. True                         | 16. True                  |       |

### 13.11 Further Readings



#### Books

Cheney, F. N. and Williams W. J. (2000) *Fundamental reference sources*. Ed.3. ALA, Chicago.

Crawford, John. (2000) *Evaluation of library and information services*. ASLIB, London.

Farmer, L.S.J., Ed. (2007) *The human side of reference and information services in academic libraries: adding value in the digital world*. Chandos Publishing, Oxford.

Fourie, D. and Dowell, D. (2002) *Libraries in the information age*. Libraries Unlimited, New York.

Katz, William A. (1987) *Introduction to reference work: reference service and reference process*. v.2. Ed. 5. McGraw-Hill, New York.

Krishan Kumar (1996) *Reference service*. Ed. 3. Vikas Publishing, New Delhi.



#### Online links

[eprints.rclis.org/19405/1/ALIS%2059\(4\)%20247-279%20\(1\).pdf](http://eprints.rclis.org/19405/1/ALIS%2059(4)%20247-279%20(1).pdf)

<http://www.expertsmind.com/questions/qualities-of-indexing-and-abstracting-periodicals-30121941.aspx>

[www.ejil.org/about/services.php?](http://www.ejil.org/about/services.php?)

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