Chapter 4: Information Needs and Sources

In this Chapter, you will learn:
1. The major activities in an information research process
2. How to define your topic for your assignment
3. How to determine the information needs (requirements) for your selected topic/problem or assignment
4. The three major types of information resources in a society
5. Information is of great diversity and in various formats
6. Some useful electronic resources available on the Internet and in the Lingnan Library (For your information only)
7. The various related issues in acquiring appropriate information sources for your assignment
8. The two major classification systems adopted in grouping all material items in an academic library (For your information only)
Introduction

Though you have written papers in one form or another since early high school days, you might have no idea where to start while being asked to write research/academic papers in your university study at Lingnan. Writing academic papers is in fact a very time-consuming process, generally a number of main steps must be identified and you need to go through them one by one before a complete paper is written or an oral presentation is conducted. In other words, you start on your information research process for a written paper.

1 The Information Research Process (Birks and Hunt, 28)

The following is a summary of the major activities in an information research process. Please note that a research process is cyclic in nature, implying that some steps need to be done repeatedly.

Major Activities in an Information Research Process

i. Get a Topic
   This activity involves:-
   • Defining a topic for your assignment/problem
   • Determining the information needs for your specific topic

ii. Develop Your Search Strategy
   This activity involves writing an outline in:-
   • Identifying the various kinds of information resources for your selected topic
   • Determining the kinds of tools for information access
   • Defining the searching techniques and the search strategies.

iii. Search and Read
   This activity involves:-
   • Identifying the evaluation criteria for your information sources
   • Searching and evaluating of your information (Note: This step is cyclic and will be repeated until you are satisfied with what you have found.)

iv. Write Your Paper and Presentation
   This activity involves:-
   • Selecting a communication medium for your presentation
   • Organizing materials (contents) for presentation
   • Writing your paper extracting information from your notes, and integrating new and prior knowledge from what you have learned in this process
v. **Citation**

This activity involves writing a bibliography of all information sources that you have used in working on this academic paper.

In this chapter, only the first activity and part of the second activity (Identifying the various kinds of information resources for your selected topic) in an information research process will be covered. Detailed discussions for the remaining activities in the research process will be explained in subsequent chapters.

2 **Get a Topic (The first activity of an information research process)**

This activity consists of two major steps:-

- Defining a topic for your assignment/problem
- Determining the information needs for your specific topic.

**Defining a Topic for Your Assignment/Problem**

Defining a topic for your academic paper involves two important processes—selecting a topic and refining your topic.

A **Selecting a Topic**

Selecting a topic for your academic paper is the first step you have to do in your information research process. With the information provided by your professors, you may get some idea of the topic to work with, or you may not have any idea at all. Either way, you may find the following points helpful for picking up a topic for your assignment:

- Select a topic that interests you and your group members.
- Look up the syllabus to see what topics are covered in the course.
- Look up the teaching materials reserved for the course in the library.
- Brainstorm all possible ideas with your group members or your fellow classmates.
- Browse scholarly journals or books in the common areas of interest. In many instances, you may find helpful when looking up other sources such as newspapers, magazines, or Web resources and so forth.
- Check up possible topics in a general encyclopedia or in a subject encyclopedia, such as the Encyclopedia Britannica.

Please note that a topic should be selected eventually in this process.
B Refining your Topic

Refining your topic is a continuing process, with a workable topic resulted as its by-product. The process requires some critical thinking and analysis, and it involves the following activities:

i. State your topic as a question
At this point, you may have some general idea of your studied problem. Now you further clarify your thoughts and focus by stating your topic as a question. (Note: You may state your topic in more than one question.)

ii. Identify concepts
Once you have stated your topic as a question, you need to identify the main concepts in the question by making a list of important keywords (including the synonyms or the related terms) that describe your topic. The list will be very useful as it provides you added terms to use when you are required for more information, also it recommends you the ways to narrow or broaden your topic. (Note: You may need to repeat the same activity if you have stated your topic in more than one questions.)

iii. Narrow or broaden your topic if needed
When you find out you have too much information in the list, you may need to narrow your topic by adding specific terms to your question(s). In contrast, you may need to broaden your topic by including more general terms to your question(s). In whatever case, you will have created more focused questions, concentrating only on certain aspects of your topic, from the original questions. Please note that this activity is cyclic in nature; you may keep revising the question(s), continuing to locate more information, modifying the topic until a workable topic is defined.

Determining Information Needs of the Topic

Once a topic is defined, you have to determine the information requirements (i.e. information needs) for your specific problem or assignment. Of course, the types of information required are dependent on the topic selected. However, the following are the important points you have to consider when determining the information needs of your topic:

- Types of the assignment
  In general, assignments can differ from a short presentation (say 10 minutes) to a senior project (e.g. master thesis), with many varieties in between including short essays,
critiques, summaries, or term papers, etc.

- **The quantity of information required to meet your need**
  Depending on the specific requirements of your problem (topic), you may note that some assignments can be done by consulting brief summaries or overviews, whereas other assignments may require more detailed and wide-ranging information.

- **Currency of the information**
  In general, you need to know whether your assignments require the most updated information or historical information, or information over a period of time.

- **The types of publications for your information need**
  In this issue, you need to know whether your assignments need information from scholarly or professional journals, or the current information from popular magazines, trade magazines, or government publications, etc.

- **Kinds of information sources (primary sources or secondary sources) for your need**
  In most cases you will use **secondary sources** (e.g. books and articles, reference materials, magazines, newspapers, encyclopedia, etc) for your assignment. However, in other cases, your assignments may require you to use **primary sources** such as interviews, diaries, letters, e-mail, discussion, debate or raw data collected from survey, etc.

- **Formats of information sources for your need**
  In addition to using printed sources, you may need to use other kinds of sources such as numeric sources (statistical data, survey data), visual/graphic sources (e.g. slides, maps, chart, graph, table, video tapes, etc.), audio sources (audio tapes), or electronic sources (Internet Web sites, computer sources, etc.).

- **Is point of view an issue?**
  For assignments such as argumentative essays, you may need to find information that presents a particular point of view, opposing points of view, or a range of viewpoints.

### Information Sources

Now you have defined your workable topic and determined the information needs for your selected problem (i.e. you have completed the first activity of an information research process-Get a Topic), it is time for you to start searching your wanted information. However, do you realize where to access your information? What kinds of information sources are available for your searching? What are the general criteria you need to consider before identifying the useful sources for searching? The following sections provide you detailed information.
1 Information Resources

Generally, there are three major resources available for your searching, namely: Government, academy and private sectors.

A Government

Government provides a wealth of information for your searching and study. In Hong Kong, the HKSAR Government is playing an important role to produce information in our society, and it is supported by government departments at all levels. In many occasions, government officials may need information about the society in order to make decisions related to the economic, social, and political issues. Since the information generated by the HKSAR Government is carried out with public tax dollars, Hong Kong citizens are able to access the information free or at low cost. This can be done through the Hong Kong Public Libraries Depository and Special Collection system (i.e. Special Collections Hong Kong Collection at the Hong Kong Public Libraries) or the government web sites.

The Special Collections Hong Kong Collection\(^1\) is a comprehensive collection of Hong Kong related materials, including books, periodicals, government publications, audiovisual and multimedia materials, CD-ROM databases, maps and others. The Collection has grown to over 70,000 items and is mainly maintained in the Hong Kong Central Library, the City Hall Public Library, the Kowloon Public Library, Shatin Public Library, Tsuen Wan Public Library and Tuen Mun Public Library. Among the six public libraries, the Collection in the Hong Kong Central Library is the largest, with historical documents and government publications, comprising a complete run of government gazettes since 1853, administrative and annual reports of the government since 1879, departmental reports, district board minutes and papers, statistical information and ad-hoc publications.

Information stored in the Collection may be available in print format, microform format, or in electronic format. As a result, Hong Kong citizens are able to access much of this government information through the public libraries or related information at home via an Internet connection while browsing the government web sites.

You may take a look at the following Hong Kong Government web sites and see a wide variety of government information available to you.

**Hong Kong Government Information Resources:**
- Hong Kong SAR Government Information Centre (Web Directory)

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\(^1\) “Special Collections Hong Kong Collection.” Hong Kong Public Libraries. 12 September 2004
This provides information about the HKSAR Government and links to other government departments & agencies, related organizations and tertiary institutions.

- Hong Kong SAR Government Information Centre (General Information)  
  This provides general information about Hong Kong, government notices, government publications, and government reports, etc.

- Census and Statistics Department (政府統計處)  
  [http://www.info.gov.hk/censtatd/]

- Information Services Department (政府新聞處)  

- Information Technology Services Department (資訊科技署)  

- Intellectual Property Department (知識產權署)  

### B Academy

Universities and colleges are the second major producers of information in a society. In US, large universities (e.g. UCLA, University of Wisconsin, University of Pennsylvania, etc.) and private research universities (e.g. Harvard, Yale, Princeton, Stanford, MIT, etc.) have been conducting numerous researches in sciences, humanities, and social sciences; and a great deal of knowledge is generated from the findings. Similar situations occur in Hong Kong, whereas tertiary institutions have been conducting researches exploring various issues relating to government policies, economic and social context. Generally, the research and the findings are published in the form of books and scholarly journals. As a matter of fact, some of the research results can directly address certain social problems; and that some findings in the sciences and social sciences can directly/indirectly benefit business corporations and/or public institutions. However, many research results do not directly affect the public in general; instead, other scholars may use them to move on a specific field of study.

There are ample information resources in an academic institution. Specifically, university libraries contain lots of books, academic journals, magazines, newspapers, and abundant e-resources such as journal databases, WiseNews, etc. These resources provide an essential learning environment for students to study and explore new knowledge. Generally, a university library is open to its students or graduates, and is not open to the public.
C Private Sectors

The private sector is the third major producer of information in a society. Generally, commercial newspapers, book and magazine publishers, film and television industry, business research firms, and corporate laboratories are good examples of private sector producers. Information from all commercial media organizations is readily accessible to public with a fee.

Alternatively, business research firms and corporate laboratories carry out research and publish their findings. Nevertheless, much of the research done and the findings are kept confidential and are not available to public access for various kinds of reasons. (Can you name some examples in this issue?) Finally, we need to understand that much of the research takes place in an economic, political and social background, and that a research is carried out does not mean it will be published and accessible to the public.

2 Information in Various Formats

Up to this point you should understand that government, academic institutions, and private sectors are the three major producers of information in a society. Whatever resources you may use to retrieve information during your information research process, you must understand that some kinds of tangible forms must be taken if people are to understand them. Generally, information can be accessible in three common formats, namely: printed materials, non-printed materials, and electronic forms.

A Printed Materials

Information in printed materials format includes books, periodicals, and government documents. Detailed discussion is as follows:

i What is a book?
The Oxford Advanced Learner’s English-Chinese Dictionary (Extended 4th edition) defines a book as “a number of printed or written sheets of paper bound together in a cover.” This definition obviously is very simple; and a book in fact is composed of a number of components (see below) that provide you lot of relevant information for your searching in your academic research.

There are various kinds of books and one may find difficulty when locating a particular book in a library. (You need to know about subject heading later.) Books are generally classified into two categories: literature and non-fiction. Literature comprises works of fiction, drama, essay, poetry, biography (i.e. memoir). A fiction book (e.g. legend, novel) contains material that may not be true and that all
or part of its characters and scenes are made up by the author to tell a story. Non-fiction books deal with factual information. (What are the examples of non-fiction books?)

**Organizational structure of a typical book**

- **Title Page**
  This is the front page of the book. From here you can find the official title of the book, the author or editor’s name, the publisher’s name and the place of publication.

- **Verso Page**
  This is located on the back of the Title Page. From this page you can find more detailed information about the publisher, copyright information, cataloging-in-publication information (the information that libraries will use to catalog a book) and the ISBN (International Standard Book Number, a unique number assigned to every book). You may need to know the ISBN when ordering a book or searching the book in a library catalog.

- **Table of Contents**
  This provides you a quick introduction to the major sections and topics covered in the book.

- **Foreword (optional), Preface and Acknowledgment Pages**
  Foreword—this optional page provides you introductory remarks to a book, and in particular, this is written by someone who is not the author of the book.
  Preface—this page allows the author to include any explanatory remarks, and additional information about the book or about the writing of the book.
  Acknowledgments—this page provides the author to express appreciation for those who have assisted him/her in writing and preparing the book for publication.
  Note that some author likes to include the Acknowledgments as part of the Preface.

- **Introduction**
  This provides you summarized information of the materials covered in the book. You can get a clear idea of the content of the book as well as the author’s point of view when scanning the Preface and the Introduction of a book. Note that Preface and Introduction are generally located in non-fiction books.

- **Appendices**
  These are the sections located at the end of the book to provide the reader additional information about particular features used in the book. The appendices may include listing of acronyms, abbreviations, illustrations, and other special features not included in the text.
Notes and Bibliographies

These are generally located in non-fiction books. **Notes** are created when the author wishes to provide supplementary information about a specific topic in his text, or the origins of source from which he or she got an initiative or the idea. Notes are classified into two major types: namely, footnotes (the notes located at the bottom of the page), and endnotes (the notes located either at the end of a chapter or at the end of the book).

**Bibliographies** are placed at the end of the book to provide a summary list of other resources that the author has used in writing the book, or which the author anticipates that might be of interest to the reader. Bibliographies definitely provide a best resource when you need to locate additional information about a particular topic in your academic research.

Index (commonly found in non-fiction books)

This is located at the end of the book. The index provides a valuable tool in highlighting particular information about the book and tells you what the author has included or omitted. All topics within an index are in alphabetical sequence which provides you quick access to the desired information. A good index is normally cross-referenced, providing the reader a good flexibility to move from one topic to another related topic with ease. A cross-referenced index is a helpful instrument to assist you to locate the main ideas and the related concepts contained in the book. You should consult the index when looking for comprehensive information for your selected topic in writing your academic paper.

Finally, please note that there exists a good collection of e-Books (over 850 copyrighted copies) in the University Library. Click on the URL: <http://www.library.ln.edu.hk/eresource/ebook.htm> to access the e-Books source for your browsing.

What is a periodical?

A periodical refers to material that is published at regular intervals, e.g. weekly, or monthly. Common examples of periodicals include popular magazines (or general interest magazines), professional and trade magazines, scholarly journals, newsletters, and newspapers.

**Popular Magazines**

Popular magazines refer to periodicals that are of non-specialist nature. They are published on a weekly, bi-weekly, or monthly basis and are geared towards the general public. The articles are usually shorter and cover a wide variety of topics,
and are written in a reporter style. Research and current issues are generally summarized. The author of the article is a reporter, and may not be listed within the article. Other features that deserve your notice are that articles within popular magazines are normally reviewed by one or several persons within the magazine company, and that only a few or no references (or notes) are included. Furthermore, popular magazines have shiny appearance, containing many photographs and advertisements. With all these features in mind, popular magazines are probably not the good sources to use in academic research. (Why?) Periodicals like People, Time, Newsweek, New Yorker, Sports Illustrated, Rolling Stone, and Car and Driver are examples of popular magazines. On the other hand, there exist certain magazines like Natural History, Scientific America, National Geographic, Live, etc. that may be considered as good sources of information for your academic paper. These kinds of magazines, though being classified as popular magazines, generally deal with topics in significant depth and are written towards readers who, though not professional, are knowledgeable about the subject matters presented.

Professional and Trade Magazines
These are magazines that present information about a profession or a particular trade. Computer World, Byte, Advertising Age, and Business World are examples of trade magazines, while Executives and Economist are examples of professional magazine.

Scholarly Journals
Scholarly journals refer to periodicals that are of specialist in a particular discipline, and are geared towards other scholars, researchers and experts in an academic or professional community. Scholarly journals usually comprise long and detailed articles, covering results of original research and experiment, case studies, and criticism, etc. The style of writing is very academic or technical; and many notes and lengthy bibliography are included. Authors of the articles are experts in their fields of study, and their credentials are included within the articles. Other features that deserve your notice are that scholarly journals are generally sponsored by academic or professional organizations; all articles submitted will be reviewed by an editorial board of honored scholars. Furthermore, scholarly journals may have a stern or moderate look in few bright colors, containing less photographs or advertisements. Scholarly journals are usually published bi-monthly, quarterly (Winter, Spring, Summer, Fall), semi-annually, or annually. With all these features in mind, scholarly journals are considered as good sources to locate articles in academic research. (Why?)
At Lingnan, the University Library has maintained a serial collection for all Lingnan staff and students. The Library has over 19,000 electronic journals and 3,800 print journals (checked up on January 18, 2005). For your interest, you are recommended to click the URL: <http://www.library.ln.edu.hk/libinfo/ser_c.htm> to access the Serial Collection at Lingnan Library, and then the URL: <http://www.library.ln.edu.hk/libinfo/ser_deptlist.htm> for the lists of library-subscribed print journals by departments. Meanwhile, a list of electronic full-text titles is available at the URL: <http://www.library.ln.edu.hk/ejournals/>. Try on these web sites for your browsing.

**Newsletters**
These are the periodicals produced by a variety of groups with the objective of informing readers about the activities of the group concerned. For example, *Lingnan University Bulletin* is an example of newsletter which is mainly for circulation within the Lingnan community.

**Newspapers**
Newspapers come in many forms and are business in nature; they are designed mainly to attract a wide segment of the general public. Because of this, the articles are usually short and are written in an easy to understand style. The materials mainly focus on current events, news, or popular topics of the day. The articles, written by reporters (i.e. journalists) but generally not signed, are reviewed by internal staff only. In conclusion, *we may consider newspapers generally are good sources for secondary information though in certain cases newspapers may provide primary information like direct interview etc.* (Caution: Do you think all materials extracted from newspapers are reliable?) Newspapers are usually published daily, weekly or monthly; and are published by commercial publishers.

iii **Government documents**
As we stated at the very beginning in this chapter, government is one of the three major producers of knowledge in a society. In Hong Kong, government agency such as *Census and Statistics Department* has been collecting information about the society for analysis. As a result, various types of government publications are produced and the general public is then able to access the documents at a number of government public library depository and collection systems. For example, the Hong Kong Collection at the Hong Kong Central Library contains the largest depository system for all government documents. Generally, government documents include
various types of government reports (e.g. administrative reports, annual reports, departmental reports, minutes, etc.); government gazettes; government yearbook; statistical information and ad-hoc publications and so forth. For your interest, click on the website at URL: <http://www.info.gov.hk/ef3low.htm> to check up the various types of government publications and reports. You will find lot of useful information from this government website. **In conclusion, government documents provide good sources for secondary information in your academic research; all government documents present factual information and make references available when you need to locate relevant information for your research topic.**

In addition to all these printed resources, there are other resources that provide good references to support your academic research. Typical examples include abstracts, indexes, bibliographies, directories, encyclopedias, thesaurus, atlases, handbooks, yearbooks, statistical resources, and annual reports of selected companies. Click on the URL: <http://www.library.ln.edu.hk/libinfo/ref_c.htm> to access the Reference Collection in Lingnan Library if you need to access references information for your research.

**B Non-printed Materials**

In addition to the printed materials, information is also produced in other formats, namely: audio-visual, multimedia and microforms.

i **Audio-Visual (AV) and Multimedia**

Today, much of the information created in society comes in both audio and visual, and in multimedia format. The Lingnan University Library is a good place for you to locate all these audio and video materials as well as other media sources. Examples of audio information include music on CDs as well as books on tapes. Video information includes VCR tapes of TV shows, movies, and documentaries, etc. Furthermore, other media resources available at the University Library include laser discs, multimedia packages, VCD, DVD, computer software, interactive videodiscs, and so forth. Multimedia packages refer to multimedia software in CD-ROMs, which normally consists of text, sound, animation, graphics, and video in the application.

ii **Microform**

Information is frequently placed in microform format for archival purposes. Microform offers a very stable and economic medium to store information for long periods of life. Microform is divided into two major categories: microfilm and microfiche.
Microfilm
Microfilm is a roll of transparent film (approximately 100 to 200 foot in length) to store microscopic images of document. A special device called microfilm reader is needed when reading the images in a microfilm.

Microfiche
Microfiche is a small sheet of transparent film, usually about 4 inches by 6 inches. A microfiche reader is needed when reading images in a microfiche.

For your interest, browse through the URL: <http://www.library.ln.edu.hk/libinfo/avmicro.htm> to locate the various kinds of microform collection in our library. What do you find?

In conclusion, **microform provides you a good source of information if you need to identify those historical documents for your research**. Materials like back issues of newspapers, magazines, academic journals, company annual reports, genealogy records, newspaper clipping, etc. can be located in the microform collection.

C Electronic Resources
The Internet and the WWW provide a rich source of information for searching and exploration. From the Internet, you can access different types of information from a variety of web sites. The University Library, in addition to providing **usual information sources** on the Internet, has also collected a variety of useful **electronic resources** for Lingnan users’ access anywhere via the Internet. For your interest, you may click on the **Lingnan University Digital Library E-Resources** page at the URL:<http://www.library.ln.edu.hk/eresource/> to access the collection.

The following is to introduce you the various types of websites on the Internet for your browsing. A new section introducing some of the useful electronic resources on the Internet and in the Lingnan Library will be described later.

**Types of Web Sites** (Shelly, Cashman, and Vermaat 2.16-2.17)
In general, web sites can be grouped into eight categories, but in practice, many web sites fall into more than one of these categories. Listed below is a brief discussion of the various web sites for your information.

- **Portal**—a portal is a web site that provides a range of Internet services from a single, handy location. From the portal you can find general information like news; sports; weather for your use. Furthermore, portal offers you some free services
such as search engine; web publishing services; reference tools; shopping malls and auctions; e-mail and other forms of online communications.

- **News**—a news web site includes newsworthy material like stories and articles relating to current events and popular topics of the day. Many newspaper and magazine publishers sponsor specific web sites that provide summaries of their printed articles, including those not in the printed versions. Some television and radio stations also maintain news web sites.

- **Informational**—an informational web site contains factual information. Examples include government websites and organizations that provide specific information like public transportation schedules and published research findings.

- **Business/Marketing**—these the websites from business companies with information to promote and/or sell products or services.

- **Educational**—an educational web site that offers channels for formal and informal teaching and learning.

- **Entertainment**—these are the web sites that offer various types of entertainments like music, videos, sports, games, chats, and so forth.

- **Advocacy**—these are the web sites which purposes are to convince their readers some specific views or opinions of a particular group or association.

- **Personal**—a personal web site for individual or family.

The following are some common examples of portal for your browsing:

- Yahoo.com <http://www.yahoo.com>
- Google.com <http://www.google.com>
- Lycos.com <http://www.lycos.com>
- Alta Vista <http://www.altavista.com>
- America Online <http://www.aol.com>
- HotBot <http://www.hotbot.com>

Now you understand that there exist various types of web sites on the Internet, however, not all web sites are reliable and provide accurate information. Therefore, you need to know how to evaluate web sites critically so that you can get your required information. The main concepts and criteria necessary for evaluating information sources will be introduced later in chapter 6.

### 3 E-Resources on the Internet and in the Lingnan Library

The following will introduce some of the useful e-resources on the Internet and in the Lingnan Library.
A News and Newspapers

Information providers are increasingly willing to provide information free on the Internet. Some popular news sites on the Internet include:

- BBC News <http://news.bbc.co.uk/>
- Financial Times <http://news.ft.com/>
- CNN <http://www.cnn.com/>
- Ming Pao <http://www.mingpaonews.com/>
- People News Network <http://www.people.com.cn/>
- Xinhua News Network <http://www.xinhuanet.com/>

The following are examples of some selected internet resources for Hong Kong news:

- (香港電台網上廣播站) <www.rthk.org.hk>
- Ming Pao <www.mingpao.com>
- Wen Wei Po (文匯報) <http://www.wenweipo.com/>
- 星島網 <http://www.singtao.com/index.htm>
- Ta Kung Pao (大公報) <http://www.takungpao.com/>
- Yahoo Hong Kong News Headlines <http://hk.news.yahoo.com/>
- South China Morning Post <http://www.scmp.com>
- Hong Kong Newspaper Clippings Online <http://sunzi.lib.hku.hk/newspaper/main.jsp>

B WiseNews

WiseNews is a Hong Kong-based news archive, which provides its users with news articles licensed from a large number of newspapers and magazines published in Hong Kong, Mainland, Macau and Taiwan. The Hong Kong newspapers include MingPao, SCMP, The Standard, HK Economic Journal, HK Economic Times, Apple Daily, Oriental Daily, etc. Mainland newspapers include the People's Daily, China Daily; and Taiwan newspapers include the China Times and the United Daily News. WiseNews also
provides full-text search of the news articles.

You can view and search WiseNews through the WiseNews link listed in the Library’s E-Resources page: <http://www.library.ln.edu.hk/eresource/>

C Journals and Serials

Traditionally, library needs enormous space to store past journals and other serials. With the advent of electronic documents and storage, access of journals and serials could be more convenient nowadays.

The Lingnan Library provides a number of searchable journal databases for its users. Nearly all of them are accessible from any computer on the campus network. Each database usually contains the contents of a large number of journals in several fields of study. Users can use journal databases to find papers relating to a certain topic or papers which contain some user-input keywords.

These journal databases can be divided into two categories: ones that provide only abstracts of the papers in the journals, and ones that provide full text of the papers. Depending on a particular database, full-text databases may or may not carry the illustrations, photos that are present in the printed version of the papers. Sometimes a database carries both full-text papers and abstract-only papers.

The most important journal databases accessible through Lingnan Library E-Resources page <http://www.library.ln.edu.hk/eresource/> are listed below. They are full-text databases unless stated otherwise.

- **EBSCOhost**
  
  EBSCOhost is a collection of databases which can be searchable from a common search index page. The individual databases within the collection include:-
  
  - **Academic Search Elite (ASE)** – wide coverage of different academic subjects
  - **Business Source Elite (BSE)** – business journals
  - **EconLit** – the American Economic Association's electronic journal database
  - **ERIC (Educational Resource Information Center)** – journals related to education
  - **MAS Ultra** – general interest, current events publications such as Time, Economist

- **ProQuest**

  ProQuest is also a collection of databases. It includes:-
- ABI/INFORM – business journals
- Academic Research Library (ARL) – arts, business, children, education, general interest, health, humanities, international, law, military, multicultural, psychology, sciences, social sciences, and women's interests

- JSTOR
  JSTOR is a non-profit organization comprising of participating libraries to convert back issues of journals of different academic disciplines into electronic formats. The JSTOR database covers different academic fields of study.

- Chinese Academic Journal Net 中國期刊網：文史哲專輯
  Users can search this database with traditional as well as simplified Chinese. It collects a large number of journals titles published in the Mainland. Papers in 300+ serials in the fields of literature, linguistics, history, philosophy, music, religion are available in full-text to Lingnan users. The full-text papers are available in pdf or caj formats.

- Cambridge Scientific Abstract (CSA)
  CSA is a collection of abstracts-only databases. The individual databases are:
  - ERIC (abstract only)
  - Linguistics and Language Behavior Abstracts (LLBA)
  - Social Services Abstracts
  - Sociological Abstracts
  - Worldwide Political Science Abstracts

- Columbia International Affairs Online (CIAO)
  CIAO is a searchable database consisting of books, journals and working papers about international affairs.

- LexisNexis Academic
  LexisNexis is a collection of articles, mainly about general news, business, law and medicine. The sources of the articles include:
  - English and non-English language news sources: more than 350 newspapers
  - wire services including Associated Press
  - more than 300 magazines and journals, including the most popular news magazines
  - more than 600 newsletters
  - business news journals, company financial information, SEC filings and reports, industry and market news
  - US law and regulations, legal news, US Supreme Court cases
China Infobank 中国資訊行

China Infobank is a database of business, economic and legal news and information. The information is collected from different Chinese and Hong Kong media sources and government sources. The information in the database is also classified into around 200 different industries.

D Other Databases

Other useful databases that can be accessible through Lingnan Library E-Resources (subject list) page <http://www.library.ln.edu.hk/eresource/cdssub.html> include the following:

- Encyclopedia Britannica – the largest English-language general encyclopedia
- Oxford English Dictionary – the definitive historical dictionary of the English language
- EIU Country Reports – country profiles, statistics and reports of latest social-economic developments in a number of different countries

Please check up the above subject list page if you need to find any topics/titles useful for your assignment.

4 Considerations in Acquiring Appropriate Information Sources

Finding appropriate sources for useful information is one of the very important activities in an information research process. You need to know how to evaluate the sources you find to acquire quality information. Before we begin introducing those evaluation criteria (see Chapter 6), there are a number of related issues (see below) that deserve your careful thoughts when you wish to identify proper information sources for your academic work.

A Primary and Secondary Information

During the process of finding appropriate sources for useful information in an information research, two important issues that deserve your attention. Do you require primary source of information or the first-hand information? Do you require secondary source of information or the second-hand information? Do you require both? These are the very important things you must know before spotting out your information sources.

In many cases, you need to use both primary and secondary information sources in your study (i.e. primary and secondary information). What are they? Primary sources of information refer to the sources that provide you the original and unedited information. Primary sources require you to interact with the sources and dig out information. On the
other hand, secondary sources of information refer to those edited primary sources, second-hand versions. As soon as someone else writes an interpretation of an original source, we consider it as secondary.

If you need to know more about the various examples of primary and secondary information sources that are available to you, please go to the URL:
<http://www.graphic.org/resources.html> for details.

In addition to differentiate between primary and secondary sources, you should note that knowledge can broadly be organized into three major disciplines (i.e. humanities, social sciences, and sciences), and that each major discipline is composed of relevant subject fields, each defining individual primary and secondary sources for your information searching. Therefore, before beginning searching, please note the following two suggestions. First, identify the disciplines or subject fields for your selected topic; second, identify if you require primary or secondary sources or both for your information searching.

B Formal vs. Informal Information

Not all information collected is worth of trust (reliable). Information extracted through personal experience, observation, interviews, etc., is normally related to personal views or opinions and may have bias in certain extent. Such kind of information is considered informal, and must be used in caution. On the other hand, published information extracted from government, business research firms, academic and professional organizations, business corporations, etc., are considered as formal information. This includes government publications, government reports, government notices, historical documents, books, scholarly journals, statistical information from business research firms and corporations and so on. Formal information is normally sponsored and issued by academic and professional organizations such as reputable trade publisher, university press, official government agencies, etc. As a result, information extracted from all these sources are reliable and can be considered as good sources for your information.

C Purpose and Audience of Different Information Sources

Two important things you need to consider in this issue. First, what are the purposes of the sources? Second, what are the target audiences of the sources?

i Purposes of the sources (Motives of the producer of the source)
Different information sources have different purposes, namely: expressing specific views or opinions for a particular group; making commercial business or offering promotion of certain products or services; building an argument for individual benefit; providing factual information (e.g. current news item); giving a factual report (e.g., a
statistical report or a financial report), or communicating a person opinion. Also you need to identify if the information is presented in an objective writing style (with both sides of an argument) or a subjective bias (with the author’s own point of view).

ii Target audiences
Some sources are targeted for the general public audience; for example, popular journals are geared towards a broad population of the general public. Some sources are targeted for a group of specialist or scholars; for example, scholarly journals and professional periodicals are geared towards academic scholars or professionals. Some sources are targeted for a particular group of community; for example, University newsletters are geared towards staff and students within the Lingnan community.

D Free and Fee-based Information
The Internet provides a rich resource of information. Almost all of the information obtained from the Internet is free. For example, you can access general information such as local news; national news; weather; sports; auction and shopping malls, etc. from popular portals. You can access government information and notices from various governmental web sites; and even you can obtain specific information like financial data or statistical reports of business corporations. Furthermore, there are web sites that provide free application programs for your download. However, some web sites require your subscription and fee if you want to access a particular type of information. (Can you think of any example?) On the other hand, all library resources are not free. The University Library has purchased a wide variety of printed resources, reference tools, audio and video resources, multimedia packages, and has subscribed a variety of electronic databases for the Lingnan community.

5 Information by Disciplines (Classification Systems)2

The main purposes of classification systems in libraries are to provide a systematic way to organize and shelve books about the same subject matter together as well as helping people locate a specific item on the shelf. There are several different types of systems, and most academic libraries use more than one. The Library of Congress or LC system and the Dewey Decimal system are mainly used to classify many materials. SuDoc (Superintendent of Documents) numbers are often used to classify government documents. Regardless of which systems are being used, the code (i.e., the classification number) assigned to each item -- its unique identification number (found both in the catalog and on the item itself) -- is

2 Information Literacy Tutorial http://www.denison.edu/collaborations/ohio5/infolit/c2libnav/#class
called a call number.

Library materials at Lingnan Library are grouped by language. They are mostly in Chinese and English but include some other languages. Each group is classified by a different classification scheme. The following two tables outline the 2 schemes (See Table 1 and Table 2). All English materials adopt the Dewey Decimal Classification system, while all Chinese materials adopt Chinese Library Classification. Under these two systems, all the world’s knowledge is divided into ten broad categories (see the class number of selected subjects in the following two tables).\(^3\) The first division of the Dewey Decimal system is referred to as the First Summary, which is then further broken down into narrower subdivisions, referred to as the Second Summary. The division will continue further with each subdivision classifying the knowledge into more specific units.

Example

300 Social Sciences
   320 Political Science
   330 Economics
   340 Law
   370 Education

Under the Social Sciences category, you can locate individual subjects, e.g., political science, economics, law, and education and so forth. And then within each subject, further subdivisions are formed.

Table 1 English Materials are classified by the Dewey Decimal Classification:

<table>
<thead>
<tr>
<th>Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Generalities</td>
</tr>
<tr>
<td>100</td>
<td>Philosophy &amp; Related Disciplines</td>
</tr>
<tr>
<td>200</td>
<td>Religion</td>
</tr>
<tr>
<td>300</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>400</td>
<td>Language</td>
</tr>
<tr>
<td>500</td>
<td>Pure Sciences</td>
</tr>
<tr>
<td>600</td>
<td>Technology &amp; Applied Sciences</td>
</tr>
<tr>
<td>700</td>
<td>Arts</td>
</tr>
<tr>
<td>800</td>
<td>Literature</td>
</tr>
<tr>
<td>900</td>
<td>Geography and History</td>
</tr>
</tbody>
</table>

\(^3\) Refer to the Lingnan web site for more information in Classification

http://www.library.ln.edu.hk/libinfo/classifi.html
Table 2 Chinese Materials are classified by 中國圖書分類法

<table>
<thead>
<tr>
<th>Chinese Classification</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>000 总类</td>
<td>General Literature</td>
</tr>
<tr>
<td>100 哲學類</td>
<td>Philosophy</td>
</tr>
<tr>
<td>200 宗教類</td>
<td>Religion</td>
</tr>
<tr>
<td>300 自然科学類</td>
<td>Natural Science</td>
</tr>
<tr>
<td>400 應用科學類</td>
<td>Applied Science</td>
</tr>
<tr>
<td>500 社會科學類</td>
<td>Social Science</td>
</tr>
<tr>
<td>600 史地類</td>
<td>History and Geography</td>
</tr>
<tr>
<td>700 世界史地類</td>
<td>World History and Geography</td>
</tr>
<tr>
<td>800 語文類</td>
<td>Language</td>
</tr>
<tr>
<td>900 美術類</td>
<td>Art</td>
</tr>
</tbody>
</table>

For more information about Dewey system, click on the URL at
http://www.denison.edu/collaborations/ohio5/infolit/c2libnav/dewey.html

Summary of Information Sources

You know that information is available from many sources and in many formats. You can find information from books, journals, magazines, encyclopedias, dictionaries (including general language dictionaries and subject dictionaries), commercial newspapers, television, videos, library databases, websites, etc. However, the important thing is to understand what sources can provide you useful information that can meet your need and specific requirements for your academic writing. The website http://tilt.lib.utsystem.edu/nf/module1/tilt.htm suggests you a listing of information sources that you can search for to acquire needed information for your academic work.

A brief summary extracted from the website\(^4\) is as follows:

- You use a book if you need to:
  - i Look for comprehensive information on a topic;
  - ii Extract summaries of research to support an argument;
  - ii Locate historical information

- You use a journal if you need to:
  - i Do scholarly research;
  - ii Explore what has been studied on your research topic;

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\(^4\) Part of this information is extracted from the web site at URL: http://tilt.lib.utsystem.edu/nf/module1/tilt.htm
iii Explore other relevant researches related to your topic from the bibliographies.

➤ You use a magazine if you need to:
   i Locate information or opinions/views about a popular culture;
   ii Locate the latest information about current news;
   iii Locate the general articles for people who are not necessarily specialists about the topic

➤ You use a newspaper if you need to:
   i Locate current information about international, national and local events;
   ii Locate editorials, commentaries, expert or popular opinions

➤ You use a periodical index to help you when:
   i Researching a topic in magazines, journals or newspapers;
   ii You know a subject but not a specific article.

➤ You use a library catalog if you need to:
   i Identify the items that the library has on your selected topic;
   ii Find the location of a specific item in the library.

➤ Use an encyclopedia, handbook, and dictionary if you need to:
   i Identify discipline-specific terminology that describes a given topic;
   ii Search for background information on a selected topic;
   iii Locate key ideas, important dates or notions;
   iv Locate the meanings of words and their synonyms.

➤ Use the Web if you need to:
   i Link to other information sources provided by your library;
   ii Locate current news and information;
   iii Locate information about business companies, government, academic institutions, etc.
   iv Locate both specialist and trendy opinions.

Up to this point, you should have a good understanding of the various types of information sources available for your searching. You can access abundant information from our University Library and the Web, therefore make full use of the resources to learn as much as you can in this course and in your subsequent study in other courses. I hope you enjoy this chapter, now take a break before continue the next chapter.
Works Cited
