

**They relate to the  
INFORMATION LITERACY SKILLS COURSE FOR LEVEL 100  
UNIVERSITY OF CAPE COAST**

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Editor

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INFORMATION LITERACY SKILLS COURSE FOR LEVEL 100 (ILT 100)

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## INTRODUCTION

Information literacy is an educational concept that has gained prominence in recent times. It is an intellectual framework for recognizing, identifying and finding information. It also has to do with understanding, evaluating and using information appropriately and effectively.

This handout is therefore designed for Level 100 students at the University of Cape Coast. In the main, it explains the essential skills required by students to function successfully in the information era. It is the conviction of the authors that the skills acquired in this document would equip the students for lifelong learning.

The handout is divided into four parts. Part one defines the concept of information literacy and distinguishes between information and knowledge. Part two describes the various types of libraries and information sources. Part three describes how information/knowledge is organized in libraries while section four deals with the Internet and its advantages and disadvantages.

All in all, this handout is not only useful for professional education in library and information service programmes but also a good reference tool for in-service activities in libraries that seek to empower practising library professionals in the comprehension of the concepts on information literacy skills to tertiary students.

## PART ONE: DEFINING INFORMATION LITERACY (IL)

According to the American Library Association (ALA) an information literate person is able to "recognize when information is needed and has the ability to locate, evaluate, and use effectively the needed information".

Information Literacy may be understood to be the body of knowledge, skills, competencies and understanding required by an individual to find information effectively and use it appropriately to meet the need that prompted its acquisition.

It has been variously called user education, bibliographic instruction, etc. Computer literacy is an important part of information literacy but the student who knows every database, every computer program and every keystroke may not be information literate at all. In fact, thinking and reasoning are at the center of information literacy.

It is the ability to locate, retrieve, evaluate, manage and use information efficiently from a range of sources for problem-solving, decision making and research. It therefore covers the range of skills required for effective processing of information. The need for IL has become more relevant than ever before since the introduction of information technology has made information an important commodity in the modern world.

This therefore covers all the skills one needs for effective processing of information. It involves a situation where one tries to find out where to get requisite information and be able to evaluate the information as to whether it is usable or not. In our contemporary information rich, technology driven society, IL is a prerequisite for functioning effectively. IL cuts across all disciplines, all kinds of learning situations and educational levels and forms the basis for lifelong learning.

IL therefore allows people to engage in effective decision making, problem solving and research. Everyone at different times and in a variety of ways participates in all these activities which are made more difficult because of the information age in which we live.

### **Who is an Information Literate Person?**

The Information Literate Person/Student:

- Has the ability to determine the nature and extent of the information needed
- Accesses needed information effectively and efficiently
- Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system
- Individually or as a member of a group, uses information effectively to accomplish a specific purpose.
- Understands many of the economic, legal and social issues surrounding the use of information and accesses and uses information ethically and legally. (Students must note that this relates to lecturers as well as people who are not in academic settings).

### **Defining Information and Knowledge**

Information is defined as facts or data that are collected, recorded, processed and stored in a retrievable form. Knowledge refers human inferences and interpretation derived from processed information. Therefore, knowledge is a blend of human experience, analysis, deduction and assimilation. As knowledge is growing exponentially, so has it become increasingly important to develop tools for finding information and knowledge within a collection.

### **Overall Objective**

By the end of the course, students will be equipped with the requisite skills to search for, retrieve relevant and appropriate information and use it effectively during the period of their study and after.

## PART TWO: LIBRARIES AND INFORMATION SOURCES

BY

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### Definition of Library

A library may be defined as a building or a series of rooms containing a collection of records of human culture in diverse formats and languages, organized, preserved, stored and interpreted to meet broad and varying needs of individuals for information, knowledge and recreation.

Librarians therefore acquire, catalogue, classify and arrange the library materials in such a way as to facilitate easy retrieval. The specific activities involved are as follows:

- Acquisitions - Selection of books and other library materials based on the information requirements of a specific library.
- Processing of the materials (stamping, cataloguing, classifying, lettering).
- Displaying the materials in the appropriate areas in the library.
- Giving reference and lending services.
- Giving instruction in the use of the library.

In most libraries, the activities mentioned above are divided into the following departments:

- Acquisitions
- Cataloguing
- Circulation
- Reference

Materials in any library may include the following:

- General reference books like encyclopaedias, dictionaries, etc.
- Text books
- Books for voluntary and recreational reading
- Periodicals and newspapers
- Audio visual materials
- Government publications.
- Electronic resources. These include access to the internet, on-line journals, on-line databases, databases on CD-Rom, e-books etc.

## CATEGORIES OF LIBRARIES

Libraries can be grouped into three broad categories based on their resources and the way they render services to their clientele or patrons as follows:

- Traditional Library
- Electronic / Digital Library
- Hybrid Library

### The Traditional Library

In the traditional Library almost all its operations are carried out manually in the various sections - acquisitions, cataloguing, lending, reference and periodicals. It is the library that existed before the introduction of computers in libraries. Almost all the library's resources are in print format. Other non-print materials may include audio tapes, audiocassettes, microfilms, microfiche, videotapes, etc.

Lending Services:

- Library tickets
- Book cards with bibliographic details of work (author, accession number, class mark) inserted into book pockets
- Circulation statistics (counting tickets manually to record items borrowed)
- Overdue notices (sorting out library tickets manually)

Reference Services

- No computer at the Reference Desk

Access to the library' collection is through the card catalogue

### Digital Library

The digital library has all information resources in digital form and access to such resources is through digital technologies. It is therefore a library in which collections are stored in digital formats (as opposed to print, microform, or other media) and accessible by computers.

Digital cameras are used to digitize specific library collections. Scanners can also be used in the process. By using the appropriate software the information can be accessed on the internet.

To be considered as a digital library an on-line collection of information must be managed by and made accessible to a community of users. The digital content can be stored locally, or accessed via computer networks.

## Benefits of Digital Libraries

- They allow users to directly access and use the documents they have found.
- They allow users to quickly find documents by using a computer and a network.
- Because they are accessed over the internet and the web, they can be accessed from virtually anywhere at any time. They are not tied to a physical location and operating hours like a traditional library.
- Digital library collections can be delivered on CD-ROM to users with inadequate network connectivity.
- A digital library can provide access to content in different and more appealing forms including animation, graphical, audio and video formats.
- They can easily share information with other similar digital libraries and provide enhanced access to users.

Many academic libraries are actively involved in building institutional repositories of the institution's books, papers, theses and other works which can be digitized or were born digital. An example is the Digital Library for Distance Learners in the UCC Main Library where theses and other works are being digitized. It is however not functional yet.

## Hybrid Library

The hybrid library has its information resources in both print and non-print formats. This implies that the users of a hybrid library have access to physical collections as well as digital collections (electronic resources) like full text on-line journals, e-books, audio books and full text databases on CD - ROM etc.

With the introduction of computers in libraries most libraries have automated their housekeeping functions including acquisitions, cataloguing and circulation. In such libraries for example, online public access catalogues are used to access the libraries' collections. All the features of the traditional library may be present in the hybrid library.

Most academic libraries develop hybrid collections of print and electronic resources and provide integrated access to them. With a common gateway members of the university community can use computers in the library, in offices, in halls or elsewhere to identify what resources are owned by their institution, what is on order, and the physical materials currently are on loan to other borrowers. Some systems enable users to request for items for delivery to their offices and extend the due dates for borrowed items.

All the public funded universities in Ghana, including the University of Cape Coast have hybrid libraries.

## TYPES OF LIBRARIES

Every library has an intended community of users resulting in five (5) types of Libraries. These are:

- Academic
- Public
- Special
- National
- School

### Academic libraries

The academic library is also known as the college or university library. It serves the curricular needs of students, faculty and staff of their parent institutions. In other words its users are the academic staff (lecturers) undergraduates, graduates and researchers. The main function of the academic library is to support teaching, learning and research.

### Collections

Academic libraries develop collections in direct relation to academic programs, with increasing depth for undergraduate, postgraduate and doctoral courses. As new curricula and programs are established and as existing programs expand into new areas, library collections are expected to expand proportionately. Academic libraries are building hybrid collections of print and electronic resources. Their resources include textbooks, encyclopedias, dictionaries, theses, newspapers, research reports, microforms, electronic resources and others.

### Lending Services

These allow a user to borrow materials for use outside the library and also ask for a book to be reserved for him or her. The single largest collection of books at most university libraries are in the lending section.

### Reference Services

Under these services the Reference Librarian serves as a link between a user in search of information and the printed or electronic source where information can be located. Library users' questions are answered at the reference desk, catalogue, and searchers' workstations and through electronic mail or by telephone.

### Inter-lending Services (Interlibrary Loan and Document Delivery) (IDD)

Inter-lending is a transaction in which the user makes a request with his local library which, acting as an intermediary, identifies owners of the desired item, places the request, receives the item, makes it available to the user and arranges for its return (Wikipedia, 2010). Document delivery, however is the provision of non-returnable documents, published or unpublished, in whichever format, at an established cost upon request by users (Baker and Jackson, 1993; Alemna, 1997). I/DD services are part of resource sharing or library cooperation. No matter how well endowed libraries the world over are,

they are no longer able to provide on-site all the needs of their patrons. Most frequently requested items include textbooks, journal articles etc.

### Electronic Services

These deal with the use of resources in electronic format and include databases on CD-ROM, online databases subscribed to by the library, the internet etc. These resources are part of the reference collection because they can be accessed from terminals or computers located in the library.

### Reprographic Services

The library offers photocopying and digital duplicating services.

### User Education

The library organizes User Education for fresh students through library orientation including a guided tour of the library, to enable them to use the library effectively.

- Knowing how to use the library would make students independent learners and this would promote efficiency in individual study, research and intellectual self reliance.
- One needs the library to perform such tasks as assignments, project work, research etc. because the library provides materials which cut across all subject areas.
- One gains ability to search for information

In Ghana the academic libraries between them hold the largest collection of materials used to support teaching learning and research.

The Public funded universities in Ghana are the:

- University of Ghana, Legon
- Kwame Nkrumah University of Science and Technology, Kumasi
- University of Cape Coast, Cape Coast
- University for Development Studies, Tamale.
- University of Education, Winneba
- University of Mines and Technology, Tarkwa

Using the U.C.C. Library as an example, our total book stock is over 220 thousand volumes including bound journals. Materials like dictionaries, encyclopaedias, bibliographies, almanacs, biographies, theses, periodicals and newspapers are kept for reference in the library. Other special collections are the Ghana Collection, Students Textbook Reference Collection, Africana Collection etc.

There are different departments within the library and each has a specific role to play in providing service to users.



- Administration
- Acquisitions
- Cataloguing
- Readers' Services
- Periodicals
- Electronic Support Unit
- Resources Centre for Visually Impaired
- Section for Physically Challenged (with computers and internet connection)
- Digital Library for Distance Learners (Workroom)
- Bindery

### The Role of the Library in the Academic Community

Libraries are described as the nerve-centre of educational institutions especially the universities. Among the fundamental criteria for giving accreditation for academic programs is the adequacy of library collections to support the curricula. The main function of the library in any academic institution is to support teaching, learning and research. The library therefore develops a collection of resources based on all subjects being taught in the university. These library resources include general reference books, textbooks, periodicals, newspapers, government publications in the print format and a wide range of electronic information including access to the internet, full-text databases on CD-ROM, e-books etc. and microforms.

In order to satisfy its primary function of supporting teaching, learning and research by providing relevant and timely information to users, materials acquired are accessible under the following services:

- Circulation Services
- Reference Services
- Electronic Services
- Reprographic Services
- Interlibrary Lending and Document Delivery Services

### Public Libraries

Public libraries by their nature are the most familiar and visible type of library to most people. A public library is a library that has been set up to provide service to all members of the community regardless of age, citizenship, occupation, economic status educational level etc. Public libraries are cited in cities, towns or villages so that users can have easy access to their facilities.

### Collections

Their collections typically include popular reading materials for children and adults, basic reference sources, classics and resources specific to the local economy and culture.

General textbooks, storybooks encyclopedias, dictionaries, newspapers and other materials (print and non- print) are provided in the public library.

### Services

Public libraries serve diverse constituencies in their communities and therefore provide a wide range of services. They provide lending and reference services for their users. In the advanced countries, they often lend materials such as software, videos, sewing patterns and art works.

Some public libraries provide free access to Mobile Library services.

In Ghana the Ghana Library Board with its Headquarters in Accra is responsible for providing public Library services in the country, to meet information needs of various communities.

### Other Services

- Adults' Reference Service
- Children's Services
- Extension Library Services
- School and College Libraries Department
- George Padmore Research Library on African Affairs

### Special Libraries

This term covers libraries set up by government institution, industrial, commercial and business organizations to provide for the information needs of their staff. The overriding requirement of the special library is that it should provide current information that enables research workers and other employees to carry out their company duties affectively.

### Collections

The collections of special libraries include general reference materials, relevant books and periodicals both in print and non print formats.

The contents of the reference sections of special libraries vary according to the needs of their particular organizations. A commercial library for example, is likely to provide company reports and such items as market surveys and economic reports. A law firm on the other hand may maintain its own library of legal documents for its lawyers and staff. Scientific, technical and trade publications issued weekly, quarterly or irregularly enable an employee to keep abreast of development within his own and related field. They present him with new ideas upon which he can work and give him information about work being done in other companies.

## Services

Special libraries are often set up as reference libraries. An abstracting and indexing service provided by the library ensures that the researcher is informed of what relevant papers and articles are accessible whether in print or electronic format.

In Ghana, The Institute Scientific and Technological informational (INSTI) serves as a central Library that coordinates activities for special Libraries under the Council for Scientific and Industrial Research. (CSIR). It is a documentation centre and develops an efficient method of recording and retrieving information.

The CSIR Group of Libraries has developed around the various subjects of interest of the research staff mainly in Agriculture. Examples are the:

- Cocoa Research Institute Library (1938)
- Animal Research Institute Library (1957)
- Food Research Institute Library (1965)
- Industrial Research Institute Library (1965)
- Institute of Aquatic Biology library (1965)
- Crop Research Institutes Library, Kumasi (1967)

Some other Government Department Libraries are:

- Food and Agriculture (1890)
- Supreme Court Library (1909)
- Geological Survey Department Library (1925)
- Lands Department Library (1925)
- Meteorological services Department Library (1937)
- Ministry of Information Library (1944) Institute of Chartered Accountants of Ghana
- Statistical Service of Ghana Library (1948)

## School Libraries

Libraries that are established in Primary Schools, Junior High Schools and Senior High Schools are known as school libraries. The main function of the school library is to support various educational programmes at various levels. The users are teachers, pupils and students.

## Collections

Their collections may consist of textbooks, storybooks, newspapers, magazines and general reference books like dictionaries, encyclopedias, etc. Other non-print materials may be photographs, films, audio and video recordings, computers, CD-rooms etc. The content of the library materials depends on the various educational levels.

## Services

Reference service

Lending service

In Ghana most Primary and Junior High Schools do not have libraries especially those in the rural areas. Some of those who have libraries have limited collections. However some private schools are able to develop comprehensive hybrid collections of traditional print and non print resources, and employ qualified librarians to manage their libraries.

Libraries in Senior High Schools depend on how well endowed the schools are. Some examples are:

- Mfantshipim(1876)
- Adisadel College (1910)
- Achimota School (1927)
- St. Augustine's College (1935).

National Library

A national library is a library specifically established by the government of a country to serve as an outstanding repository of information for that country. A national library is usually the largest and the most comprehensive library, as compared with other libraries in a given country.

The main goal of a national library is to ensure the bibliographic control of all books and other materials published in that particular country and about that country.

## Functions

- Legal deposit (the national library is supposed to receive free of charge at least one copy of every work published in the country)
- Compilation of National Bibliography
- Storage of numerous valuable works and rare books.
- Training of library personnel
- Conducting research Collection

The collection includes all published works in a particular country and about that country, both in the print and non-print format including electronic resources.

## Services

- General reference service
- Interlibrary Loan and Document Delivery (national and international)

Examples of national libraries are The British Library in the UK and The Library of Congress in USA.

In Ghana, The George Padmore Research Library on African Affairs serves as the national library. Apart from being an Africana Library with special emphasis on Ghana, the Padmore Library performs the following essential functions of a National Library for the country:

- Acquisition, processing, preservation, documentation, accumulation of domestic and Africana publications and providing access to them
- It is the National Bibliographic Agency and a Legal Deposit Library (copyright law)
- Management of ISBN and ISSN System
- Guidance and support for Library services and learning activities for other Libraries
- Cooperation with foreign libraries and international exchange of materials
- Compilation of special bibliographies as a means for research

## LIBRARY RESOURCES AND THEIR USES

Resources in any library are determined by the information requirements of the users of the Library.

### Print Resources Books

They usually form the bulk of or a greater percentage of the resources in the library and can be located in the various sections. The UCC Library for example has the following collections:

- Students Textbook Reference Collection
- Africana Collection
- Ghana Collection (under closed access)
- Reserve collection
- Theses
- Arts and Humanities
- Science and Agriculture
- Medical School Section
- Social Science and Education Section

### Periodicals

Journals

Newspapers (including bound volumes)

Government publications

Abstracts

Indexes

Reports

Transactions

Newsletters

Bulletins

Magazines

World Bank publications (DIG)

FAO publications

### Non - print Resources

- Micro editions
- Audio-visuals (videotapes, videocassettes, audiotapes)
- Electronic resources

Computers and accessories

On- line databases

CD -Rom Work stations

### Digital Library resources

Internet connections

Audio- books etc.

Reference Materials

Reference materials contain facts that have been brought together from many sources and organized for quick and easy use. A reference book is a book which is consulted for information on a topic, a theme, an event, a person, a date, a place, or word.

Arrangement of information in reference books may be:

- Alphabetical (dictionaries and encyclopedias)
- Tables (mathematical and statistical works)
- Regional (maps and atlases)
- Chronological ( Bible and historical books)
- Classified (bibliographies)

### Characteristics of Reference Materials

- Reference materials are meant to be consulted in the library.
- They are not meant to be read from cover to cover.
- They are housed in separate sections of the library with 'reference only' or 'not to be taken out' boldly written on the shelves.
- They are revised from time to time so as to keep abreast with recent developments.
- The library usually buys one copy or in rare cases two or a set of one or two.

### What to consider when using a reference book

- Authoritativeness - The authors, editors or contributors qualification; the reputation of the publisher is also important.
- The date of publication and edition of the work must be considered.
- The scope of the work. One needs to read the preface or the introduction for information as to the scope of the work. The preface introduces the author to the reader and gives reasons for writing the book. It indicates those for whom the book is intended. It also explains the arrangement, symbols and abbreviations as well as any special feature.

## Dictionaries

A dictionary may be defined as a reference book containing words and usually phrases, alphabetically arranged together with information about them, especially their forms pronunciations, spelling and meaning. In addition the dictionary may give synonyms, antonyms, biographical facts and geographical information.

### Types of dictionaries

- Single language dictionaries
- Subject dictionaries
- Local language dictionaries
- Translating dictionaries Uses

Dictionaries are used to define words; to verify spelling, syllabication or pronunciation; to check on usage; or to determine the etymology of a word. To some extent, they also standardize the language based on current usage.

## Directories

Directories are information sources that list persons or organizations, usually in alphabetic or classed order. They give addresses, affiliations etc. for individuals and addresses, officers, functions and similar data for organizations. The information may be arranged alphabetically or in a classified order.

Directories are used to locate organizations, institutions and people. They are also used to verify the name of an organization or the spelling of a person's name. Directories cover so many types of organizations, associations, institutions and individuals. There are major directories in the area of libraries, publishing, education and research, foundations and grants, businesses, associations and government.

Examples are:

- Directory of Directories
- Library Directories
- Publishing and Book Trade Directories
- Educational/Research Directories
- Business Directories
- Telephone Directories etc. Encyclopaedias

According to American Library Association glossary an encyclopaedia is a work containing informational articles on subjects in every field of knowledge usually arranged alphabetically or a similar work limited to a special field or subject. It usually gives an overview of a topic including definition, description, background and bibliographical references.

The most important of reference books are probably encyclopaedias as they contain information about places, people and things, including facts and figures.

Types of encyclopaedias

- Single - Volume Encyclopaedias
- Encyclopaedia for Children and Young Adults

General Encyclopaedias

Subject Encyclopaedias

Encyclopaedia Yearbooks and Supplements

Uses:

- Fact finding
- General background information

It is used to locate explanatory material or definitions. It also serves as a guide to related topics within its pages or to outside sources of information (cross references and bibliographies).

- “ Pre-research” information

For beginners, they teach research skills, that is, a systematic approach to gathering information.

There are general and specific (subject) encyclopaedias. An example of a general encyclopaedia is the New Encyclopaedia Britannica (29 Volumes). It is regarded as the most scholarly. It is in three parts:

- The Propaedia
- The Micropaedia
- The Macropaedia
- Two (2) separate volumes for index.

There is a CD-ROM version of the Index which adds flexibility to the retrieval of information.

There are several encyclopaedias in specific subject areas, for example the Encyclopaedia of Social Sciences.

Bibliographies



A bibliography is the name given to a list of books, manuscripts and other publications systematically described and arranged which have some relationship to each other.

Types of Bibliographies:

- General - not limited to one author, subject, country or period
- Author - listing the works by and about one author.
- Subject - restricted to one subject field.
- National or Regional -including material relating to one country or
- Trade - directed to the book trade and supplying information need for acquisition of books.

These are designed as reference books to aid the researcher in his quest for material. Bibliographies may be found in individual books, periodical articles, encyclopedias and other reference books.

Uses:

- Bibliographies are useful sources in any search for material on a subject. They can be used to locate material on the subject in question.
- They provide means verifying publications
- They indicate the scope of the subject if they are annotated Periodicals

A periodical is a serial publication with a distinctive title and which appears at regular or irregular intervals, generally more than once year, without prior decision as to when the last issue will appear. They have assumed greater importance due to their advantage of timeliness over books. Each issue of a periodical is complete in itself but its relationship to proceeding issues is indicated by enumeration. Usually the issue number and volume number are printed on the front cover.

Periodicals contain articles, stories or writings by several contributors. They include journals magazines, annual reports newsletters and bulletins. The contents of periodicals are controlled by an Editor or Editorial Board. Periodicals are published by scholarly societies, University presses, trade and professional associations, government agencies etc.

Most academic libraries have separate sections for periodicals. They normally bind all the issues for a given publication year in one or more physical volumes. In some libraries the back issues may be converted to microfiche or microfilm to conserve space. In such cases microform reader-printer machines are provided for viewing and printing copies of articles.

For many print periodicals, content is also available electronically in full text databases online or on CD-ROM or via the publisher's web site.

At the UCC library for example, there are several journals in the Periodicals section on all the subject areas being taught in the University. There is a sloping display shelf where current issues of journals, magazines etc are displayed face up to make them easily accessible to browsers. A number of back issues are stored on a flat shelf under the displayed ones.

Back issues are bound and treated like books (catalogued, Classified lettered and shelved). All materials in the periodicals section are for reference only.

### Indexes and Abstracts

An index indicates where information can be found rather than provide the information. Indexes include bibliographies of currently published material, usually of articles in periodicals, materials appearing in newspapers and literature appearing in collections or anthologies.

The information supplied by indexing publications include the Author, the subject of the article or report, the title of the periodical, volume number, date of publication etc. without comment.

Indexes are also found at the back of books and they are used to find where certain topics or words are discussed within the text.

Abstracts give full bibliographic details as in the case of indexes and in addition present a brief summary of the subject content of the article or report indexed. Abstracts serve as an aid in assessing the content of a document and its potential relevance.

There are several published scholarly indexing and abstracting journals. These are usually located at the Periodicals Section of Libraries (especially academic and special).

Examples are:

- International Index to Periodicals
- Current Index to Journals in Education CUE (ERIC)
- Comprehensive Dissertation Index
- Education Index
- Dissertation Abstracts International
- Geographical Abstracts
- Field Crop Abstracts
- Soils and Fertilizer Abstracts etc.

The electronic versions of Indexes and abstracts are also available. University Microfilms International (UMI) and EBSCO Publishing for example, have introduced general periodical indexes with abstracts on CD-ROM.

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## PART THREE: ORGANIZATION OF KNOWLEDGE

BY

CHRISTIAN KOFI, WILFRED BINEY & WILLIAM BAIDEN

### TOOLS FOR ORGANIZATION INFORMATION

#### Cataloguing & Classification

- Cataloguing and classification go together.
- They are two sides of the same coin.
  
- When you catalogue a book, you both catalogue (describe) and classify it to complete the process.
- Library catalogues exist in many forms and differ in detail according to type of library and users.
- Each bibliographic record in the catalogue represents an item.

#### Library Catalogues

- A library catalogue is a list of documents in a library, with the entries representing the documents arranged in some systematic order.
  
- It provides data about items in the collection which the cataloguers represent.
  
- The library catalogue carries information on where the items can be found.

- Almost all library catalogues are multiple access files
- Multiple access files are entry points or ways to get to an item and retrieve that particular record.

The primary forms of library catalogues are:

1. Card catalogue
2. Book catalogue
3. Microform catalogue
4. Computer access catalogue/online catalogue

Card Catalogues consist of multiple drawers containing 3X5 cards arranged alphabetically by author, title and added entries. Added entries consist of cards for such things as more than one author, editors, compilers, translators, illustrators, arrangers of music, and series. Catalogues that are divided into sections are referred to as divided catalogs. Divided catalogues may consist of three sections (author, title and subject) or two sections (author/title). The cards in each section are filed word-by-word.

Book Catalogues list the library's holdings in book form. It is difficult to keep these catalogues up- to-date and therefore, it is necessary for frequent supplements. With a book catalogue, it is rather easy to maintain several catalogues at the same time in different locations. The "updates" are kept in separate volumes until complete revisions are made.

Microform catalogue is a library's holdings listed on micro format. This usually requires a reading device like a microscope or microfilm reader.

Computer Access Catalogue/Online catalogue is also referred to as Online Public Access Catalogue (OPAC). OPAC can be accessed on computer terminals within a library or on the Internet outside the Library.

#### Reasons for Cataloguing Library Materials

1. To enable a library user find a book of which the author, the title or the subject is known.
2. To show what the library has by a given author, on a given subject and in a given kind of literature.
3. To assist library users in the choice of a book as to its edition or as to its character.

#### Descriptive Cataloguing

This is the process of recording information about an item according to accepted standards. Such information includes author, title, edition, publisher, year, etc.

#### Issues to consider in Cataloguing & Classification

- We assign appropriate subject heading to an item, such as Economics, History, Zoology or Computer Science as the case may be.
- The Heading is taken from an authorized or standard list
- Large libraries use Library of Congress Subject Heading (LCSH)
- Smaller ones use Sears List of Subject Headings.
- Use title page as the chief source of information
- Determine who is responsible for the intellectual or artistic content of the work.
- If one author is involved, enter work under him/her.
- Use the surname first and write it in block capitals.
- If there are 2-3 authors enter work under the first
- If more than 3 authors, enter work under title.
- Enter edited work under title.
- As a rule, titles like Reverend, Professor, Major are omitted.

#### ACCESS POINTS

1. Author(s)
2. Title/Statement of Responsibility
3. Edition
4. Publication (Imprint)-place: publisher, year).
5. Physical Description (Collation, Pagination)
6. Series-A series statement appearing anywhere in the publication should be recorded.  
Eg. (Legon economics series; no. 42), (Macmillan student series)

7. Call mark

8. International Standard Book Number (ISBN) -10 digits (country no. , publisher's no. , no. of book and check digit 0 is introduced to bring it to 10. We currently have the 13 digits.

The 13 digit ISBN will (for a while) have a 978 prefix. The 13th digit is a recalculated check digit and not the same as the final ISBN- 10 digit.

9. Accession Number-All items intended for cataloguing are accessioned.

10. Added Class Entries

11. Added Author Entries

12. Subject Headings

13. Notes and Bibliography

#### EXAMPLES OF CARD CATALOGUING

##### AUTHOR ENTRIES: ONE UP TO THREE AUTHORS ONEAUTHOR

SAMAHA, Joel	1. Author(s)
Criminal law/Joel Samaha	2. Title/Statement of Responsibility
. - 4th ed.	3. Edition Statement1993.
Minneapolis: West Publishing Co.	4. Publication (Imprint)-place: publisher, year.)
xviii, 577 p. : ill.	5. Physical Description (Collation, Pagination)
KF9218.Sa4	7. Callmark (class number + author/title cutter no.)
231712	9. Accession Number
0-314-00774-1	8. International Standard Book Number (ISBN)

Criminal Law - United States - Cases 1      2. Subject Headings

Includes bibliographical references and index      13-Notes and Bibliography

##### TWO AUTHORS

HEWARD, William L.

Exceptional child: an introductory survey of Special Education/William L. Heward and Michael D. Orlansky

.-4thed.

New York: Macmillan, 1992.

xviii, 670 p. : ill.

LC3981.H49

232864

0-675-22200-1

ORLANSKY, Michael D. 11. Added Author Entries  
Special Education- United States  
Includes bibliographical references and indexes

### THREE AUTHORS

LYONS, Richard E.

The adjunct professor's guide to success: surveying and thriving in the college classroom/Richard L. Lyons, Marcella L. Kysilka and George E. Pawlas. London: Allyn and Bacon, 1999.

xvi, 202p. LB1778.2. L99

23426

0-205-28774-3

1. KYSILKA, Marcella L. 2. PAWLAS, George E.  
Education, Higher-United States  
Includes bibliographical references and index

### TITLE ENTRIES: MORE THAN THREE A UTHORS AND EDITED WORKS EDITED WORK (S)

RETAIL management: principles and practices/edited by R. Sudarshan, S. Ravi Prakash, Subrahamanya Sarma and Wilfred Biney.

New York: New Century Publications, 2007.

xiv, 257p. : ill.

HF5429. R31

233612

81-7708-148-9

1. SUDARSHAN, R. 2. PRAKASH, S. Ravi 3. SARMA, Subrahamanya  
Retail trade-India  
Includes bibliographical references and index.

## MORE THAN THREE AUTHORS

REPORTING technical information/Kenneth W. Houp . . . et al.

Oxford: Oxford University Press, 2006.

xxiv, 615p. : ill. T11.R29

226452

0-19-517879-3

1. HOUP, Kenneth W. 2. PEARS ALL, Thomas E. 3. TEBEAUX, Elizabeth

Technical writing Includes bibliographical references and index.

## CORPORATE AUTHORSHIP

UNIVERSITY OF CAPE COAST. Vice-Chancellor's Annual Report to the 39th  
Congregation, Friday, September 26- Saturday, September 27, 2008.

Cape Coast: Documentation & Documentation Section, 2008.

xi, 497p. : ill. LG481.C36.Un3

University Annual Reports- Vice-Chancellor and Departmental reports.

## Classification

Classification is a process of grouping. It involves putting together like entities and separating unlike entities. In ordinary classification, we deal with the arrangement of ideas and objects. But in library classification, we are concerned with documents and the aim is to arrange these in the most helpful order. According to Savers it is "the arrangement of books on shelves or descriptions of them, in the manner which is most useful to those who read" The emphasis is on usefulness, so that users can search for books without difficulty. Mann notes that classification "is the arranging of things according to likeness and unlikeness. It is the sorting and grouping of things, but in addition, classification of books is a knowledge classification with adjustments made necessary by the physical form of books."

Classification is thus a process, which brings together like documents and separates unlike ones.

- We fit the primary or main subject of the work into the provisions of the classification scheme in use.

This means that we assign a subject number according to the content of the item

- An author or title cutter number is added to complete the process.
- Added class may be provided for multidisciplinary works.

## Guide to Original Cataloguing

- Read the introduction



- Read the Preface
- Read any Review (Take reviews with a pinch of salt)
- Go carefully through the content pages Examine the index
- Take a close look at the text and illustrations

The author and/or the publisher may give some indication of the subject matter. Consult a fellow professional or scholar in the field.

- Express content as accurately as possible within the provisions in the scheme in use. Used by large libraries including academic ones.

## CLASSIFICATION SYSTEMS

For the purpose of our study, one can take note of two major classification systems: (1) Dewey Decimal Classification (DDC) and (2) Library of Congress Classification.

The Library of Congress Classification Scheme (LC)

- LC is basically a classification by discipline. And consists of 21 main classes
- The structure is as follows:

Class A- General Works and Polygraphy

- Class B to P- Humanities and Social Sciences
- Class Q to V - Science and Technology
- Class Z - Librarianship and Bibliography

Egs. English for Nurses (English), Statistics for engineers (Statistics).

Outline of the Main Classes

- A - General Works
- B-BJ - Philosophy. Psychology
- BL-BX -Religion
- BL,BM,BP,BQ \_ Reiiigion: Religions, Hinduism, Judaism, Islam, Buddhism

- BX - Religion: Christian Denominations
- C - Auxiliary Sciences of History
- D - History: General and Old World (EH)
- E-F - History: America (Western Hemisphere)
- G - Geography. Maps. Anthropology. Recreation
- H-HJ- Social Sciences: Economics
- HM-HX - Social Sciences: Sociology
- J - Political Science
- K - Law (General) L - Education
- M - Music N - Fine Art
- P- Languages and Literature
- Q- Science
- R - Medicine
- S - Agriculture
- T - Technology
- U - Military Science
- V - Naval Science
- Z - Bibliography. Library Science

#### ETHICAL ISSUES: Plagiarism, Citation and Copyright

Plagiarism is academic fraud or literary theft and puts one's academic integrity into disrepute. It is the practice of taking someone else's work, idea, invention, etc. and passing it off as one's own. Penalties include failed paper, failed course and expulsion.

#### How to Avoid Plagiarism

- Never buy a paper or hire somebody to write it for you

- Changing a few words doesn't help
- When quoting, you need quotation marks, a reference and an item in your bibliography
- Don't paraphrase, but interpret.

## Citation Styles

The most common citation styles are the American Psychological Association (APA) and Modern Languages Association (MLA). APA is most commonly used to cite sources in social sciences and MLA is mostly used in Languages and Literature. In-Text Citations: Author/Authors

1. A work by Two Authors: Name both authors in the signal phrase or in the parentheses each time you cite the work. Use the word "and" between the authors' names within the text and use the ampersand in the parentheses. For example,

Research by Alemna and Badu (2005) showed or (Alemna & Badu, 2005)

2. A work by Three to Five Authors: List all the authors in the signal phrase or in parentheses the first time you cite the source. For example, (Alemna, Badu, Kissiedu, Adjei & Akusah, 2006 ). In subsequent citations, only the first author's name followed by "et al." in the signal phrase or in parentheses. For example, ( Alemna et al., 2006)

3. Six More Authors: Use the first author's name followed by et al. in the signal phrase or in parentheses. For example, Bannerman et al. (2001) argued or ( Bannerman et al. , 2001)

## Reference List: Author/Authors

The following rules for handling works by a single author or multiple authors apply to all APA style references in your reference list, regardless of the type of work (book, article, electronic resources, etc.)

### Single Author

Last name first, followed by initials.

Asamoah, E. A. (2008). *The History of Ghana*. Accra: Sedco Publishing, p. 45.

### Two Authors

List by their last names first followed by initials. Use the ampersand (&) instead of 'and.' Wegener, D. T. , & Petty, R. E. (1994). Mood management across effective states: The hedonic contingency hypothesis. *Journal of Personality & Social Psychology*, 66, 1034-1048.

### Three to Six Authors

List by last name first followed by initials, separate names with commas, while the last author's name is preceded by ampersand.

### More than Six Authors

List the first six and then add "et al." which means 'and others.'

### Organization as Author

American Psychological Association (2008).

### Reference List: Books (Basic Format)

1. Author (s)
2. (Year of publication)
3. Title of work : Capital letter to begin subtitle.
4. Location:
5. Publisher.
6. Page number.

### For example:

Calfee, R. C. , & Valencia, R. R. (1991). APA guide to preparing manuscripts for journal publication. Washington, DC: American Psychological Association.

### Edited Book, No Author

Duncan, G. J. , & Brooks-Gunn, J. (Eds.). (1997). Consequences of growing up poor. New York: Russell Sage Foundation.

### Edited Book with Author or Authors

Plath, S. (2000). The unabridged journals (K. V. Kukil, Ed.). New York: Anchor.

### Edition Other Than the First

Heifer, M. E. , Kerne, R. S. , & Drugan, R. D. (1997). The battered child (5th cd). Chicago: University of Chicago Press.

### Reference List: Articles in Periodicals

1. Author(s)
2. Year in brackets.
3. Title of article.
4. Title of Periodical,
5. Volume number (issue number),
6. Pages.

### For example:

Harlow, H. F. (1983). Fundermentals for preparing journal articles. *Journal of Comparative and Physiological Psychology*, 55, 893-896.

## MLA Citation Style

### Book

Okuda, Michael, and Denise Okuda. *Star Trek Chronology: The History of the Future*. New York: Pocket, 1993.

### Journal Article

Wilcox, Rhonda V. "Shifting Roles and Synthetic Women in Star Trek: The Next Generation." *Studies in Popular Culture* 13.2 (1991): 53-65.

### Copyright Law

Copyright is a legal term/concept that gives the creator of original work "exclusive rights" to control the use of his/her work for a limited time. These rights are:

- the right to make copies,
- the right to be credited for the work,
- the right to determine who may adapt the work to other derivative forms, such as translations, performance, financially benefit from the work, and other related rights.

Authors may transfer by contract those rights to publishers, or users, to authorize them to make copies, translations, performances, recordings...However, authors do not have monopoly to control all uses of their works: the law foresees some legal exceptions to the benefit of the public, which scope and modalities varies from country to country, such the right of quotation or parody.

### Main Issues in a Copyright Law

1. Gives monopoly to authors and creators in order to stimulate intellectual and artistic creativity.
2. Authors and creators may transfer their monopolistic rights to publishers for marketing purposes.
3. Users/Publics have rights in the form of fair use (academic purposes and knowledge improvement).

Three Copyright Acts of Ghana:

1. Copyright Act 85 of 1961

2. PNDC Law 110

3. Copyright Act 2005

The Library is mentioned under the third Section, Permitted Uses of Copyright SubSection 21:

1) A library and archive with activities that are not for gain may, without the authorization of the author of copyright, make a single copy of the work by reprographic reproduction.

2) A reprographic reproduction under subsection (1) may be made when the work reproduced is a published article, other short work or short extract of a work and where the purpose of the reproduction is to satisfy the request of an individual.

3) The library or archive shall under subsection (1) ascertain that the copy is to be used solely for the purpose of study, scholarship or private research.

4) The act of reproduction under subsection (1) a copy is made in order to preserve or replace a copy which has been lost, destroyed or rendered unusable in the permanent collection of similar library or archive if it is impossible to obtain the copy under reasonable conditions.

5) Where a library or, archive requires more than a single copy of a work by reprographic reproduction, the permission for this shall be obtained from the author, other owner of copyright or from an appropriate collective administration society authorized by the publisher.

Under section 2 of the Bill, the following is stated:

1) The rights of the author are protected during the life of the author and seventy years after the death of the author.

2) Where a work is co authored, the rights of the authors referred to are protected during the life of the last surviving author and seventy years after the death of that author.

#### References

Amanquah, S.N. (2000). Introduction to cataloguing and classification. Legon: University of Ghana.

Bolner, M. S. & Poirer, G. A. (1997); The Research Process, Iowa: Kendall/Kunt Pub., Co.

Mann, M.(1943). Introduction to cataloging and classification of books, 2nd ed. Chicago, American Library Association, p.33.

Rowley, J. F. & Farrow, J. (2000). Organizing knowledge: an introduction to managing access to information.^ ed. Cambridge: Cambridge University Press.

Sayers, W. C. B (1964) Manual of classification for librarians and bibliographers, 3rd edn., Andre Deutsch. p.l.

Smith, A. N. & Medley, Donald B. M. (1987). Information resources management. Cincinnati: South-Western Publishing.

## PART FOUR: INTERNET

By

KWAME BOOHENE, PAULINA KWAFOA & PAUL NUNEKPEKU

### OUTLINE

- Introduction to the Internet
- Internet searching:
  - Search engines
  - Meta search engines
  - Subject directories/ subject gateways -Academic databases
- Uses and misuse of the internet

### GENERAL OBJECTIVE

- This Course aims to increase the students' Information Literacy by acquiring skills and gaining knowledge about tools used to efficiently search and find relevant and topical information by making use of e-resources, and in particular the Internet.

### LEARNING OBJECTIVES

Students

- will be aware of the usefulness of searching e-resources
- will be able to carry out a search analysis and design a search strategy

- can use different tools and sources that are helpful in searching for relevant and topical information
- will realize how the basics of database searching can be helpful in Internet searching
- will be able to use the basics of Boolean searching

## INTERNET

It is simply defined as a global network of computer networks.

The Internet is a large computer network that has connections to a vast number of computers all around the world. It is indeed made up of hundreds of thousands of connected networks around the globe. It is not centrally controlled that is there is no regulatory body. Owners of various parts of the networks maintain them.

## COMPUTER NETWORKS

A computer network refers to a group of computers connected to each other, so they can share information and electronic equipment. The connections are either done by cables, wireless, telephone satellite, etc. A network could be made up of two to over a million computers. The Network could be in one locality in that case we will have a Local Area Network (LAN). If it spans over a wide area then we have a Wide Area Network (WAN) eg. Bank networks, the Internet, etc.

## PROTOCOLS

A set of rules that help the different networks on the Internet communicate without conflict. The standard Internet communication protocol is called Transmission Control Protocol and Internet Protocol (TCP/IP).

## HISTORY OF INTERNET

In the 1960s, researchers began linking computers to each other through telephone hook-ups, using funds from the U.S. Defense Department's Advanced Research Projects Agency (ARPA). The internet which is a modern phenomenon became popular from the latter part of 1960s. The initial network; ARPAnet was designed to support military research and at the same time provide a measure of security against partial cable outages. It was only be used to communicate. Numerous modification to this network resulted in the development of the World Wide Web (www) in 1989. The World Wide Web made the Internet interactive and also gave it a multimedia nature (that is made it possible to host text, sound and graphics). In 1990, the Hypertext Transfer Protocol (http) was created to make possible to use international networks for web browsing.



Exponential growth since

1995: 16 million users; 1996: beginning of the Internet boom; 1998: Google launched; 1999 Microsoft conquers the browser market; 2000: the number of domain names doubles from 10 to 20 million; 2001: Wikipedia launched & 500 million users; 2003: social networking (MySpace), "web 2.0"; 2004: Firefox & Facebook; 2007: Twitter; 2008: 100 million web sites; 2009: the Internet now has 1.5 billion users and there are over 100 billion live web pages.

## ACCESSING THE INTERNET

Broadly, connection to the Internet could be grouped into two; Dial up and Broadband Access

Dial-up connection: Refers to the connection of a personal computer to the internet using dialup modems.

Broadband connection: Refers collectively to faster or high speed connections to the internet. These may be more costly options. The broadband is always on and doesn't require dialing up the internet to connect.

## TYPES OF BROADBAND CONNECTION

- Digital serial (Subscriber) line (DSL) Modern connection
- Satellite Modern connection
- Cable Modern connection
- Wireless, etc.

## BANDWIDTH

This refers to the speed with which information move from one place to the other on the Internet. It is measured in kilobytes per second (kbps). The bigger the bandwidth size, the greater the volume of information that could be transmitted at a time and so the faster it will be to move information from one place to the other on the Internet.

## BROWSERS

A browser is a software or a program that is used to navigate the Internet. Examples: Mozilla Firefox, Microsoft Internet Explorer, Netscape Navigator, Safari, Flock, Google Chrome, etc. Browsers could be used for communication and retrieval of information

NB: Without a browser you cannot be able to access the Internet

## Why effective searching?

- There are a huge number of resources online
  - Google claims it searches >4 billion web pages
- The www is not indexed/catalogue
  - So we need to formulate our searches carefully
- We need to make effective use of —Computers
  - Bandwidth
  - Time
  - Money

## What types of information are available online

- Grey literature eg. Public sector publications
- Individuals' and organizations' home pages
- Collection of subject resources
- Bibliographic database
- Electronic journals (> 20,000 full text journals)
- Online book
- Reference resource (dictionaries, encyclopaedias, etc.)
- News papers, music, magazines, etc.

## Internet Search Tools

### 1. Search engines

A search engine is an information retrieval system designed to help find information stored on a computer system (often the World Wide Web). Search engines are composed of:

- programs ("spiders" or "robots") to collect information;
- programs to index this information; and,

-databases of web sites (sources, regularly updated)

-search interface (tool)

Eg. [www.google.com](http://www.google.com), [www.bing.com](http://www.bing.com), [www.msn.com](http://www.msn.com), [www.alltheweb.com](http://www.alltheweb.com),  
[www.ask.com](http://www.ask.com), etc.

## 2. Web directories/portals (Subject gateway or Multi-subject directory)

Subject gateway or Multi-subject directory collect and categorize Internet resources (websites and Internet publications of particular interest) into several categories or disciplines. Each category contains links to subcategories, linking Web pages that contain information on broad topics. They do not search the entire internet.

NB: It is a useful guide to start with as it often provides structured overviews of resources.

Eg. [yahoo.com](http://yahoo.com), [about.com](http://about.com), [lycos.com](http://lycos.com), [intute.ac.uk](http://intute.ac.uk), [infomine.ucr.edu](http://infomine.ucr.edu), etc

## 3. Meta-search/multi-search engines

Metasearch engines, query several search engines at a time and combine the result. Example: Yippy.com generates an ordered list based on comparative ranking. This "metasearch" approach helps raise the best results to the top and push search engine spam to the bottom.

Eg. [www.yippy.com](http://www.yippy.com), [www.excite.com](http://www.excite.com), [Webcrawler.com](http://Webcrawler.com), [www.dogpile.com](http://www.dogpile.com), etc. Most have huge databases of web resources

## 4. Database

A database is a collection of structured records. Structured in such a way to permit orderly retrieval, e.g. for research, study, or administration. The records contain defined fields such as text, author, date, URL (uniform resource locator), etc.

Academic Database is a universal index of periodical literature covering basic research from all fields of knowledge. Academic Journals Database contains complete bibliographic citations, precise indexing, and informative abstracts for papers from a wide range of periodicals.

Eg. High Wire, JSTOR PubMed, Hinari, Agora, OARE, Science Direct, Emerald, Ebsco, etc

Types of databases

Bibliographic databases, Full-text databases, Numeric databases, Image databases, Audio/Video databases, and Mixed databases

Illustrations

Search for Literacy "developing country" using google.com

Consider the following:

- Search terms
- Time taken to search
- Results

Let's do the same search (Literacy "developing country") in yahoo.com

- Let's check results
- Time taken

Effective search strategy (procedure)

1. Define your information need
2. Choose your search terms
3. Decide which sources to use
4. Find out how the search tool functions
5. Run your search
6. Review and refine your search

Steps 1 -3 can be done away from the computer

1. Define your information need
  - What sort of information are you looking for? —Specific information, e.g. a fact or date

Reference source, e.g. data book, encyclopaedia, dictionary, the Web or even a textbook are usually best.

- General information, e.g. research areas

May require more thought, including how much information is needed and at what depth

- Who is going to use the information?

- Researcher? Academic? First year student?

This might affect the sort of information you require

## 2. Choose your search terms

- What unique words do you think will appear in the site/article you want?
- Are there any key phrases?
- Are there any synonyms, alternative spellings, plurals or capitals that you need to consider
- What broader topic is it a part of or related to?

Example: I want to find information about the health implications of water pollution

- Keywords-'water' 'pollution' 'health'
- Broader topics-'environmental degradation' or 'agricultural management' or 'health'
- Synonyms:

- Water: rivers, lakes, sea, coastal, 'domestic water', etc

—Pollution: 'oil spills', chemical, biological, toxicity, etc

- illness, disease, etc Alternative spellings: none Plurals: river(s), lake(s), disease(s)

Capitals: name of a specific lake, disease, region

Decide the sources to use

What sources are appropriate for your information need?

- Individuals' and organisations' home pages
- Newspapers and magazines

- Subject gateways, databases, catalogues
- Journals—titles, abstracts or full text
- Reference resources, e.g., encyclopaedias, dictionaries
- Books
- Grey literature, e.g. government publications
- Print or electronic

How the search tools function

Electronic search tools all function slightly differently and may use:

Boolean operators

Phrase searching

Case sensitivity

Truncation or wildcard functions

## BOOLEAN SEARCHING

Boolean searching is the conventional basis for searching most computerized systems, including bibliographic databases. Most search engines allow you to combine terms with words (referred to as Boolean operators) such as "and," "or," or "not." Knowing how to use these terms is very important for a successful search. Most search engines will allow you to apply the Boolean operators in an "advanced search" option.

- Uses commands (operators) such as AND, OR, NOT
- Different search tools may use different symbols AND +

NOT-

- Different search tools may use OR or AND as a default setting
- Sometimes Boolean operators must be entered in capital letters (e.g. Synergy)

OR is an operator that allows either word to be present in each record in the results. Use OR to expand your search.

Query: I would like information education or literacy

AND is an operator that requires both words to be present in each record in the results. Use AND to narrow your search.

Query: I'm interested in the relationship between education and literacy

NOT is a connector that requires the first word be present in each record in the results, but only if the record does not contain the second word.

Query: I want to see information about education, but I want to avoid seeing anything about secondary

Note: In some databases, the expressions "Must contain" or "all of these words" implies the operator AND, whereas "Any of the words" implies the operator OR.

- Phrase searching: allows you to search for an exact phrase
- Truncation/wildcards: allow you to search alternative spellings
- Case sensitivity: recognition of upper or lower cases in search terms
- Fields: searches in fields such as the title, URL or links
- Stop words: searches may ignore terms such as: and, if, an, the

#### 5. Run the search

- Take the terms/keywords you have decided on
- Find the sources you are going to search
- Read the 'Help' page to find out how that particular source uses Boolean commands, wildcards, etc
- Run the search

#### 6. Review and revise your search

- Hopefully you have found what are looking for, or at least places to start from, but
- Be prepared to review and revise your search scope and strategy
- Try new sources of information (familiarity is sometimes too easy)
- Start again near the beginning of this process if you need to

How to use a specific database?

Every database is different. Therefore, in order to search it effectively you must learn its basics. On the home page of a database you will normally find a number of very useful features that help you search in the database. Apart from the search box, these include:

- Help
- Database guide
- Advanced search, limiters, expanders, citation
- Thesaurus
- How to truncate/use wildcard and do proximity searches
- Search history for combining searches

#### Evaluating Information from the Internet

The Internet is a large electronic network which has no centralized monitor and is not regulated for reliability, authority, or accuracy. When research is conducted on the Internet for academic purpose, it's important to evaluate the credibility of the sites you visit. Critically, the author's credentials, educational background, expertise on the topic, the author's association with a credible institution, etc. are very relevant. It is therefore prudent that criteria applied in evaluating print sources of information should be applied to the Internet. Some aspects to consider are:

- **Reliability:** Examine the source by checking the URL. Is it from an educational institutions (edu), a government agency (gov), a commercial enterprise (com)? If the source is from an educational institution, is there a disclaimer saying that the institution is not responsible for the contents? Is the site a government agency? Check listed sources, contact information, available corroboration, claims supported, documentation supplied. Goal: a source that provides convincing evidence for the claims made, a source you can triangulate (find at least two other sources that support it).
- **Authority:** Is the author someone who is well known or who might be considered an authority? Examine the contents carefully to see if the author's credentials are noted.
- **Currency/Timeliness:** When was the information posted or updated? What are the inclusive dates of the information?
- **Accuracy/Completeness:** Is the information the most complete available? It is not unusual to find postings that are just excerpt or summaries of another work in a printed source. Is the information solely reflective of one individual's opinion? Is the individual bias in the writing? What is the motive of the author?



Check if the information is fair, balanced, objective, reasoned, no conflict of interest, absence of fallacies or slanted tone. Goal: a source that engages the subject thoughtfully and reasonably, concerned with the truth.

- **Relevancy:** Does the information fit your research needs? Do not let the attraction to the medium obscure the message. Simply because something is on the Internet, it is not the best source.
- **Credibility:** Trustworthy source or credibility of the institution or organization hosting the information, author's credentials, evidence of quality control, known or respected authority, organizational support. Goal: an authoritative source, a source that supplies some good evidence that allows you to trust it.

## USES AND MISUSE OF THE INTERNET

There are several uses and misuse of the Internet

### Uses/Advantages

- **Communication**

The foremost target of Internet has always been the communication. And Internet has excelled beyond the expectations. Still; innovations are going on to make it faster, more reliable. Some of the means by which we can use the Internet to communicate now are: Electronic mail (Email), mailing list, chatting, blogging, video conferencing, facebook, etc.

### Information dissemination

Information is probably the biggest advantage the internet is offering. The Internet is a virtual treasure trove of information. There is a huge amount of information available on the internet for just about every subject known to man, ranging from government law and services, trade fairs and conferences, market information, new ideas and technical support, the list is endless.

- **Education/Research**

Students use the Internet for research for the purpose of gathering resources. Teachers have started giving assignments that require research on the Internet. Almost every coming day, researches on medical issues become much easier to locate.

- **Entertainment**

Entertainment is another popular reason why many people prefer to surf the Internet. Downloading games, visiting chat rooms or just surfing the Web are some of the uses people have discovered. There are numerous games that may be downloaded from the

Internet for free. When people surf the Web, there are numerous things that can be found. Music, hobbies, news and more can be found and shared on the Internet.

- Services

Many services are now provided on the internet such as: online banking, job seeking, purchasing tickets for your favorite movies, guidance services on array of topics, hotel reservations, etc.

- E-Commerce

Ecommerce is the concept used for any type of commercial maneuvering, or business deals that involves the transfer of information across the globe via Internet. It has become a phenomenon associated with any kind of shopping, almost anything. It has got a real amazing and wide range of products from household needs, technology to entertainment.

Misuse/Disadvantage

- Pornography:

This is perhaps the biggest threat related to healthy mental life. There are thousands of pornographic sites on the Internet that can be easily found and can be a detrimental factor to use the Internet.

- Identity Theft/Fraud

If you use the Internet, you may be facing grave danger as your personal information such as name, address, credit card number; email password etc. can be accessed by other culprits to cause you problems.

Spamming

Spamming refers to sending of unwanted e-mails in bulk, which provide no purpose and needlessly obstruct the entire system. Such illegal activities can be very frustrating and so instead of just ignoring it, you should make an effort to try and stop these activities.

Virus Threat

Virus is a program which disrupts the normal functioning of your computer systems.

Computers attached to Internet are more prone to virus attacks and they can end up into crashing your whole hard disk destroying very important files.

**\*KNOWLEDGE IS POWER \***