

## **COURSE GUIDE**

### **LIS 103 INTRODUCTION TO LIBRARY AND INFORMATION WORK**

#### **Course Team**

Dr. Aliyu Abdulkadir- (Course Writer)  
Dr. Nkata Kalu- (Content Editor(S))  
Dr. Nkata Kalu- (Copy Editors)



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

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National Open University of Nigeria  
Headquarters  
University Village  
Plot 91, Cadastral Zone  
Nnamdi Azikiwe Expressway  
Jabi, Abuja

Lagos Office  
14/16 Ahmadu Bello Way  
Victoria Island, Lagos

E-mail : [centralinfo@nou.edu.ng](mailto:centralinfo@nou.edu.ng)  
URL: [www.nou.edu.ng](http://www.nou.edu.ng)

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## INTRODUCTION

Welcome to **LIS 103: Introduction to Library and Information Work**. This Course Guide is a brief description of what the course is about and the course material will give you the contents of what you are expected to learn in this course. It also contains some general guidelines on the amount of time you are expected to spend on each unit of this course in order to successfully complete the course. There is a separate Assignment File which contains detailed information on tutor-marked assignments that you are expected to answer at the completion of each unit.

## WHAT YOU WILL LEARN IN THIS COURSE

Definition of concepts, the origin and background of man; intellectual history; foundation and development of information transfer in ancient period, the middle ages or medieval period; the renaissance period; the enlightenment and age of reasoning; the information age; information society; Importance of libraries and information in the educational and learning process; Types of libraries and information centres; the information worker; social issues relating to libraries & information Centres; information institutions and organizations; information networking; role of professional association and bodies in the transfer of information; professional qualities and advancement of information worker etc.

## COURSE AIMS

The aim of this course is to expose you to Library and Information Work as agent of information transfer in Library and Information Services. This will be achieved by

- Introducing you to the concepts in Library and Information Work.
- Outlining the origin and background of man towards the development of tools and language
- Clarifying some basic concepts in the foundation and development of information transfer from the ancient, the middle ages or medieval and to the renaissance era
- Outlining the importance of library and information centre in educational processes.
- Outlining the importance of Information institutions and Organisations to library operations

## COURSE OBJECTIVES

To achieve the above aims, some general objectives are set for the course. The course is divided into units and each unit has specific objective at the

beginning. You may want to refer to them during and after you might have completed a unit to check the pace of your progress. The general objectives set below cover the whole course. By meeting these objectives, you should have achieved the aims of the course.

On successful completion of the course, you should be able to:

- Define and explain what a library is
- Clarify the following terms/concepts: Information transfer, information worker, intellectual history, intelligence, ancient era, middle ages, renaissance ages, age of enlightenment, information age, information society, information institution and organisations etc.
- Describe the Historical Development of man and the stages of information transfer
- Describe the intellectual history and intelligence and factors effecting man's intelligence.
- Identify different type of libraries and its importance to educational processes and information dissemination
- Outline the role of information institutions and organisational professional associations/bodies in information transfer
- Describe information networking as well as information and knowledge worker in information transfer

## **WORKING THROUGH THE COURSE**

To complete this course, you are advised to read each study unit of this study material and read other materials, which may be provided by the National Open University of Nigeria (NOUN). Self-assessment exercises are included in each unit and you will be required to submit tutor-marked assignments for assignment purposes. There will be a final examination at the end of the course. The course will last for 22 weeks. The course will be divided into learnable units and you can allocate your own time to the units so that you can complete the course at a record time. You are advised to utilize the opportunity of tutorial sessions for comparing notes and sharing ideas with your colleagues.

## **COURSE MATERIALS**

Major components of the course are:

- The Course Guide
- Study Units
- Assignments
- References /Further Reading
- Presentation Schedule

## **STUDY UNITS**

There are 19 study units divided into five modules in this course. The modules and units are presented as follows:

### **MODULE 1      FUNDAMENTAL CONCEPTS**

- Unit 1:      Library
- Unit 2:      The Origin of Man
- Unit 3:      History of Information Creation
- Unit 4      Development of Tools and Language

### **MODULE 2      THE BACKGROUND OF HUMAN INTELLIGENCE**

- Unit 1:      Intellectual Background and Philosophy:
- Unit 2:      Intellectual History
- Unit 3:      Human Intelligence

### **MODULE 3      HISTORY AND FOUNDATION AND DEVELOPMENT OF INFORMATION**

- Unit 1:      Ancient Period
- Unit 2:      The Middle or Medieval Period
- Unit 3:      The Renaissance Period
- Unit 4:      The Enlightenment Era/ Age of Reasoning

### **MODULE 4      THE INFORMATION AGE AND INFORMATION SOCIETY**

- Unit 1:      Information Age
- Unit 2:      Information Society; Origin, Cause and Characteristics
- Unit 3:      Information networking

Unit 4: Information transfer and the role professional bodies/association

## **MODULE 5 LIBRARIES AND INFORMATION IN THE EDUCATIONAL AND LEARNING PROCESS**

Unit 1: Importance of Library in Learning Process and professional Quality of information worker

Unit 2: Types of Libraries

Unit 3: Social Issues in Information Centres

Unit 4 : Information worker, institutions and organizations

Each unit consists of table of contents, introduction, learning outcomes, main content summary, possible answers to self-assessment exercises as well as references/further studies/web resources. There are activities at every point that will assist you in achieving the stated objectives of the individual units of this course.

### **PRESENTATION SCHEDULE**

Your course materials will spell out the important dates for early and timely completion and submission of your Tutor-Marked Assignments and for attending tutorials. You should bear it in mind that assignments should be submitted at the stipulated time and date. Make sure you do not lag behind in your work.

### **ASSIGNMENT FILE**

There are at least twenty-one assignments in this course, that is, at least one assignment per unit. The assignment file contains all the works you are to submit to your tutor/facilitator for marking. Your assignments are as important as your examinations and they carry 30% of the scores earmarked for the course.

### **ASSESSMENT**

Assessment method will be two-folds. These are assignments and written examination. The course materials are prepared to assist you to do the assignments. You are expected to utilize the information and knowledge from the recommended texts at the end of each unit. The assignments will carry 30% of the total marks while the final examination of about three hours duration will be written at the end of the course and this will carry 70%.

## **TUTOR-MARKED ASSIGNMENT (TMA)**

The Tutor-Marked Assignment is a continuous assessment component of your course and it accounts for 30% of the total score. You are required to submit at least three (3) TMAs before you are allowed to sit for the end of course examination. Your facilitator will give you the TMAs and you are expected to return same to him/her as and when due.

Your assignment file contains the assignment questions for the units in this course. The information and materials contained in your reading, study units and references will assist you in completing your assignments. You should demonstrate that you have adequate knowledge of the materials read and that you have equally made further research into other references, which will give you a wider viewpoint as well as provide you a deeper understanding of the subject.

Ensure that each tutor-marked assignment reaches your facilitator on or before the deadline stated in the presentation schedule and assignment file. In case of any unforeseen circumstances that may hinder you from submitting your assignment before the due date, contact your facilitator before the assignment is due to discuss the possibility of an extension. Extension will not be granted after the due date.

## **FINAL EXAMINATION AND GRADING**

The final examination for LIS 103 is about three hour's duration and it has a value of 70% of the total marks. The examination questions will reflect the type of self -testing, practice activities and tutor-marked assignments/problems that have previously been encountered in the course. All areas of the course will be assessed.

You could form a discussion group with a considerable number of your colleagues and practice or discuss the activities and assignment written in each unit before the examination period.

## **COURSE MARKING SCHEME**

<b>Assessment</b>	<b>Marks</b>
Assignment 1-21 (best 3 out of all the assignment submitted)	Three assignment marked, each 10% totalling 30%
Final Examination	70% of Overall Course Score
Total	100% of Course Score



## HOW TO GET THE MOST FROM THIS COURSE

- In distance learning, the study units replace the university lecturer. The advantage is that you can read and work through the course materials at your pace, time and location or environment that suits you best. Think of it as reading the lecture instead of listening to the lecturer. Just as the lecturer might give you in-class exercise, this study unit provide appropriate exercises that will keep you abreast the pace of your progress in the course.
- Each study unit is designed in peculiar format that will facilitate your learning. It starts with an introduction to the subject-matter of the unit and how a particular unit is integrated with the other units and the course as a whole. This is followed by the objectives. These objectives will let you know what you should be able to do by the time you have completed the unit. Use the objectives to assess your progress at the end of every unit.
- The main body of the unit will serve as a roadmap that will guide you through the required reading from other sources. This is usually from either your references or from a reading section.
- Self-activities are entrenched throughout the units and going through them religiously will help you to achieve the objectives of the unit and prepare you for the assignment and examination. Equally, go through each self-activity as you come across it in the study unit.
- You can follow this practical strategy for working through the course. In case you run into problem, do not hesitate to telephone your tutor/facilitator or visit the study centre nearest to you. Note that your tutor/facilitator's job is to help you. When you need assistance, do not hesitate to call and ask your tutor/facilitator to provide it.

## READ THIS COURSE GUIDE THOROUGHLY, IT IS YOUR FIRST ASSIGNMENT.

- Organize a Study Schedule - Design a 'course overview' to guide you through the course. Take note of the duration of every unit and the assignment related to it. Keep a diary of important information, e. g., details of your tutorials, duration of a semester, when you are to submit your assignment, etc. Map out your own schedule of work for each unit.

- Once you have mapped out your study schedule, follow it religiously and stay focused. A major cause of failure is not keeping abreast with the schedule of work. If you get into any difficulty concerning your study, inform your tutor/facilitator on time.
- Read the introduction and objectives of every unit before working through it.
- Assemble the study materials. Information about what you need is given at the beginning of each unit. You will always need both the study unit you are working on and one of your textbooks on your desk at the same time.
- Study critically the course information that will be continuously posted to you and do not fail to visit your Study Centre for up-to-date information.
- Before the due dates (at least 4 weeks before the dates), visit your Study Centre for your next required assignment. Be assured that you will learn a lot by doing your assignment meet the objectives of the course and will definitely help you to pass your examination. Make sure your assignments are submitted not later than the due dates.
- A revision of each study unit objectives will assist you to confirm whether you have achieved them. In case you are not sure whether you have achieved the objectives, review the study materials or consult your tutor/ facilitator. When you are sure that you have achieved the unit's objectives, you can proceed to the next unit. Go through the course unit by unit and ensure that you space your study in a manner that you can keep to the schedule.
- Do not wait till your tutor return the submitted assignment before you proceed to the next unit. Keep to your schedule. When your assignment is returned, take note of your tutor's comments, both on the tutor-marked assignment form and also the written comments on the assignment. Consult your tutor/facilitator if you have any problem or questions.
- After completing the last unit, review the course and get prepared for the final examination. Ensure that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed on the Course Guide).

## **FACILITATION/TUTOR AND TUTORIALS**

Facilitation/Tutorials shall be provided in support of this course. You will be notified of the dates, times and locations of these tutorials as well as the names and phone number of your facilitator, as soon as you are allocated a tutorial group.

Your tutor/facilitator will mark and comment on your assignment, keep close watch on your progress, on any difficulties you might encounter and provide assistance to you during the course. Ensure that you submit your tutor-marked assignments to your facilitator before the due date; at least two working days are required. Your assignments will be marked and returned to you as soon as possible. You can contact your facilitator on telephone, e-mail and discuss your problems whenever you need assistance. You may need to contact your facilitator if:

- you do not understand any part of the study or assigned readings.
- you have difficulty with the self-tests or activities.
- you have a question or problem with an assignment, with your tutor's comments or with the grading of an assignment.

Make it a point of duty to attend your tutorials regularly. This will afford you the opportunity of face-to-face contact with your course facilitator and to ask questions which are instantly answered. You can equally discuss any problem encountered in the course of your study. For maximum benefit from course tutorials, you can prepare a question list before attending them. You will learn a lot from participating in active discussion.

## **SUMMARY**

This course will bring you the method of information creation and transfer from ages to ages, the importance of library in educational process and in information transfer/dissemination as well as the role of information workers and information association in information age. At the end of the course you will achieve the objective if you follow the instructions and do what you are expected to do.

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## **MODULE 1      FUNDAMENTAL CONCEPTS**

### **Introduction**

This module takes into account the various concepts related to Library and Information Work. It attempts to define their relevance, characteristics and utility in information system and society.

- Unit 1            Library
- Unit 2:          The Origin of Man
- Unit 3:          History of Information Creation
- Unit 4            Development of Tools and Language

## **UNIT 1      LIBRARY**

### **Unit Structure**

- 1.1    Introduction
- 1.2    Learning Outcomes
- 1.3    The Library
- 1.4    Forms of Libraries
  - 1.4.1   Public library
  - 1.4.2   Academic Library
  - 1.4.3   Special Library
  - 1.4.4   Private Library
  - 1.4.5   Virtual Library
  - 1.4.6   National Library
- 1.5    Summary
- 1.6    References/Further Readings/Web Resources
- 1.7    Possible Answers to Self-Assessment Exercise



### **1.1    Introduction**

In this unit, we will discuss the concept of library, its forms and the preliminaries concerning the library. Library originates from the Latin word “liber” which stands for BOOK. Earlier a library was “a place where books were written or kept”. This term was commonly used as a “collection of books” and a librarian as a keeper or safe guarder of books. This word has taken centuries to become central point of all social actions and has got recognition as a social institution.



## 1.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the meaning of library
- evaluate the forms of libraries



## 1.3 The Library

Traditionally, a library is defined as physical space (house) emphasizing physical (print) collections. Importance is on storage and preservation of physical items particularly books and periodicals. Information is physically gathered in one place and users must visit the library to use the resources. However, the introduction of ICT, which brought about the introduction of new formats of information, has given the concept of library a new definition. It is now defined as: A place where information resources are accessed and information services are provided by professionals who specialize in identifying, collecting, organizing, processing information sources as well as interpreting information needs.

*Figure 1*



### SELF-ASSESSMENT EXERCISE (SAE) 1

- |  |
|--|
| <ul style="list-style-type: none"><li>• Define the new concept of the library</li><li>• Define the traditional library</li></ul> |
|--|

## 1.4 Forms of Libraries

Different forms of libraries will be discussed in this section. There are different types of libraries and each perform a task which is different from the other.

**1.4.1 Public library:** Definition of a Public Library as a non-profit library established for the use of the general public and maintained chiefly by public funds. In other words, a public library is for the public, by the public and of the public. It provides service to every citizen irrespective of one's birth, caste, colour, gender, social, economic and educational standard without any cost. Libraries of all categories are generally used for five purposes, i.e., education, information, recreation, aesthetic appreciation and research. It facilitates informal self-education of all people in the community

**1.4.2 Academic Library:** Academic Library primary objective is to meet the academic needs of the particular institution for which it is created to serve. Academic libraries comprise of school libraries, college libraries, and university libraries whose prime objective is to meet the academic needs of the particular institution for which it is meant to serve. It serves the needs of the academic community.

**1.4.3 Special Library:** Special library is a collection of books and other printed, graphic or recorded material dealing with a limited field of knowledge and provided by a learned society, research organization, industrial or commercial undertaking, government department or even an educational institution. It may also be a special branch of a public library serving certain interests or occupational groups such as a technical library or a special subject library, meeting the needs of all enquiries on that given subject such as music library.

**1.4.4 Private Libraries:** Private libraries are libraries established, owned and funded by individuals or families. The collections could be single or multi-discipline. Therefore, the size of the collection is mostly small based on the owner's research and reading interest. For instance, a private library owned by a lawyer is highly dominated by law materials (books) and serials.

**1.4.5 Virtual Libraries:** The Association of Research libraries (ASL) in a publication described digital collections as unlimited access to document surrogates: they extend to digital artifacts that cannot be represented or distributed in printed formats. Online Glossary defined digital library as a collection of texts, images, etc, encoded so as to be stored, retrieved, and read by computer. Furthermore, a digital library is a collection of documents in organized electronic form, available on the Internet or on CD ROM disks. It is the traditional/conventional physical



library that provides a basis for the digital library. Another further development from the digital library is the advent of Virtual Library (VL).

Figure 2



Virtual library

## SELF-ASSESSMENT EXERCISE 2

- What is the prime objective of an academic library?
- Which of these set of people established, owned and funded private libraries?
- Government
- Non-Governmental Organisation(NGO)
- Private individuals
- Tertiary institutions

### 1.4.6 National library

National Library is a library maintained out of government funds and serves the nation as a whole. The books are mainly for reference. They usually receive material through legal deposit legislation. The function of such a library is to collect and preserve for posterity all the published records viz. books, periodicals, newspapers and other printed and multimedia material of the country's cultural heritage. National libraries collect and preserve the nation's literature. Most national libraries receive, by legal right (or copyright, or deposit), free copies of each book and periodical printed in the country. It provides leadership among the nation's libraries.

## SELF-ASSESSMENT EXERCISE 3

- What is National Library?
- Who maintain and fund the National Library?



### 1.5 Summary

Now that you read through this unit, you ought to have grasped the understanding of what library is all about, how library was conceived in the past and its present notion. In the past library is seen as a physical space with physical collections. Now it is seen as a place where information resources are accessed and information services are rendered by professionals.



### 1.6 References/Further Reading

Day, A. (1994). *The New British Library*. London: Library Association Publishing. XII,

Aina, R. F. (2011). *Foundation of Information Studies*. Lagos: Emaphine Reprographics Ltd.



## **1.7 Possible Answers to Self-Assessment Exercise (SAE)**

**1**

### **SELF-ASSESSMENT EXERCISE 1**

- A place where information resources are accessed and information services are provided by professionals who specialize in identifying, collecting, organizing, processing information sources as well as interpreting information needs.
- A physical space (house) emphasizing physical (print) collections.

### **SELF-ASSESSMENT EXERCISE 2**

- Prime objective is to meet the academic needs of the particular institution for which it is meant to serve.
- Private individuals

### **SELF-ASSESSMENT EXERCISE 3**

- National library is a library a government library that collect and preserve the nation's literature through legal right (or copyright, or deposit) of books or periodicals printed in the country The Government.

## UNIT 2 THE ORIGIN OF MAN

### Unit Structure

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 Origin of Man
- 2.4 Summary
- 2.5 References/Further Readings/Web Resources
- 2.6 Possible Answers to Self-Assessment Exercise(s)



### 2.1 Introduction

In this unit you will learn the traces of the background and origin of an early man. You will also look at archeological evidences spanning 3.5 million years ago, from hunter-gatherer to nomadic and finally settled lifestyle. Our genus, Homo, which originated about 2.5 million years ago was discussed, its earliest known species was Homo habilis which is the only surviving species in genus Homo. In the course of development there was genetic change leading to the materialization of language (speech) and developments of tools, which involved a radical improvement in man's ability to learn and innovate.

Our genus, Homo, originated about 2.5 million years ago, and its earliest known species was Homo habilis. As all species of Australopithecus lived in Africa, Homo habilis must have originated there; and indeed, fossil remains of Homo habilis have been found only in East Africa.



### 2.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the origin man



### 2.3 Origin of Man

Modern human" refers to the existence of hunter-gatherers, of which even today some small numbers have remained. Based on archeological proof, humans living 100,000 years ago were in fact still largely inept at hunting. They were certainly unable to take down large and dangerous animals, and it appears that they did not know how to fish. The "modern humans"

led a nomadic hunter-gatherer lifestyle. Societies were made up of small bands of people (10–30), which intermittently met and formed a common genetic team of about 150 and may be up to 500 people (a size which geneticists have found to be necessary in order to avoid dysgenic effects). The division of work was limited, with the main partition being that between women acting mostly as gatherers and men acting mostly as hunters.

While private possessions of tools and implements was known and recognized, the nomadic lifestyle only allowed for little possessions and hence made hunter-gatherer societies comparatively egalitarian. Nonetheless, life initially appears to have been good for our descendants. Only a few hours of regular work allowed for a comfortable life, with good (high protein) nourishment and plenty of leisure time. Indeed, fossil findings (skeletons and teeth) seem to indicate that our hunter-gatherer forebears enjoyed a life expectancy of well above 30 years, which was only reached again in the course of the nineteenth century. Their life was anything but nasty, brutish, and short.

Zoologists classify our species as part of the genus *Homo*, which in turn is part of the hominid family. The hominid family once included another genus (now extinct) called *Australopithecus*. One species within that genus was *Australopithecus afarensis*, which lived in East Africa about 3.5 million years ago, and from which the entire genus *Homo* is believed to be descended. We are the only surviving species in genus *Homo* (indeed, in the entire hominid family), and our closest living relatives are the chimpanzees. Chimpanzees are not hominids, but belong to another family, the pongids (or great apes). The last common ancestor of chimpanzees and human beings probably lived about 5 million years ago. The exact evolutionary sequence leading to *Homo sapiens* is still disputed, but a common view is that we derive from *Homo erectus*, which derived from *Homo habilis*, which in turn derived from *Australopithecus afarensis*. Adult members of *Australopithecus afarensis* were considerably smaller than we are. Their normal height was about 3'6" (1.1 meters), and their average weight about 110 pounds (50 kg). They walked erect, but their brains were much smaller than ours, characteristically only about 450 cc (cubic centimeters). This is about the same size as that of an average chimpanzee, but only one-third that of a modern human. However, as they were considerably smaller than chimpanzees, their encephalization (i.e., the ratio of brain weight to body weight) was much higher, and they were probably a good deal smarter. Our genus, *Homo*, originated about 2.5 million years ago, and its earliest known species was *Homo habilis*.

As all species of *Australopithecus* lived in Africa, *Homo habilis* must have originated there; and indeed, fossil remains of *Homo habilis* have

been found only in East Africa. Although there were several anatomical differences between *Homo habilis* and *Australopithecus*, the most important one involved brain size. The brains of *Homo habilis* averaged about 650 cc in size approximately fifty percent larger than those of *Australopithecus*, although only about half the size of ours. The increase in brain size was accompanied by a significant behavioral change: They developed techniques for making stone tools.

Although the tools they produced were very crude, it was an important advance. (That early type of tools is called Oldowan, after Olduvai Gorge in modern Tanzania, where many of the remains of *Homo habilis* have been found.) About 1.8 million years ago a new species, *Homo erectus*, arose in East Africa. The brains of *Homo erectus* were much larger than those of *Homo habilis*, and for adults averaged about 1000 cc. Indeed, the largest *Homo erectus* brains lie within the range of our own species, although far below the human average.

*Figure 5*



Once again, the increased brain power of the new species was accompanied by behavioral changes, at least three of which are remarkable. To begin with, *Homo erectus* was the first hominid to spread out of Africa into Asia and Europe. They reached Central Asia at least 1.5 million years ago, and must have entered the Middle East even earlier.

Remains of *Homo erectus* have been found in northern China, and as far East as Java. Indeed, the first *Homo erectus* skull ever discovered was found in central Java in 1891; and for a while, the species was called “Java Man” or *Pithecanthropus erectus*. That skull might be about a million years old, and it therefore predates the earliest specimens of *Homo erectus* found in Europe. In the second place, *Homo erectus* was the first of our ancestors to use and maintain fires. This advance was made at least 1.6 million years ago.

Most primates lack the anatomical and physiological features necessary to survive cold winters, and with the exception of those in genus *Homo* they are only found in tropical regions. It seems likely, therefore, that it was only due to its mastery of fire that *Homo erectus* was able to move into such regions as Central Asia, northern China, and Europe. Thirdly, *Homo erectus* created a new set of tools, better and more varied than any produced by *Homo habilis*. This enhanced toolkit is often called Acheulian, after the site in France where samples of it were first found.

Because of the higher intelligence of the new species, and the advances resulting from it, *Homo erectus* eventually supplanted all earlier hominid species, and by one million BC those earlier species had become extinct. A similar fortune was to befall *Homo erectus* after *Homo sapiens* arose.

### SELF-ASSESSMENT EXERCISE (SAE) 1

- How was the division of work organised during early stage of life?
- The *Homo* .....was the first to use and maintain fires?



## 2.4 Summary

Now that you read through this unit, you ought to have grasped the understanding of how man originated according to archeological and zoological views, different human species, and families, their features and characteristics. *Homo habilis* the earliest known human species originated about 2.5 million years ago. The evolutionary sequence leading to *Homo sapiens* is still disputed



## 2.5 References/Further Reading/Web Resource

Gardner, H. (1983). *Frames of mind: the theory of multiple intelligences*.

New York: Basic Books

Steven (1994), *The Language Instinct*,

The Human History Documentary 2018

Video <https://www.youtube.com/watch?v=1qnjsOG84DE>



## 2.6 Possible Answers to Self-Assessment Exercise(s)

### Self-Assessment Exercise (SAE) 1

1. The division of work was limited, with the main partition being that between women acting mostly as gatherers and men acting mostly as hunters
2. Homo **erectus** was the first of our ancestors to use and maintain fires.



## UNIT 3 HISTORY OF INFORMATION CREATION

### Unit Structure

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 The concept of information transfer
- 3.4 History of Information Creation
  - 3.4.1 Early Age
  - 3.4.2 Middle age
- 3.5 Invention of Printing Press
- 3.6 Summary
- 3.7 References/Further Readings/Web Resources
- 3.8 Possible Answers to Self-Assessment Exercise(s)



### 3.1 Introduction

*This unit will introduce you to the concept of information creation. By definition information creation is the process by which knowledge is created, produced, disseminated, organized, diffused, utilized, preserved, and destroyed.*



### 3.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the concept of information
- analyse the history of information creation



### 3.3 The Concept Of Information Transfer

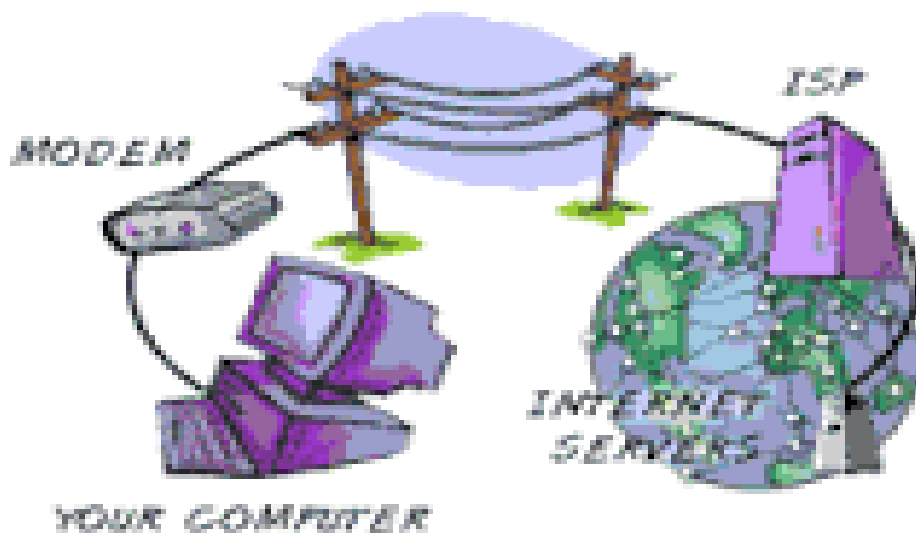
It is ideal you understand the concept of information transfer as a library student. Though several schools of thoughts have different definition, but there are concept that is central to all, which is creation, storage and dissemination of information. According to Turunen (2010) information transfer as the transferring of information between individuals even if the information is momentarily stored into a database, repository or memo of some kind.

The information can be transferred between individuals face-to-face (so called face-time) or by various types of networks and communication

devices (phone, video conferencing, etc.), thus relying on ICT infrastructure as an enabler. Gogoi (2011) views information transfer cycle as the process of creation, collection, storage, dissemination and retrieval of information. It refers to how information is transferred to the users from its sources.

Syam and Sangkala (2014) states that information transfer is an activity that reproduces either from a full linguistic form into diagrammatic or semi diagrammatic form, or vice versa during the transfer activity, the information remains the same, but the form of information changes for instance, from nonlinguistic form to linguistic form. Information transfer involves getting people to put ideas and wants, spoken or written into another form, such as a texts, chart, grid, picture, table or diagram – or vice-versa.

*Figure 3*



*Information transfer*

### **SELF-ASSESSMENT EXERCISE 1**

- Define information transfer according to Turunen (2010)
- Define information transfer in your own language

## **3.4 History Of Information Creation**

**3.4.1 Early age:** The early years started from 3500 BC and ended in 1099 AD. The very first kind of communication instrument appeared in the form of pictographs written on clay tablets. In 1800 BC, China was using smoke signals, three hundred years later, Phoenicians introduced the alphabet. In 1400 BC, the oldest writing in China was found it was written on bones. 500 hundred years later, China organized a postal service system which was only used for the needs of the government. In around 350 BC, a military Greek scientist and cryptographer invented an

optical system for communication similar to the telegraph: the water-clocks.

**Figure 4**



### Early writing

**3.4.2 Middle Ages:** The early and Middle Ages actually started from 1100 AD and ended in 1399 AD. These ages began with the development of stitched books by the Chinese in about 1116 AD. The late middle ages started from 1400 AD and ended in 1599 AD. At the beginning of this age, the Europeans started the method of block printing which was first founded by the Chinese.

### SELF-ASSESSMENT EXERCISE 2

- The early years started from 3500 BC and ended in ..... AD.
- 1100
- 1900
- 1099
- 1999
- Who started the method of block printing
- Chinese
- Africans
- Europeans
- Nigerians

### 3.5 Invention Of Printing Press

Johann Gutenberg (c. 1400-1468) came out with one of most important inventions in human history. Gutenberg's invention of movable type made possible the spread of humanistic literature to rest of Europe with astonishing speed. The Renaissance, which began in Italy and eventually

spread to other parts of Europe, is usually said to have lasted from about 1400 to 1650.

### SELF-ASSESSMENT EXERCISE 3

- Between 1400-1468..... invented movable type made possible the spread of humanistic literature
- Renaissance era lasted from.....to 1650



### 3.6 Summary

Now that you've read through this unit you ought to have grasped the meaning of *Information transfer*, know how *Information is transferred or communicated* at Ancient Period, the middle Ages or Medieval Period, and the Renaissance Period. *Information transfer* is the process by which knowledge is created, organized, retrieved, preserved etc. The very first kind of communication devices appeared in the form of pictographs written on clay tablets. Middle ages began with the invention of stitched books by the Chinese at about 1116 AD. Gutenberg's development of movable type made possible the spread of literature to rest of Europe with astonishing speed.



### 3.7 References/Further Reading/Web Resources

Irving, F. (ND) *Timeline of Communication History*. The University of Minnesota –the school of journalism).

The History of Communication Technology by James Parker Doyle

Turunen, T. (2010). Communication, information transfer and role-shift in a challenging public safety & security field operation. Retrieved from <https://core.ac.uk>

Gogoi, H. (2011). What is information transfer cycle?

Onobrakpor, U. D. (2019) Information transfer in libraries and information centers: Role of communication. *Information Impact: Journal of Information and Knowledge Management*, Vol.10 (2), Dec., 2019. Accessed from <file:///C:/Users/pc/Downloads/192891-Article%20Text-488781-1-10-20200205.pdf>

Syam, U & Sangkala, I. (2014) Information transfer technique in teaching writing. *Exposure Journal* (3).  
Doi.10.26618/ejpbi.v3i1.800.



### **3.8 Possible Answers to Self-Assessment Exercise(S)**

#### **SELF-ASSESSMENT EXERCISE 1**

- The transferring of information between individuals even if the information is momentarily stored into a database, repository or memo of some kind.
- .....

#### **SELF-ASSESSMENT EXERCISE 2**

- C 1099
- C Europeans

#### **SELF-ASSESSMENT EXERCISE 3**

- Johann Gutenberg
- 1400

**UNIT 4: DEVELOPMENT OF TOOLS AND LANGUAGE****Unit Structure**

- 4.1 Introduction
- 4.2 Learning Outcomes
- 4.3 Development of tools
  - 4.3.1 Development of Language
  - 4.3.2 Significance of language
- 4.4 Summary
- 4.5 References/Further Readings/Web Resources
- 4.6 Possible Answers to Self-Assessment Exercise

**4.1 Introduction**

The last unit introduced you to the origin of man, in this unit you will learn that in the course of human history and prehistory there have been many inventions of great importance, including agriculture, metalworking, printing, firearms, antibiotics, and computers. But none of those was nearly as important as the invention of speech. It is speech syntactic language that truly separates us from all other animals.

**4.2 Learning Outcomes**

By the end of this unit, you should be able to:

- discuss the development of tools by early Man
- analyse the relationship between language and tools

**4.3 Development of Tool**

Homo tools were almost completely made of stone and wood and made of materials of local origin, indicating the absence of any distance travel or trading. In distinct contrast, about 50,000 years later the human toolkit took on a new, greatly superior look. Other materials were used besides stone and wood: bone, antler, ivory, teeth, shells, and the materials often came from distant places. The tools, including knives, needles, barbed points, pins, borers and blades were more complex and skillfully crafted.

The missile technology was much improved and indicated highly advanced hunting skills (although bows were invented only about 20,000 years ago). As well, man knew how to fish and was apparently able to

build boats. Moreover, next to plain, functional tools, seemingly purely artistic implements: ornaments, figurines and musical instruments, such as bird-bone flutes, appeared on the scene at this time.

### SELF-ASSESSMENT EXERCISE 1

- Homo tools were almost completely made of stone and wood.  
List four other tools discussed
- Homo were made of which origin?
- Aborigines
- foreign
- Local
- Time

*Figure 6*



*Early tools*

#### 4.3.1 Development of Language

It has been hypothesized that what made this significant development feasible was a genetic change leading to the emergence of language, which involved a far-reaching improvement in man's ability to learn and innovate. The archaic humans homoergaster, homo neanderthalensis, homo erectus did not have command of a language.

To be sure, it can be safely assumed that they employed, as do many of the higher animals, the two so-called lower functions of language: the expressive or symptomatic function and the trigger or signal function. However, they were apparently unable of performing the two higher, cognitive functions of language: the descriptive and especially the argumentative function.

These unique human abilities so uniquely human indeed that one cannot take them 'away' from our existence without falling into internal



contradictions of forming simple descriptive statements (propositions) such as “this (subject) is ‘a’ (predicate),” which claim to be true, and especially of presenting arguments (chains of propositions) such as “this is ‘a’; every ‘a’ is ‘b’; hence, this is ‘b’,” which claim to be valid, emerged apparently only about 50,000 years ago.

### 4.3.2 Significance of Language

Without language, human coordination had to occur via instincts, of which humans possess very few, or by means of physical direction or manipulation; and learning had to be either through imitation or by means of internal (implicit) inferences. In distinct contrast, with language that is with words: sounds associated with and logically tied to certain objects and concepts (characteristics) coordination could be achieved by mere symbols; and learning thus became independent of sense impressions (observations) and inferences could be made externally (explicitly) and hence became inter-subjectively reproducible and controllable.

That is, by means of language knowledge could be transmitted to distant places and times (it was no longer tied to perception); one could communicate about matters (knowledge acquired and accumulated) far away in time and place. And because our reasoning process, our train of thought leading us to certain inferences and conclusions became ‘objectified’ in external, inter-subjectively ascertainable arguments it could not only be easily transferred through time and space but at the same time be publicly criticized, improved, and corrected. It is no wonder, then, that hand in hand with the emergence of language revolutionary changes in technology would come about.

**Figure 7**



*Development of language*

Two major differences between hominids and pongids are: hominids are fully adapted to bipedal locomotion; and they have much larger brains. The purpose of our large brain size is clear enough: it enables us to have high intelligence. Otherwise, our large brains which are metabolically very expensive would never have evolved. Among the extinct species within our genus are *Homo habilis* and *Homo erectus*. (The official name of a species consists of two words, the first being the genus to which it belongs.)

## SELF-ASSESSMENT EXERCISE 2

- Without language, human coordination had to occur via .....?
- By which means could knowledge be transmitted to distant places and times?



### 4.4 Summary

By now you should be knowledgeable about the language development of *Homo habilis* and his early tools. Humans' *homo ergaster*, *homo neanderthalensis*, and *homo erectus* did not have command of a language. *Homo* tools were almost exclusively made of stone and wood and made of materials of local origin



### 4.5 References/Further Reading/Web Resources

Deacon, T.W. (1997) *The symbolic species. The evolution of language and the human brain* (London: Allen Lane, 1997)

Dobzhansky, T. (1937). *Genetics and the Origin of Species* (New York: Columbia University Press, 1982)



#### **4.6 Possible Answer to Self-Assessment Exercise**

**SELF-ASSESSMENT EXERCISE 1**

- Bone, antler, ivory, teeth, shells
- C, Local origin

**SELF-ASSESSMENT EXERCISE 2**

- Instinct
- Language

## **MODULE 2      THE BACKGROUND OF HUMAN INTELLIGENCE**

### **Introduction**

The last module traced the background and origin of an early man. It looked at archeological evidences spanning 3.5 million years ago, from hunter-gatherer to nomadic and finally settled lifestyle. It also takes into account of development of tools and language and the various concepts related to it. This module will attempt to explain the concepts of Intelligence, Intellectual History, and Intellectual History and Philosophy

Unit 1 Intellectual Background and Philosophy:

Unit 2 Intellectual History

Unit 3 Human Intelligence

## **UNIT 1      INTELLECTUAL HISTORY AND PHILOSOPHY**

### **Unit Structure**

- 1.1 Introduction
- 1.2 Learning Outcomes
- 1.3 Intellectual History and Philosophy
  - 1.3.1 Methodology of Intellectual History
- 1.4 Summary
- 1.5 References/Further Readings/Web Resources
- 1.6 Possible Answers to Self-Assessment Exercise(s)



### **1.1 Introduction**

Intellectual history can often involve a close reconstruction of philosophical arguments as they have been recorded in formal philosophical texts. In this respect intellectual history may bear a noteworthy similarity to philosophy, and most especially, the history of philosophy. But intellectual history remains importantly different from philosophy for a number of reasons. Most importantly, philosophy tends to disregard differences of history or cultural context so as to concentrate almost solely upon the internal coherence of philosophical arguments in them.



## 1.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the resemblance of Intellectual history and philosophy
- evaluate the six methodological debates on intellectual history



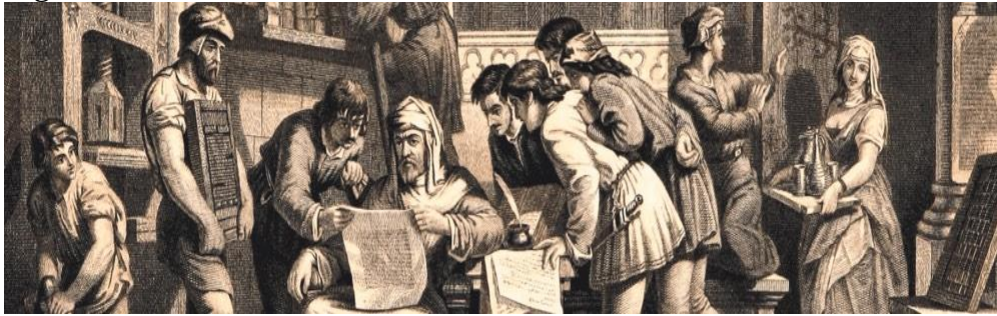
## 1.3 Intellectual History and Philosophy

One often says that the task for intellectual historians is that of “understanding” rather than philosophical evaluation. That is, intellectual historians want chiefly to “understand” rather than, say, to “defend” or “disprove” a given intellectual problem or perspective, and they therefore tend to be skeptics about the philosophers’ belief in decontextualized evaluation. Philosophers, too, of course, will frequently appeal to historical-contextual matters when they are trying to figure out just why someone thought as they did. So the difference between philosophy and intellectual history is simply one of degree rather than kind. Yet intellectual historians tend to be more relaxed about crossing the boundary between philosophical texts and non-philosophical contexts. Indeed, intellectual historians will tend to regard the distinction between “philosophy” and “non-philosophy” as something that is itself historically conditioned rather than eternally fixed.

They will therefore be wary of assuming one can ever concentrate one’s attention upon a purely philosophical meaning uncontaminated by its surroundings. Because they are historians, intellectual historians believe it is important to understand why people thought differently about things we may not agree with today. This pronounced awareness regarding historical difference makes historians generally reluctant to draw strongly evaluative claims about past ideas.

Of course, historians cannot bracket out their own moral or intellectual commitments entirely and it would be foolish to believe they could do so.

But history nourishes certain skepticism about the permanence of any philosophical or moral obligation. It therefore promotes a certain readiness to entertain differences in philosophical viewpoint whereas philosophers would likely think that the differences are either superficial or evidence of philosophical error.

**Figure 8****Early Philosophers**

This interest in reconstructive understanding as against strict assessment has at least two notable consequences for the practice of intellectual history.

First, it enables intellectual historians to draw sometimes surprising and artistic connections between different sorts of texts.

Second, it allows them to think about intellectual “meaning” in a rather capacious or open-ended style, such that the canon of what counts as the proper topic for intellectual history remains remarkably loose. Intellectual historians are interested in “ideas” of all sorts, not only ideas as they are defined within the current guidelines of academic philosophy. Intellectual history is a dynamic discipline not easily given to exclusive characterization, all the more so because during the twentieth century it has become a universal activity.

### **SELF-ASSESSMENT EXERCISE 1**

- The difference between philosophy and intellectual history is simply one of ..... rather than kind?
- The task for intellectual historians is that of ..... rather than philosophical evaluation.

#### **1.3.1 Methodology Of Intellectual History**

The issue as to where to draw the line between intellectual history and cultural history has been particularly fiercely contested. Methodological debates on intellectual history have usually been centred on six significant issues.

First, the purpose of intellectual history: Should scholars in the field chiefly aim to historicize past thought, largely confining themselves to revisiting and reconstituting “archives” of ideas, or should they also discuss current concerns in a future-oriented “laboratory” of Ideenpolitik, engaging in intellectual history as a way of making politics?

Second, and related to the first issue, the existence of perennial questions: Can intellectual historians legally explore, without falling into the trap of anachronism, the ways in which thinkers, from Plato to Pareto, dealt with issues that are taken to have a timeless quality and are believed to transcend historical periods.

Third, the explanation of intellectual transmutations: How are intellectual historians to account for changing ideas over time? What strategies can they adopt to loosen the complicated relationship between intellectual and social change? And how are they to approach the interplay between structure and agency vis-à-vis ideational modifications?

Fourth, the interrelation of text and context, often referred to, if somewhat misleadingly, as the inside-outside, or internal-external, relation: How should intellectual historians place ideas that are traceable in textual utterances, in the discursive web of other texts as well as in the context of social structures, cultural milieus, political systems and institutions.

Fifth, the objects of historical inquiry: Should intellectual historians primarily investigate ideas, concepts, ideologies or "languages"? Should they primarily deal with one or two individuals, or should they attend to larger groups of people, perhaps even "collectives of thought"? Should they focus on "great thinkers" and/or "intellectuals" (a notoriously contested term) or should they concentrate on other, potentially less esoteric agents of thought, including the supposedly "inarticulate masses"?

Sixth is related to the former issue, the source-base: Should intellectual historians confine themselves to textual utterances (in the stricter sense of the word) or should they stretch the limits of their field and consult visual and audible material as well – and if so, how?

## **SELF-ASSESSMENT EXERCISE 2**

- Methodological debates on intellectual history have usually been centred on which significant issues?
- six
- four
- one
- eight
- Write the first Methodological debates on intellectual history discussed in this unit



## 1.4 Summary

By now you should be knowledgeable about the resemblance of Intellectual history and philosophy and be able to discuss six methodological debates on intellectual history. Intellectual history may bear a noteworthy resemblance to philosophy, and most especially, the history of philosophy. Intellectual history is a dynamic discipline not easily given to exclusive characterization.



## 1.5 References/Further Readings/Web Resources

Donald, R. K (1996), “What is happening to the History of Ideas?”  
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Riccardo, B (2010), Intellectual History, Version: 1.0, in: Docupedia-  
Zeitgeschichte, 13. 9.2010, URL:  
[http://docupedia.de/zg/Intellectual\\_History](http://docupedia.de/zg/Intellectual_History)





## 1.6 Possible Answers to Self-Assessment Exercise(S)

### Self-Assessment Exercise 1

- degree
- understanding

### Self-Assessment Exercise 2

- A (six)
- the purpose of intellectual history

## UNIT 2 INTELLECTUAL HISTORY

### Unit Structure

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 Foundation of intellectual history
  - 2.3.1 Definition of intellectual history
- 2.4 Summary
- 2.5 References/Further Readings/Web Resources
- 2.6 Possible Answers to Self-Assessment Exercise



### 2.1 Introduction

We discussed intellectual history and philosophy in the last unit, hence, in this unit, we will discuss intellectual history. The definition and various types of intellectual history will be explain and highlighted respectively.



### 2.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss intellectual history
- evaluate the types of intellectual history



### 2.3 Foundation of Intellectual History

The term "intellectual history", coined by James Harvey Robinson at the beginning of the twentieth century, was adopted by a variety of scholars who, mostly focused on a well-defined period of time, favoured a functionalist conception of ideas as epiphenomenal or preferred a more autonomous yet still contextualize understanding of historical thought. In the broadest sense, intellectual history has been linked to a variety of scholarly fields. The most important ones are the history of philosophy, the philosophy of history, the history of science, the history of literature, the history of art, discourse history, conceptual history, the history of political thought, the history of ideologies, the history of political cultures, the cultural history of politics, the history of intellectuals, the history of mentalities, the history of the book, media history, and visual history.

Efforts were made to distinguish “intellectual history” and “the history of ideas” this is because the two terms are sometimes used interchangeably.

### SELF-ASSESSMENT EXERCISE 1

- The term "intellectual history", coined by .....?
- Intellectual history started at the beginning of .....century?

#### 2.3.1 Definition of Intellectual History

What is intellectual history? Broadly speaking, intellectual history is the study of intellectuals, ideas, and intellectual patterns over time. Of course, that is an extremely large definition and it admits of a puzzling variety of approaches. One thing to note right off is the distinction between “intellectual history” and “the history of ideas.” This can be somewhat puzzling, since the two terms are sometimes used interchangeably: “history of ideas” is a rather outdated phrase, and not currently in fashion (though there is an excellent journal for intellectual historians published under the title, *The Journal of the History of Ideas*.) But if we are worried about precise definitions rather than popular usage, there is arguably a difference: The “history of ideas” is a discipline which looks at large-scale concepts as they appear and transform over the course of history.

Intellectual history is often considered to be different from the history of ideas.

Intellectual history resists the Platonist expectation that an idea can be defined in the absence of the world, and it tends instead to regard ideas as historically conditioned features of the world which are best understood within some larger context, whether it be the context of social struggle and institutional change, intellectual biography (individual or collective), or some larger context of cultural or linguistic dispositions (now often called “discourses”). To be sure, sometimes the requisite context is simply the context of other, historically conditioned ideas intellectual history does not necessarily require that concepts be studied within a larger, non-conceptual frame.

Admittedly, this last point can be controversial: some intellectual historians do adopt a purely “internalist” approach, i.e., they set thoughts in relation to other thoughts, without mention to some setting outside them. This method is usually most revealing when the relations between ideas help us to see a previously unacknowledged connection between different realms of intellectual inquiry, e.g., the relation between theological and scientific modes of explanation, or between metaphysical and political concepts of causality.

But this method tends to reproduce the Platonism which beset the older-style history of ideas approach. Even today, many intellectual historians remain stubbornly or covertly internalist in their method. They may pay lip-service to contextualism, but they are chiefly interested in conceptual contexts only. But because internalist styles of argumentation have in recent decades fallen out of favor amongst historians and humanists more generally, those who write intellectual history in the internalist manner often look rather tweedy and traditionalist to their more “worldly” colleagues both within and beyond of the historical discipline. Indeed, intellectual historians who practice this sort of concept-contextualism will not infrequently meet with accusations of quietism, elitism, or political naiveté.

Internalism is nonetheless defensible on methodological grounds, though it is important to acknowledge its risks and its limitations. As this discussion makes plain, there are many types of intellectual history, and each of them has its own methodological peculiarities. Perhaps the most helpful way to think about the various tendencies in intellectual history today is to compare them with those disciplines within and beyond the discipline of history itself which they most closely resemble. These are: philosophy, political theory, cultural history, and sociology.

### SELF-ASSESSMENT EXERCISE 2

- Define intellectual history according to the context of the unit
- Intellectual history resists the ..... expectation that an idea can be defined in the absence of the world



#### 2.4 Summary

Now that you have read through this unit, you ought to have mastered and understand very well the concept and types of intellectual history. Intellectual history is the study of intellectuals, ideas, and intellectual patterns over time. There are many types of intellectual history and each of them has its own methodological peculiarities

**Video link:** <https://www.youtube.com/watch?v=FMjvY2gRMmQ>



#### 2.5 References/Further Readings/Web Resources

Wilhelm, S. B (1996), “What is ‘Intellectual History’?” Intellectual News, (1996)

Nicholas, J (1996), "Intellectual History and Philosophy of Science,"  
Intellectual News, (1996)



## 2.6 Possible Answers to Self-Assessment Exercise

### Self-Assessment Exercise 1

- James Harvey Robinson
- twentieth

### Self-Assessment Exercise 2

- Intellectual history is the study of intellectuals, ideas, and intellectual patterns over time
- Platonism

## UNIT 3 HUMAN INTELLIGENCE

### Unit Structure

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 Human intelligence
  - 3.3.1 Importance of intelligence
  - 3.3.2 Why intelligence differs
- 3.4 Summary
- 3.5 References/Further Readings/Web Resources
- 3.6 Possible Answers to Self-Assessment Exercise



### 3.1 Introduction

This unit takes into account the various concepts related to Intellectual background. It attempts to explain the concepts of Intelligence and factor influencing the concept



### 3.2 Learning Outcomes

By the end of this unit, you should be able to:

- analyse intelligence
- discuss types of intelligence
- analyse what makes intelligence differ



### 3.3 Human Intelligence

Howard Gardner in his theory of multiple intelligences, identified at least seven different types of intelligence, including musical intelligence (as exemplified by the composer Igor Stravinsky) and bodily-kinesthetic intelligence (as exemplified by the dancer Martha Graham). While it is clear that Stravinsky and Graham possessed outstanding talents, referring to those talents as “intelligences” merely serves to conceal discussions of intellectual ability.

In this unit, however, the term “intelligence” will be used only in the sense of the word stated in the first paragraph. The advantages of this definition are:

- It accords fairly well with common usage.
- It is very close to such common dictionary definitions as “the ability to acquire and retain knowledge” and “use of the sense of reason in solving problems.” (It also resembles the dictionary definition of intellect as “the ability to think abstractly or profoundly.”)
- It seems to describe the faculty that is actually measured in standard intelligence tests. In any event, intelligence is not the same thing as knowledge. Memorizing a page from a telephone book increases your store of knowledge, but it does not make you any smarter. (Since a more intelligent person has a greater ability to acquire and retain knowledge, he will probably have accumulated a greater store of knowledge than a less intelligent person of the same age; the two concepts, however, are quite different.).

### SELF-ASSESSMENT EXERCISE 1

- |   |
|---|
| <ul style="list-style-type: none"><li>• Write the type of intelligence as exemplified by composer Igor Stravinsky</li><li>• Write the type of intelligence as exemplified by dancer Martha Graham</li></ul> |
|---|

#### 3.3.1 Importance Of Intelligence

How important is intelligence? It is clear that high intelligence does not, by itself, ensure an individual's achievement. Indeed, persons of visibly high intelligence who have nevertheless failed to achieve anything significant are so common that we have a special word for them: underachievers. Even a very smart person is unlikely to accomplish much if he lacks sufficient energy, dedication, and determination; and he might also be held back by a lack of social skills, or by poor health, or by lack of opportunity.

Nor is high intelligence or even average intelligence required for an individual to function capably in everyday life. Many people have the belief that a person with an IQ of 70 is an incompetent who needs to be institutionalized; but that notion is incorrect. Such persons can not only wash, dress, and feed themselves, but can also make and retain friends, marry, rear children, and support themselves reasonably. They can learn a wide range of skills by direct, hands-on instruction, or by simply watching more experienced persons. As long as their job or occupation does not require a high degree of abstract reasoning, such persons are able to perform their duties in an adequate manner.



Not only is this true today, but it was even more true in past ages, including the Paleolithic Era, during which most human evolution occurred. It did not require high intelligence for a parent to show to his child how to make a hand ax by chipping a piece of stone, or to show him which plants were not poisonous and which should be avoided. The same is true for the typical skills needed by subsistence farmers.

However, although high intelligence is neither necessary for functioning in ordinary circumstances, nor sufficient by itself for marked success, it is not unimportant. In the first place, there are certain tasks for which high intelligence is an absolute essential. For example, one can hardly imagine a person of average intelligence teaching a course in quantum mechanics.

### **SELF-ASSESSMENT EXERCISE 2**

- Many people have the belief that a person with an IQ of .....is an incompetent who needs to be institutionalized?
- Which of these Era did most human evolution occurred?
- Dark Era
- Middle Age
- Information Age
- Paleolithic Era

### **3.3.2 Why Intelligence Differ**

What causes differences in intelligence? Since individuals differ greatly in intelligence, we may ask:

- What are the direct biological factors responsible for those differences?
- What are the underlying factors?
- In particular, are individual differences in intelligence caused primarily by genetic factors or by differences in upbringing and environment? (In technical language, what is the heritability of intelligence?)

As for question (1), at least three biological factors affect the intelligence of a human being:

- The size of his brain.
- The microstructure of his brain. (For example, the surfaces of the cerebral cortex are extremely convoluted, and the extent of those convolutions which is much greater in human beings than in any other animal may be connected with intelligence.)

- The details of his brain chemistry, such as the abundance of various neurotransmitters. It is plain that brain size is not the only factor. There are many persons whose high intelligence is undisputed but who have smaller than average brains, and vice versa. However, on average, persons with larger brains are more intelligent.

This is what we would intuitively expect. After all, larger hearts can pump more blood, and larger muscles can lift greater weights. We would therefore expect that larger brains can, on average, process more information. Furthermore, there is a high connection between intelligence and brain size across animal species. Finally, since brains are very expensive organs metabolically, it seems unlikely that natural selection would have permitted the development of large brains unless they resulted in greater intelligence.

### SELF-ASSESSMENT EXERCISE 3

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Write two factors that make intelligence differ</li> <li>• There is a high connection between intelligence and .....size across animal species</li> </ul> |
|--|



### 3.4 Summary

Now that you read through this unit, you ought to have grasped the understanding of what intelligence is all about, types of intelligence and biological factors that determines intelligence. Intelligence is general reasoning ability, and in particular the ability to carry out and understand abstract reasoning. At least three biological factors affect the intelligence of a human being. High intelligence does not by itself ensure an individual's success



### 3.5 References/Further Readings/Web Resources

Wilhelm, S. B (1996) "What is 'Intellectual History'?" Intellectual News, (1996)

<https://www.academia.edu>

Nicholas, J. (1996), "Intellectual History and Philosophy of Science," Intellectual News, (1996)

<https://www.tandfonline.com> ›



### 3.6 Possible Answers to Self-Assessment Exercise

**Self-Assessment Exercise 1**

- Musical intelligence
- bodily-kinesthetic intelligence

**Self-Assessment Exercise 2**

- 70
- D Paleolithic Era

**Self-Assessment Exercise 3**

- (i). Biological factors, (ii) Underlying factor
- brain

## **MODULE 3      HISTORY, FOUNDATION AND DEVELOPMENT OF INFORMATION**

### **Introduction**

This module takes into account the foundation and development of information transfer from ancient to the middle age and renaissance periods. *Information transfer* is the process by which knowledge is created, produced, disseminated, organized, diffused, utilized, preserved, and destroyed. The very first kind of communication devices appeared in the form of pictographs written on clay tablets. In 1800 BC, China was using smoke signals, three hundred years later, Phoenicians invented the alphabet. With the invention of alphabet, the oldest writing in China was found, 500 hundred years later, China organized a postal service system which was only used for the needs of the government. The early and Middle Ages actually started from 1100 AD and ended in 1399 AD with the development of stitched books by the Chinese in about 1116 AD. The Europeans started the method of block printing which was first founded by the Chinese. Johann Gutenberg (c. 1400-1468) came out with one of most important inventions in human history. Gutenberg's development of movable type made possible the spread of humanistic literature to rest of Europe with amazing speed.

- Unit 1:        Ancient Period
- Unit 2:        The Middle or Medieval Period
- Unit 3:        The Renaissance Period
- Unit 4:        The Enlightenment and Age of Reasoning

### **UNIT 1:      ANCIENT PERIOD**

#### **Unit Structure**

- 1.1    Introduction
- 1.2    Learning Outcomes
- 1.3    Information transfer in Ancient Period
  - 1.3.1   Stages of information transfer in ancient period
  - 1.3.2   Egypt and China
  - 1.3.3   Greek
  - 1.3.4   The Romans
- 1.4    Summary
- 1.5    References/Further Readings/Web Resources
- 1.6    Possible Answers to Self-Assessment Exercise(s)



## 1.1 Introduction

You have learnt about the origin and background of man as well as the development of tools and languages. Also the last unit of the last module introduced to the intellectual history and philosophy. In this module you are expected to learn about the development of information transfer whereas this unit will introduce to you to ancient period of information transfer.



## 1.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss how Information is *transferred in the ancient period*



## 1.3 Information Transfer In Ancient Period

The ancient and early eras started from 3500 BC and ended in 1099 AD. The alphabet is a group of letters that are assembled together to give a certain meaning. The creation of alphabet caused a great leap in the history of communication because it led to the invention of writing later in 1400 BC, the oldest writing in China was found. It was written on bones.

### SELF-ASSESSMENT EXERCISE 1

- |  |
|--|
| <ul style="list-style-type: none"><li>• When did the ancient time started?</li><li>• What time did the period referred to as ancient time ended?</li></ul> |
|--|

### 1.3.1 Stages Of Information Transfer in Ancient Period

There are phases in which information transfer occurred and each stage has a peculiar attribute that differentiate it from others.

### 1.3.2 Egypt and China

The very first kind of communication devices appeared in "Sumer" in the form of pictographs written on clay tablets. Pictography is the usage of pictures to express certain ideas and information which means that it is a kind of image communication with the use of a public key. In 2600 BC scripts appeared in Egypt. They spread widely because they were very

easy to reserve and use. In 1800 BC, China was using smoke signals. These signals allowed the soldiers who were stationing on the Great Wall of China to warn their friends 500 miles away from a possible danger using the smoke signals from one tower to another. Three hundred years later, Phoenicians invented the alphabet. 500 hundred years later, China organized a postal service system which was only used for the needs of the government.

### **1.3.3 The Greeks:**

In around 776 BC, pigeons were also used by the Greeks to send messages such as the outcomes of the Olympic Games in ancient Greece to Athens. Much later, exactly in 500 BC, Greeks started using many different methods of communication which were new and creative such as sending signals via sunlight, via mirrors, and sometimes via shields. They also used fire signals at night. With these techniques, they were able to send messages to a distance that reached 40-100 kilometers depending on the visibility.

The method with the mirrors and the sun was called Heliography, which means writing with the sun light. Another simple method that was also used was colored flags to symbolize specific messages, and these flags were used for a long time in the Greek Navy. Greeks also used Acoustic signals. Acoustic signals are kind of sound communications where a huge musical instrument was used by Alexander the Great to send messages probably that his army could hear from a distance of 5km. This instrument was called the Stentorophonic tube, and this name came from Stentor, a figure of Greek mythology.

About 100 years later, exactly in 400 BC, cryptography was being used in Sparta. The "Skytale" or "Scytale" was a Spartan method for encryption. It consisted of a piece of wood and a leather strip. Any communicating party needed exactly the same size wooden stick. The secret message was written on the leather strip that was wound around the wood, unwound again and sent to the recipient by a messenger. The recipient would have rewound the leather and by doing this enciphering the message.

In around 350 BC, a military Greek scientist and cryptographer invented an optical system for communication similar to the telegraph: the water-clocks. The water-clocks were an early long-distance-communication system. Every communicating party had exactly the same jar, with a same-size-hole that was closed and the same amount of water in it. In the jar was a stick with different messages written on. When one party wanted to tell something to the other, it made a fire sign and when the other answered, both of them opened the hole at the same time. And with the

help of another fire sign closed it again at the same time, too. In the end, the water covered the stick until the point of the wanted message.

### 1.3.4 The Romans

In about 100 AD, Roman couriers started carrying government mail across the empire. The development of papers came five years later by Tsai lun and the true printing appeared in 450 AD in China in the form of ink seals stamped on papers. It was not a long time until China started to print books. That was in around 600 AD. 15 years later, picture books were printed in Japan for the first time ever. In about 1000 AD, Mexican people started fabricating paper using tree barks. The ancient age ended with a great invention, which is the movable type. It was invented by Pi Sheng using clay. As we saw, most of the communication devices in these pages were in the form of writing and signals which means that the communication devices until 1099 AD weren't practical at all.

**Figure 9**



*Egyptian early writings*

### SELF-ASSESSMENT EXERCISE 2

- In around 350 BC, a military Greek scientist and cryptographer invented an optical system for communication similar to the .....?
- In about 100 AD, Roman couriers started carrying government ..... across the empire?



### 1.4 Summary

Now that you've read through this unit you ought to have grasped the meaning of *Information transfer*, know how *Information is transferred or communicated* at Ancient Period. *Information transfer* is the process by

which knowledge is created, organized, retrieved, preserved which was recorded from the ancient ages etc. The very first kind of communication devices appeared in the form of pictographs written on clay tablets.

Video <https://www.youtube.com/watch?v=oxTUC5I22LU>



## **1.5 References/Further Readings/Web Resources**

Ancient Egypt and Earliest known stages of alphabetic writing

<https://www.academia.edu>

Timeline of Communication History written by Irving Fang (the University of Minnesota –the school of journalism).

The History of Communication Technology by James Parker Doyle





## **1.6 Possible Answers to Self-Assessment Exercise(S)**

### **Self-Assessment Exercise 1**

- 3500 BC
- 1099 AD

### **Self-Assessment Exercise 2**

- telegraph
- mail

## UNIT 2 THE MIDDLE OR MEDIEVAL PERIOD

### Unit Structure

- 2.1 Introduction
- 2.2 Learning Outcome
- 2.3 History of information transfer in Medieval Era
  - 2.3.1 Characteristics of Medieval Age
- 2.4 Summary
- 2.5 References/Further Readings/Web Resources
- 2.6 Possible Answers to Self-Assessment Exercise(s)



### 2.1 Introduction

The early Middle Ages (ca. 476-800), the high Middle Ages (ca. 800-1300), and the late Middle Ages (ca. 1300-1453), each succeeding division had distinctive features. The Middle Ages are sometimes referred to as the “Dark Ages” or “Medieval Times”. The term Dark Ages has fallen from use in modern times, but is used because of a lack of written records and progress in the modern sense of the word. Simply put, The Middle Ages are a product of the end of Roman influence across the continent of Europe. The history of the printing press dates back to the 1400's, when Johannes Guttenberg created a replica based on primitive versions already in use.



### 2.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss how Information is *transferred in the* medieval times
- analyse the characteristics of medieval era



### 2.3 History of Information Transfer in Medieval Era

The early and Middle Ages actually started from 1100 AD and ended in 1399 AD. These ages began with the invention of stitched books by the Chinese in about 1116 AD. In 1200 AD, the letter system was brought to life. It was used in the European monasteries for communication. At the same time, the University of Paris started a messenger service to transport

mail and messages from one place to another. About 50 years later, Koreans started metal type.

In 1300 AD, the wooden type was established in Central Asia. At the end of these ages, the Koreans started producing bronze characters which were found easy and nice to deal with. As we can see that nothing really important was invented during this age except for the ideas concerning printing and the use of metal characters which led to the birth of the typing machine few decades later.

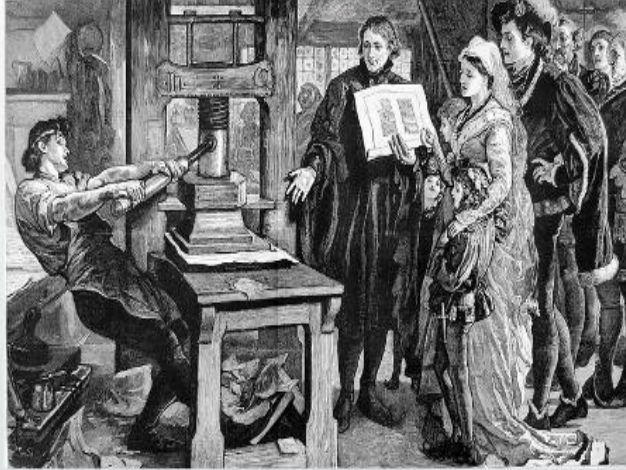
The late Middle Ages started from 1400 AD and ended in 1599 AD. At the beginning of this age, the Europeans started the method of block printing which was first founded by the Chinese. At the same time, few news letters were circulating in the European countries which were very similar to the daily newspapers. In 1455 AD, one of the biggest inventions of all times was created, which is the printing press. Johann Gutenberg (c. 1400-1468) printing press used removable metal letters that could be rearranged to create blocks of text. Before that, people had to pen texts by hand, which was an extremely difficult process.

### **SELF-ASSESSMENT EXERCISE 1**

- Which type book did the Chinese invented about 1116 AD
- Soft copy
- Hard copy
- Ancient book
- Stitched
- In 1300 AD, the ..... type of book was established in Central Asia

**Figure****10****FORMS OF COMMUNICATION**

# Printing Press



## 2.3.1 Characteristics of Medieval Age

Middle Age is characterised by the following:

- One of most important inventions in human history.
- Gutenberg's development of movable type made possible the spread of humanistic literature to rest of Europe with astonishing speed.
- No longer would copies of works need to be done by hand, individually.
- 1457-58, published the first printed Bible in the city of Mainz, Germany
- Facilitated the phenomenal spread of the Reformation.

In 1560 AD, private postal systems grew in Europe. Five years later, the pencil was invented. The Middle Ages ended with the invention of the pencil. These ages witnessed one of the most important inventions ever: the typing machine. And in these ages, the ideas concerning postal services and mail were used for the first time.

**SELF-ASSESSMENT EXERCISE 2**

- Highlight two characteristics associated with Medieval Era
- Which Era was pencil invented?
- Ancient
- Medieval/Middle
- Stone

**2.4 Summary**

Now that you've read through this unit you ought to have grasped how *information is transferred or communicated during the* medieval times. The Middle Ages are a product of the end of Roman influence across the continent of Europe. These ages began with the invention of stitched books by the Chinese in about 1116 AD. One of the biggest inventions of all times was the creation of printing press by Johannes Guttenberg  
Video <https://www.youtube.com/watch?v=rNCw2MOfnLQ>

**2.5 References/Further Readings/Web Resources**

Timeline of Communication History written by Irving Fang (the University of Minnesota –the school of journalism).

The History of Communication Technology by James Parker Doyle



## 2.6 Possible Answers to Self-Assessment Exercise(S)

### Self-Assessment Exercise 1

- D- Stitched book
- wooden book

### Self-Assessment Exercise 2

- One of most important inventions in human history.
- Gutenberg's development of movable type made possible the spread of humanistic literature to rest of Europe with astonishing speed

1. B- Middle/Medieval Era/Age

## UNIT 3 THE RENAISSANCE PERIOD

### Unit Structure

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 History of the Renaissance Period
  - 3.3.1 Characteristics of Renaissance period
  - 3.3.2 Information transfer in the Renaissance Period
- 3.4 Summary
- 3.5 References/Further Readings/Web Resources
- 3.6 Possible Answers to Self-Assessment Exercise(s)



### 3.1 Introduction

The last unit treated the Medieval otherwise known as Middle Age. In this unit, we will be discussing about another era of information transfer. The Renaissance (or rebirth) began at different times in different parts of Europe and was characterized by a thirst for progress. It is best summed up as a rebirth of Classical thought and culture. There was an information explosion, as Europeans looked to science to explain their world, rather than trust the words of priests and kings.



### 3.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the *Renaissance* Era
- analyse the characteristics of Renaissance Era



### 3.3 Brief History of the Renaissance Period

The Renaissance is considered the beginning of modern European History. Occurred first in Italy c. 1300 and lasted until the mid 16th century Renaissance spread to Northern Europe around 1450. In England, the Renaissance did not begin until the 16th century and lasted until the early 17th century. 19th-century historian Jacob Burckhardt claimed that the Renaissance period stood in distinct contrast to the Middle Ages.

### 3.3.1 Characteristics of Renaissance Era

Renaissance culture applied almost solely to the upper classes thus:

- Upper classes had the luxury of time to spend learning the classics.
- Peasantry was largely illiterate and Renaissance ideas had little impact on common people.
- Working classes and small merchants were far too preoccupied with the concerns of daily life.
- Rise of the Italian City-States. Northern Italian cities developed international trade: Genoa, Venice, Milan.
- Signori (despots) or oligarchies (rule of merchant aristocracies) controlled much of Italy by 1300
- Commenda: Contract between merchant and “merchant-adventurer” who agreed to take goods to distant locations and return with the proceeds (for 1/3 of profits).

**Figure 11**



**The beginning of modern writing**

#### SELF-ASSESSMENT EXERCISE 1

- The Renaissance is considered the beginning of modern history of which of the following?
- Italian
- European
- African
- Indian
- Renaissance Era occurred first in .....c 1300 and lasted until the mid16th century?
- *There was an information explosion, as Europeans looked to ..... to explain their world, rather than trust the words of priests and kings*



### 3.3.2 Information transfer in the Renaissance Period

The Renaissance, which began in Italy and eventually spread to other parts of Europe, is usually said to have lasted from about 1400 to 1650.

The word Renaissance means “rebirth.” This period saw a rebirth of interest in ancient Greece and Rome, and a rediscovery of Greek and Roman works. It was a time of great artistic creativity in literature, painting, sculpture, and architecture. Scholars studied Greek authors whose works had been lost or forgotten for years; writers created new works of literature; political theorists set forth new ideas about government; architects built gorgeous churches based on the classical models; and painters created beautiful new works, sometimes blending Christian and classical themes.

### SELF-ASSESSMENT EXERCISE 2

- Renaissance Era was a time of great creative new work of literature in the following. Except?
- Painting
- Sculpture
- Indexing
- Architecture
- The word Renaissance means.....?



### 3.4 Summary

You have read through this unit, you ought to have grasped the meaning of *Renaissance (or rebirth)*, know how *Information is transferred or communicated at Renaissance Period*. *Information explosion started at Renaissance Period*. It was a time of great artistic creativity in literature, painting, sculpture, and architecture.

Video <https://www.youtube.com/watch?v=rCz7qxmO2hA>



### 3.5 References/Further Readings/Web Resources

Timeline of Communication History written by Irving Fang (the University of Minnesota –the school of journalism).

The History of Communication Technology by James Parker Doyle



### 3.6 Possible Answers to Self-Assessment Exercise(s)

**Self-Assessment Exercise 1**

- *B- European*
- *Italy*
- *science*

**Self-Assessment Exercise 2**

- *Indexing*
- *Rebirth*

## UNIT 4 THE ENLIGHTENMENT ERA/ AGE OF REASONING

### Unit Structure

- 4.1 Introduction
- 4.2 Learning Outcomes
- 4.3 Brief History of the Enlightenment and Age of Reasoning
  - 4.3.1 Participants and contributions of early philosophers to Age of Reason
  - 4.4.2 John Locke (1632–1704)
  - 4.4.3 Thomas Hobbes (1588-1679)
  - 4.4.4 Voltaire (1694-1778)
  - 4.4.5 Montesquieu (1689-1755)
  - 4.4.6 Jean-Jacques Rousseau (1712-1778)
- 4.4 Summary
- 4.5 References/Further Readings/Web Resources
- 4.6 Possible Answers to Self-Assessment Exercise(s)



### 4.1 Introduction

This unit traces the enlightenment and age of reasoning period in the mid-1500s, the Scientific Revolution began when scientists used reason to question established beliefs about nature. In the 1600s, philosophers began to use reason to question old beliefs about aspects of society. This marked the beginning of the Enlightenment, a time that brought great changes to Western civilization. That intellectual movement is usually called the Enlightenment, and its central idea was the idea that all existing institutions and beliefs should be re-examined by the untrammelled application of human reason.

The Enlightenment, also known as the Age of Reason, was a philosophical movement that took place mainly in Europe and, later, in North America, during the late 17<sup>th</sup> and early 18<sup>th</sup> century. Its participants thought they were revealing human intellect and culture after the "dark" Middle Ages.



### 4.2 Learning Outcomes

By the end of this unit, you should be able to:

- analyse the Enlightenment Era/Age of Reasoning

- evaluate the participants and contributions of early philosophers to Age of Reason



### **4.3 Brief History of the Enlightenment and Age of Reasoning**

The age of Enlightenment started in 1600 AD and ended in 1799 AD. At the beginning of the age, exactly in 1609, the very first newspaper was published in Germany. Registered mail appeared for the first time ever in France in 1627. And in 1650, the first daily newspaper appeared in Leipzig, Germany. Three years later, in 1653, mail boxes were established in Persia which was a great jump in the history of mail and postal services. These mail boxes organized the job and made it a lot easier. After two decades, the postal network started expanding. In 1696, the existence of the paper mills in England increased, and the number of these paper mills approached 100. In 1704, Ads started taking their place as a helpful method in communication throughout the newspapers in Boston.

Six years later, a German inventor developed the three color painting which depended on the three basic colors red, blue and yellow. In 1790, the most important invention in the whole era was found; it was the hydraulic press which was invented in England. It took the lead towards the development of the press centers so that they could depend on mechanical power rather than manual power. Four years later, the first letter carriers appeared in America. In 1794, signaling systems were found. They connected both Paris and Lille in France.

At the end of this age, Robert (a French inventor), fabricated a paper making machine which made the process of manufacturing paper a lot much simpler. The Enlightenment age ended after the invention of the paper making machine. This age carried with it a lot of new inventions and discoveries in the history of communication devices such as the hydraulic systems, the new press centers, the paper making machine, and the invention of colored printing which makes this age the most effective one not on the history of communication devices only, but on the history of all mankind.

This basic notion led to new ideas in many different fields of thought, including political theory, economic theory, and legal reform, but most of all in matters concerning religion. In keeping with the central theme of the Enlightenment, most of the philosophers involved were deeply doubtful of all “revealed religions” and their doctrines. Many of those philosophers were deists who believed in “natural religion” (i.e., one knowable from human reason, without any divine revelation); others were atheists or agnostics. Scientists found new truths about nature by

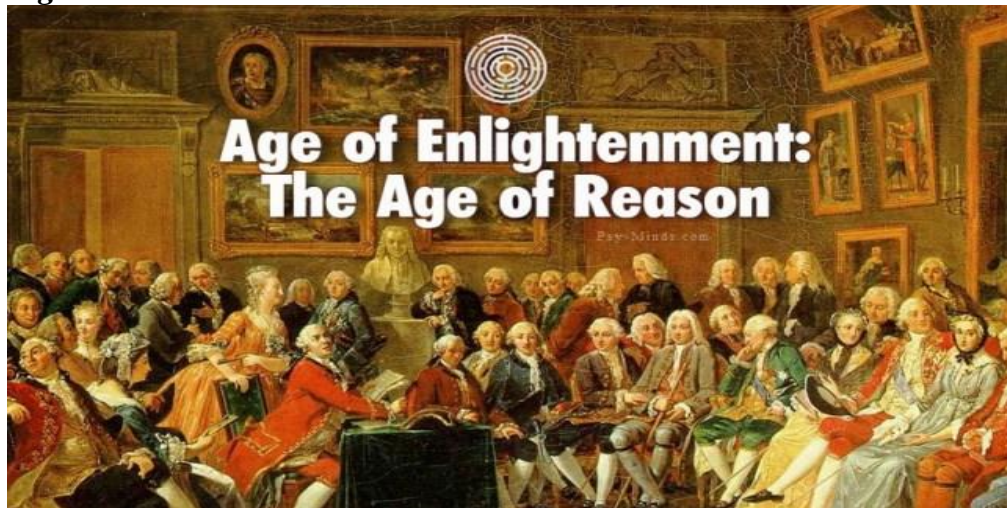
experimenting and using reason. So philosophers began using reason to seek truths about human nature. Because they wanted to enlighten, or shine a light on, this new way of finding out about the world came to be called the Enlightenment. The period also is known as the Age of Reason.

The Enlightenment gained so much force in the mid1700s that it destroyed old beliefs and led to lasting changes in society and government. The respect for reason can be traced back to the ancient Greeks and Romans. Scholars in these classical cultures gained knowledge through observation, logic, and reasoning. They also believed in the worth of the individual. As Christianity spread during the Middle Ages, faith became more important than reason.

But Christianity did introduce the idea that all people were equal in the eyes of God. Equality became a key feature of Enlightenment thought.

Scholars rediscovered the writings of Greece and Rome during the Renaissance. Once again, a person's ability to reason and the importance of the individual were valued. Later, the Reformation appeared to endorse the right of an individual to challenge the authority of the Catholic Church to put itself between God and a believer. Each of these philosophers believed in God but their primary emphasis was on human reason

**Figure 12**



*Philosophers and participants of the Enlightenment Era/Age of Reasoning*

**SELF-ASSESSMENT EXERCISE 1**

- At the beginning of the age, exactly in 1609, the very first newspaper was published in which of the following country?
- Germany
- France
- Mexico
- Egypt
- During the Scientists found new truths about nature by ..... and using reason?
- The period also is known as the Age of .....?

**4.3.1 Participants and contributions of early philosophers to Age of Reason**

The Age of Reason refers to the period in European, British and American history in which the rationalist philosophies of John Locke (1632–1704), Thomas Hobbes (1588-1679), Voltaire (1694-1778), Montesquieu (1689-1755) and Jean-Jacques Rousseau (1712-1778) were major influences in the universities and among the highly educated and ruling classes of Europe, Britain and the United States.

**4.3.2 John Locke (1632–1704)**

John Locke’s questioning ways began early. “From the time that I knew anything,” Locke wrote, “I found myself in a storm.” At Oxford University, Locke did not accept the opinions of authorities. He wanted to draw his own conclusions based on his experience and reasoning.

Locke later became an aide to an important government official. He met many men active in public life. He often invited them to debate science or religion. These debates may have led Locke to propose one of the Enlightenment’s most revolutionary ideas. He said that humans were not born with basic ideas, as was thought, but learned by experience. The English philosopher John Locke set the stage for much of the Enlightenment debate in the late 1600s. Locke did not oppose monarchies. But in his writings, he disagreed with the divine right of kings the claim that they ruled by the authority of God. Locke wrote that the power of government came from people, not from God or from a ruler.

He believed that people gave their consent to be governed. In return, the government was bound to protect what he called the people’s natural rights. People were born, Locke said, with the rights to life, liberty, and property. He argued that people had a right to revolt if a ruler failed to protect these rights.

### **4.3.3 Thomas Hobbes (1588-1679)**

One of the earliest thinkers who tried to look at politics in a rational way was Thomas Hobbes (1588-1679) from England. He believed that people were naturally aggressive and that conflict was a normal part of human nature. In his most famous book, *Leviathan*, Hobbes wrote that people could only escape war and violence by giving up their natural rights and submitting to the rule of a strong ruler. Hobbes called this agreement in which people gave up rights in exchange for law and order a social contract. Because of this negative view of human nature, Hobbes supported powerful rulers more than the rights of individuals.

### **4.3.4 Voltaire (1694-1778)**

One of the most prominent philosophers was Francois Marie Arouet, who wrote using the name Voltaire (1694-1778). Voltaire's written works included plays, poems, and historical and philosophical essays. He was well known for using humor to make his political points. Voltaire wrote in favor of religious tolerance and free speech, and he often criticized important people in society. As a young man, Voltaire was arrested and put in jail for writing verses that made fun of government leaders. He also criticized church leaders and supported the separation of church and state. Voltaire's most famous work is a humorous novel called *Candide*, in which he made fun of the attitudes of other philosophers of his day.

### **4.3.5 Montesquieu (1689-1755)**

Charles-Louis de Secondat, the Baron de Montesquieu (simply referred to as Montesquieu), wrote extensively about politics. In *The Spirit of the Laws*, Montesquieu (1689-1755) wrote about factors that would create a fair, uncorrupt government that protected people's rights. He believed that the way to achieve this goal was to have a separation of power so that no one person had too much influence. Montesquieu wanted governments divided into three different branches: a legislative branch, an executive branch, and a judicial branch. Each branch should have different responsibilities. The authors of the U.S. Constitution used this model for the U.S. government.

### **4.3.6 Jean-Jacques Rousseau (1712-1778)**

Another French philosopher, Jean-Jacques Rousseau (1712-1778), wrote about politics in a work called *The Social Contract*. In Rousseau's ideal society, people would be able to vote on the laws they must follow rather than merely obeying laws imposed on them by a ruler or rulers. While Rousseau supported democracy, he also wrote about other topics. These included how children should be educated and the benefits of spending

time in nature. Rousseau believed that human beings are inherently good, but are corrupted by the evils of society. He considered science, art and social institutions to be a part of what corrupts. He believed that the only way to get back to that goodness that human beings are born with is to be as close to nature as possible.

## SELF-ASSESSMENT EXERCISE 2

- Locke wrote that the power of government came from ....., not from God or from a ruler?
- The book 'In the Spirit of the Laws' was written by which of the following authors/philosopher.
- Karl Marx
- Adam Smith
- Montesquieu
- Thomas Hobbes



### 4.4 Summary

Now that you have read through this unit, you ought to have mastered and understand very well the age of reasoning and enlightenment and the contributions of early philosophers to the age. That intellectual movement is called the enlightenment, and its central idea was the notion that all existing institutions and beliefs should be re-examined by the untrammelled application of human reason. Scientists found new truths about nature by experimenting and using reason. Scholars in these classical cultures gained knowledge through observation, logic, and reasoning. The age of enlightenment is a philosophical movement that took place in Europe and, later, in North America. Its central idea was the notion that all existing institutions and beliefs should be re-examined. The campaign was against outmoded ideas and political and religious obscurantism

Video [https://www.youtube.com/watch?v=J0B28\\_gwj0M](https://www.youtube.com/watch?v=J0B28_gwj0M)



### 4.5 References/Further Reading/Web Resources

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Jonathan, I. I (2002) *Radical Enlightenment*, Oxford, 2002

Gay, P. (1996). The Enlightenment: An Interpretation.  
<https://www.worldcat.org/title/enlightenment-an-interpretation/oclc/553006>



#### 4.6 Possible Answers to Self-Assessment Exercise(s)

**Self-Assessment Exercise 1**

- Germany
- Reason(ing)

**Self-Assessment Exercise 1**

- people
- Montesquieu

## MODULE 4 THE INFORMATION AGE AND INFORMATION SOCIETY

# Introduction

This module takes into account the present age which is regarded as the age of information. Information has become the commodity in the present-day context of information explosion. The world has moved from the ‘Industrial Age’ into the ‘Information Age. The world now boasts of a knowledge-based and information driven economy. We live in a competitive world and in any area of competition, friendly or otherwise; the most informed party has the upper hand. An “informed” person generally makes the most appropriate decision. Information is the key word in our age. Considering the role and significance of “information”, it is necessary that we give a proper definition for information. This module will be discussed under the following units via:

- |         |   |
|---------|---|
| Unit 1: | Information Age   |
| Unit 2: | Information Society; Origin, Cause and Characteristics            |
| Unit 3: | Information networking  |
| Unit 4: | Information transfer and the role professional bodies/association |

# UNIT 1 INFORMATION AGE

## Unit Structure

- 1.1 Introduction
- 1.2 Learning Outcomes
- 1.3 The Information Age
- 1.4 Significance of Information Age
  - 1.4.1 E-commerce
  - 1.4.2 E-education
  - 1.4.3 E-health
  - 1.4.4 E-governance
- 1.5 Summary
- 1.6 References/Further Readings/Web Resources
- 1.7 Possible Answers to Self-Assessment Exercise(s)



## 1.1 Introduction

This unit will introduce you to the concept of information age where information has become part of essential commodity in every phase of life due to information explosion. The information age, as a concept, "sums up the new world order where the position of nations, their power, wealth and influence, increasingly depends on their access to and ability to use information." in fact, for any individual or group to navigate well in this increasingly complex age, information is essential. The most valuable commodity in this age is information. Information provides awareness, knowledge, and power.



## 1.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the concept of Information Age
- analyse the contributions of Information Age to various segments of our society



## 1.3 The Meaning of Information Age

Today, information has transformed various facets of our life such as the fields of business, education and communication just to mention but a few. The impacts of information society are profound. Presently, with the highly networked system, one need not leave the comfort of their home.

Information travels through networks linking people together, from a stable geographical location through their computers. The same is applied to merchandise, consuming goods, studies, training, work, even entertainment. For example, a library can now open its gates to the whole world. A university or a research institute can convey their knowledge, their researches as well as their case studies to anyone who is interested, regardless of their geographical location. In the IS, the employers may run their company while being thousands of miles away, as the use of the basic services of IS release them from their daily presence in the company.

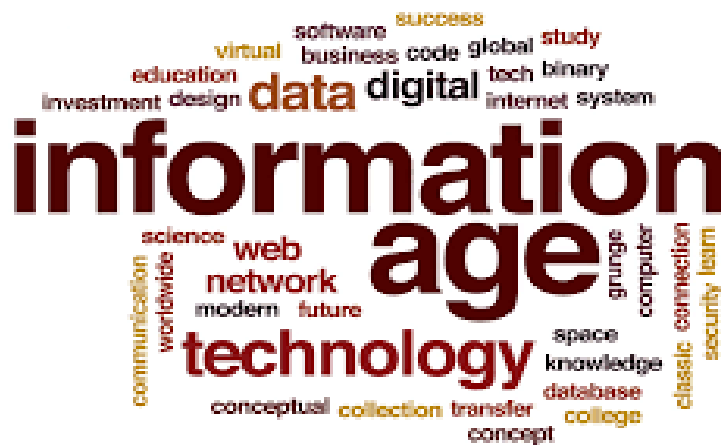
### 1.3.1 Significance of Information Age

The profound advantages that the IS brings for the environment cannot be ignored. The lesser movements that people make, results in the reduction of unnecessary transportation and that in turn results in the de-escalation of the pollution of the environment, whereas the saving of sources from the reduction of paper and fuel consumption is also of crucial importance.

The most important aspect that the IS has enforced is an ease in communication which has, in essence led to a reduction in the cultural divide. People from different cultures, are able to work with each other and share ideas irrespective of their cultural backgrounds I S will enhance individual citizens, which will in turn benefit society as a whole. The history of information is broader than that of the library. It is similar to library science. Meanwhile, libraries as information systems date back to about 1950. Information history can be constructed in different, historically interesting ways. For example, one approach is information development in the history of networking and communications.

Another could focus on the sciences, people and ideas that produced the machinery for communications, computing and information processing. While other traceable information history could be the significant events in the individual, social and industrial forces driving adoption of information technologies and their uses and effects. Information system (IS) is a computerized database built to accept, store, process, transform, make useful, and analyze data while reporting results on a regular basis.

It is a combination of not only database, software, hardware, the people using and benefiting from it, the manual, machine procedure and communication system. Information system enables processes and essential system elements like environment, boundary, purpose, and interactions. Enterprises, business executives and IT experts focus on using integrated information technology solutions and business processes to meet their information need on a daily basis for the smooth running of their business.

**Figure 13**

*Each of these sectors of our life has been impacted by information age.*

### SELF-ASSESSMENT EXERCISE 1

- The most valuable commodity in this age is.....?
- The information age, as a concept, "sums up the new world order where the position of nations, their power, wealth and influence, increasingly depends on their access to and ability to use .....?"

#### 1.3.2 E-commerce:

The impact of new technologies on trade and commerce is already visible: distance is no longer a barrier to entry into international markets, and new business models are being generated. ICTs have allowed the creation of a global marketplace, and in particular have enabled small and medium-sized enterprises (SME) to participate, giving rise to “good prospects of economic growth and development through electronic trade, investment and commerce”. Focus on SMEs is due to their importance as “engine of employment creation and income generation” and as “a mean to ensure socially equitable outcome of regional integration”. Therefore, besides the general principles on the promotion of private initiative and the set-up of adequate regulations and policies, many declarations affirm the necessity to support the involvement and participation of SMEs in the information society and economy. ICTs are now offering SME new opportunities for investment “to compete in the global marketplace” and to “have access to new business opportunities.”

#### 1.3.3 E-education:

One of the main socially relevant areas to be targeted for the development of cost-effective and integrated solution based on ICTs is education. Education and training are a prerequisite to the use of new information and communication technologies, but they can also help in the

achievement and reinforcement of educational goals, thanks to their flexibility and their potential for interactivity. The innovative approaches to education allowed by the advent of ICTs are highlighted in the Florianopolis Declaration, which sees distance learning, non-formal education and teacher training as an “essential basis for enabling the population to play a positive role in new forms of knowledge-based production, while also promoting the access and use of information and communications technologies in methodologies designed to accelerate the educational processes of marginalized population groups and those living in extreme poverty”. “Human resource development is essential for sustainable social and economic prosperity, and activities that use ICT itself, such as distance learning, can be of great help in human resource development.” Long-distance education using ICTs can enhance the openness of education by equalizing opportunities, promoting lifelong learning and reaching the smaller communities in developing countries.

#### **1.3.4 E-health**

After the education sector, the health sector has become one of the major users and promoters of the use of ICT tools to gather and disseminate knowledge. ICTs give professionals and researcher’s access to rapid exchange of information, distance learning, and access to diagnostic assistance, and in the view of many countries should be part of national health care reforms and strategies. African countries have underlined the capacity of ICTs to enhance regional approaches to major social issues, as the struggle against HIV/AIDS, and the G7 Heads of State consider “global health care applications” to be one of the main areas of concern, re-affirming the great potential of the application of telematics technologies in the field of telemedicine to fight against the major health scourges.

#### **1.3.5 E-government:**

Poor networks and infrastructure exacerbate the difficulties in interaction between Governments and citizens in many parts of the world: with E-government allows new opportunities for social and economic development. The use of ICTs as a tool for governance can help to foster democracy, efficiency and transparency, and may lead to an increased possibility for countries to attract foreign investment and financial assistance. As stated during the Palermo conference on e-Government for development, ICTs have the potential to dramatically broaden political participation, to increase access to information about the ways in which governments operate, and in facilitating knowledge acquisition and utilization. ICTs are as much about enhancing public administration as about improving the ways in which a society governs itself”

**SELF-ASSESSMENT EXERCISE 2**

- The adoption of .....has made distance no longer a barrier to entry into international markets?
- The..... have the potential to dramatically broaden political participation, to increase access to information about the ways in which governments operate?

**1.4 Summary**

Now that you have read through this unit, you ought to have mastered and understand very well the concept of information age and its contributions to various segments of our society. Information has become the commodity in the present-day context of information explosion. The most valuable commodity in this age is information. All sectors of our life have been impacted by information age

Video <https://www.youtube.com/watch?v=uLpK5Jz5l7Q>

**1.5 References/Further Readings/Web Resources**

Digital Millennium Copyright Act of 1998,

Dale, W. J. & Kevin J. S (1999), Information technology and growth (1999)

<https://ideas.repec.org/a/aea/aecrev/v89y1999i2p109-115.html>

George J. S. (1961). The Economics of Information (1961). *The Journal of Political Economy*. Volume 69. Issue 3 (Jun., 1961) 213-225  
<https://home.uchicago.edu/~vlima/courses/econ200/spring01/stigler.pdf>





## **I.6 Possible Answers to Self-Assessment Exercise**

### **Self-Assessment Exercise 1**

- information
- information

### **Self-Assessment Exercise 2**

- e-commerce
- e-governance/ICT

## **UNIT 2      INFORMATION SOCIETY; ORIGIN, CAUSE AND CHARACTERISTICS**

### **Unit Structure**

- 2.1    Introduction
- 2.2    Learning Outcomes
- 2.3    meaning of information society
  - 2.3.1    Origin and Cause of Information Society
  - 2.3.2    Basic characteristics of information society
- 2.4    Summary
- 2.5    References/Further Readings/Web Resources
- 2.6    Possible Answers to Self-Assessment Exercise



### **2.1      Introduction**

In the last unit, we discussed about information Age which characterised by information explosion. This unit will expose you to Information Society which can be defined as a society based on information and knowledge. Information society is an evolving concept and it is now at its youth. At the present, here and there, islands of information societies are taking form. This is the early stage of information society. It will evolve, as the information age unfolds, and all these islands will join together, forming the Global Information Society. Currently, each country has its own action plan for developing the information society of its own.

Also, this unit takes into account the Information society which is governed by knowledge, competence, and informed decisions and actions. There will be no room for incompetence in this society. The wealth of information and knowledge available for the citizens of information society provide an environment, where only informed, knowledge, and competent individuals can survive as managers and leaders of the society.



### **2.2      Learning Outcomes**

By the end of this unit, you should be able to:

- evaluate the origin of information society
- analyse the causes of information society
- evaluate the concept of information society
- discuss the three main characteristics of information society



## **2.3 Meaning of Information Society**

The term information society has been proposed to refer to the post-industrial society in which information plays a central role. It is a much broader concept than that of an information economy. However, there is no general agreement on one definition or on the defining characteristics.

We are living in the information society. Now information has become an essential for our day-to-day activities. Approaching the end of the twentieth century, societies all over the globe are changing. In countries, many different kinds information now plays an increasingly important part in economic, social, cultural and political life.

This observable fact is taking place regardless of a country's size, state of development or political philosophy. Changes that are happening in Singapore, with a population of 2.5 million, are similar to those taking place in Japan with its population of 125 million. Developing countries like Thailand are striving to build information-intensive social and economic systems just as hard as countries like the United Kingdom or France. And the goal of creating an information society is shared by the capitalist states of North America as well as the communist states of China and Vietnam. Information societies have three main characteristics.

### **2.3.1 Origin and Cause of Information Society**

The origins and causes of information societies lie in two interrelated developments: long-term economic development and technological change. In the long term, the structure of economies changes. It begins with a dependence on the primary sector: agriculture, forestry and mining.

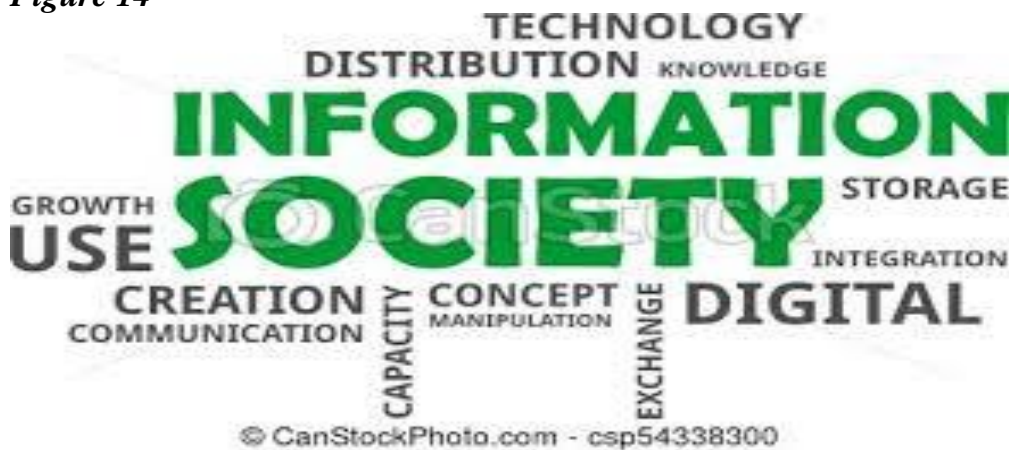
Gradually, the secondary sector manufacturing industry becomes more important, contributing a larger proportion of Gross Domestic Product and usually also contributing to exports. The rise of the secondary sector is then followed by an expansion of the tertiary sector.

The commercial and service sector grows and makes a greater contribution to the national income. At each stage in this progression, the productivity of labor grows, more value is added by each worker, capital investment increases and the economy expand. Just as significantly, the relative importance of the different sectors of the economy changes.

The effect of this is shown quite clearly in the United Nations Development Programme (UNDP)'s Human Development Report which shows that in economies as diverse as Singapore or Senegal, Hong Kong

or Hungary, the service sector accounts for more than 60% of the nation's economic activity. Even in the world's least developed economies, the share of the service sector (43%) is higher than agriculture (37%) or industry (20%).

**Figure 14**



### SELF-ASSESSMENT EXERCISE 1

- Mention the two interrelated development where the origins and causes of information societies lie?
- Mention the three (3) structure of economise on which primary sector depend on:
  - i
  - ii
  - iii

### 2.3.2 Basic characteristics of information society

- ***Information is used as an economic resource.*** Organizations make greater use of information to increase their efficiency, to stimulate innovation and to increase their effectiveness and competitive position, often through improvements in the quality of the goods and services that they produce. There is also a trend towards the development of more information-intensive organizations that add greater amounts of value and thus benefit a country's overall economy.
- ***It is possible to identify greater use of information among the general public.*** People use information more intensively in their activities as consumers: to inform their choices between different products, to explore their entitlements to public services, and to take greater control over their own lives. They also use information as citizens to exercise their civil rights and responsibilities. In addition, information systems are being developed that will greatly extend public access to educational and cultural provision.

- ***Development of an information sector within the economy:*** The function of the information sector is to satisfy the general demand for information facilities and services. A significant part of the sector is concerned with the technological infrastructure: the networks of telecommunications and computers. Increasingly, however, the necessity is also being recognized to develop the industry generating the information that flows around the networks: the information-content providers. In nearly all information societies, this information sector is growing much faster than the overall economy. The International Telecommunications Union (ITU) estimates that the global information sector grew by over 5% while the overall world economy grew by less than 3%.

Some of the very basic characteristics of information society are as follows:

- Information society is global in principle, for geographic borders are not recognized by the flow of information. It is, therefore, not our choice that the isolated information societies currently being developed in different parts of the world are going to join together, forming the Global Information Society. It is the natural trend in the evolution of information society.
- Information society demands and promotes clarity, precision, honesty, and openness. A wealth of information would be available for every citizen, who can simply look up and discover the facts.
- In an informed society; one cannot get away with false statements. Understanding the nature of information society, one has to think twice before making a statement.
- Information society promotes equal opportunity. It has been a well-known fact since long time ago that “information is power.” The free flow of information, in the information society, therefore, translates to equal distribution of power in this society.
- The availability of information to everyone without any restriction, control, or filtering, provides equal opportunity for all the citizens of information society.

## SELF-ASSESSMENT EXERCISE 2

- |   |
|---|
| <ul style="list-style-type: none"> <li>• How does information society promote equal opportunity?</li> <li>• Information society is global in principle, for geographic borders are not recognized by the flow of.....?</li> <li>• The term information society has been proposed to refer to the ..... society in which ..... plays a central role</li> </ul> |
|---|

- One of the main characteristics of information society is that Information is used as an ..... resource?



## 2.4 Summary

Now that you read through this unit, you ought to have grasped the understanding of the origin, causes and characteristics of information society. The origin and causes of information societies lie in the long-term economic development and technological change. Information society is global in principle, for geographic borders are not recognized by the flow of information. Information society demands and promotes clarity, precision, honesty, and openness. Information society promotes equal opportunity. You have read through this unit, you ought to have grasped the understanding of what information society is and main characteristics of information society. Information society refers to the post-industrial society in which information plays a pivotal role. Information is used as an economic resource. Information sector is growing much faster than the overall economy



## 2.5 References/Further Reading/Web Resources

May, C. (2002). *The Information Society: A skeptical view*. Cambridge, U.K.: Polity Press, 2002. <https://www.wiley.com/en-us>

Webster, F. (2002). *Theories of the Information Society*. Second Edition. London and New York: Routledge, 2002.

Wolff, E. N., (2000). The growth of Information Workers in the US economy, 1950- 2000:

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Webster, F. (2002). *Theories of the Information Society*. Second Edition. London and New York: Routledge, 2002.

Wolff, E. N., (2000). The growth of Information Workers in the US economy, 1950- 2000:

<https://www.tandfonline.com/doi/abs/10.1080/09535310600844193>



## 2.6 Possible Answers to Self-Assessment Exercise

### Self-Assessment Exercise 1

- a. Long-term economic development and
- b. Technological change

### Self-Assessment Exercise 2

- The free flow of information, in the information society, therefore, translates to equal distribution of power in this society.
- information
- i. post-industrial (ii) information
- economic



## UNIT 3 INFORMATION NETWORKING

### Unit Structure

- 3.1 Introduction
- 3.2 Learning Outcomes
- 3.3 Information networking
  - 3.3.1 Objectives of Library Networking
  - 3.3.2 Importance of Library Networking
  - 3.3.3 Institutional responsibilities of a Librarian
- 3.4 Summary
- 3.5 References/Further Readings/Web Resources
- 3.6 Possible Answers to Self-Assessment Exercise(s)



### 3.1 Introduction

This unit traces the foundation and development of information networking from the ancient library resource sharing, library co-operation, library consortium, library networking to the present day information networking. The librarian's information-related responsibilities were enumerated, the needs and objectives of library networking were presented and lastly, factors that necessitated information networking were provided.

The term 'Resource Sharing' has been used in the library profession since 1960 however; the practice is as old as librarianship itself. In the olden days, it was called library co-operation and mainly existed in the form of inter-library loan. As Kraus puts it, "the idea that libraries should in some way, find means to work co-operatively to provide people with access to books unavailable in nearby libraries is a deeply rooted concept in librarianship."

Some evidence of inter-library loan was found in the period around 200 B.C., with resource borrowed by the library of Pergamum from the great Alexandria Library of that time.



### 3.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the brief history of information networking
- analyse the needs and objectives of information networking
- evaluate the responsibilities of librarian in a Networked Library



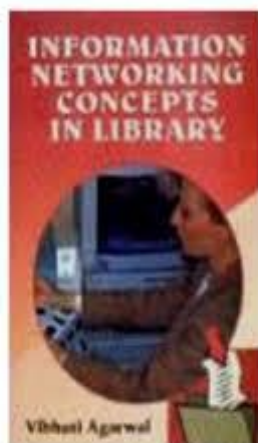
### 3.3 Information Networking

Network is the term that is widely used to connect computers that shares resources and information with each other through some type of medium. The main goal of networking is optimum utilisation of available information resources through sharing. In its broadest sense, a network consists of two or more entities, or objects, sharing resources and information. The exponential growth of information in all fields of knowledge, heavy demand of information, accuracy of information and the need for newest information has become the erroneous task to the library. The individual library cannot meet these challenges with its own resources. Librarians can and should play a crucial role in information exchange. Networking of libraries a co-operative endeavor of libraries, improves other areas such as cataloguing process, database creation and staff development too. In addition to that, it reduces the financial burden by the sharing of common resources.

Library Networking, Library Resource Sharing, Library Co-operation, Library Consortium are various term given to the same activity which mean that a group of libraries have come together and entered into some kind of formal understanding with the objective of sharing the resources of each other's materials, functions, services and the staff to their mutual benefit realising that only through library networking the greatest amount of the best information can be provided to most of the users at the most reasonable cost.

Various definitions and explanations have been given for the concept of networking. In a broad sense a library network is a distribution system composed of two or more libraries and / or other organizations engaged in a common pattern of information exchange through communication channel for some prompt purpose.

A formal organisation among libraries for co-operation and sharing of resources, in which the group as a whole is organised in to sub groups with the exception that most of the need of a library will be satisfied within the sub groups of which it is a member. It is a library networking system established by libraries and information centers which are brought together by common subject, geographic proximity to share informational resources, human resources and all other elements essential for providing effective information service.



In a library networking the aim is to achieve sharing of resources to provide better service to customers. i.e. library network is established for exchange of data, information or resources. Modern networks are intelligent carriers that provide information interchange among attached centres. Scientists are usually heavily involved in their research and do not have the time to develop new contacts, maintain existing ones, photocopy and mail documents, etc. Librarians by their profession are information specialists. They should take it upon themselves to develop the links with the outside world and to publicize the scientific endeavours of their institution.

### 3.3.1 The Need and Objectives of Library Networking

The following needs and objectives of library networking are currently in vague

- Tremendous growth of literature.
- Increasing cost of documents.
- Declining library budget and
- Technological advancement

- Above phenomena has compiled for resources sharing through network.

### 3.3.2 Importance of Library Networking

Library networking is necessary thus:

- It satisfies information needs of users.
- It increases the availability and accessibility of resources: clientele of each participating library can access to resources available in all the libraries. Resources can be moved from one library to another manually or through modern means. This provides an easy access to and free flow of information.
- Diminish cost: resource sharing helps in building specialized collection and all participating libraries need not duplicate the procurement of similar material.
- To exploit resources: resource sharing advocated that the reading material of one library should make available to the client of other libraries, thus exposing the reading materials to a wider group of users. Similarly, the services of a library can be exploited by the users of other libraries or a wider community.
- To promote co-operative activities like acquisition, exchange, storage binding, training, reference and documentation services, library loans, etc.
- It eliminates record duplication.
- It promotes the exchange of information with other co-operative networks.

### SELF-ASSESSMENT EXERCISE 1

- |   |
|---|
| <ul style="list-style-type: none"> <li>• Network is the term that is widely used to connect..... that shares resources and information with each other through some type of medium?</li> <li>• The main goal of networking is optimum utilisation of available ..... resources through .....?</li> <li>• Highlight four the (4) needs and objectives of networking as discussed in this unit</li> </ul> |
|---|

### 3.3.3 Institutional Responsibilities of a Librarian

The librarian should know all the scientists in his/her institution and be familiar with their research areas and needs. This will allow the librarian to act as some sort of public relations officer who can easily route requests from in or outside the institution for contacts. At the institutional level the librarian's information related responsibilities can thus be defined as follows:

- provide a document delivery and duplicate exchange service;
- catalog the library holdings and make this information available to in- and outside users (electronically or printed) distribute information on research activities, internally or externally; follow-up outside queries on scientists or their work;
- establish links with other libraries and exchange information on the institutions and their scientists;
- create institutional information brochures.

These are only a few examples of the important role a librarian can play in the information exchange activities of a scientific institution. However, it is clear that the management of the institution must equally appreciate the professional capabilities of the librarians and give appropriate authority to this staff to develop the above activities. In theory each component of the network should be an information user and information supplier. Links should exist between all components of the network.



### 3.4 Summary

Now that you've read through this unit you ought to have grasped the meaning of *Information networking*, know how *it started and developed, the needs and objectives of it and why it is necessary*. The main objective of networking is optimum utilisation of available information resources through sharing. In a library networking the aim is to achieve sharing of resources to provide better service to customers

Video [https://www.youtube.com/watch?v=EO\\_APRdoOkg](https://www.youtube.com/watch?v=EO_APRdoOkg)



### 3.5 References/Further Reading/Web Resources

Nnadozie, C. O. (2014). *Sources of Information*. In: Arua, U., Uzuegbu, C. P. and Ugah, A. D. (Eds.). *Information Literacy Education for Tertiary Institutions*. Lagos, Nigeria: Zeh Communications

Tamberwade, V. G. (1997). *Sources of Information*. University News,



### 3.6 Possible Answers to Self-Assessment Exercise

**Self-Assessment Exercise 1**

- computers
- information
- sharing
- tremendous growth of literature.
- Increasing cost of documents.
- Declining library budget and
- Technological advancement

## **UNIT 4      INFORMATION TRANSFER AND THE ROLE PROFESSIONAL BODIES/ASSOCIATION**

### **Unit Structure**

- 4.1    Introduction
- 4.2    Learning Outcomes
- 4.3    Origin and Cause of Information Society
  - 4.3.1   Basic characteristics of information society
- 4.4    Summary
- 4.5    References/Further Readings/Web Resources
- 4.6    Possible Answers to Self-Assessment Exercise



### **4.1      Introduction**

This unit takes into account the term professional association (PA) which refers to a group of people in the same profession who come together to form a professional organization called an association or a society. The creation of this organization is purposeful and is meant to facilitate the achievement of very specific objectives, especially in providing service and enhancing the careers of the professional members. A professional association (also called a professional body, professional organization, or professional society) is usually a nonprofit organization looking to further a particular profession, the interests of individuals engaged in that profession and the public interest.



### **4.2      Learning Outcomes**

By the end of this unit, you should be able to:

- discuss the role various professional association play in the transfer of information
- discuss different types of professional associations



### **2.3      Information Transfer Professional Bodies**

Professional associations have been variously defined: "A group of people in a learned occupation who are entrusted with maintaining control or oversight of the legitimate practice of the occupation; also a body acting "to safeguard the public interest;" organizations which "represent

the interest of the professional practitioners," and so "act to maintain their own privileged and powerful position as a controlling body."

Many professional bodies are involved in the development and monitoring of professional educational programs, and the updating of skills, and thus perform professional certification to indicate that a person possesses qualifications in the subject area. Sometimes membership of a professional body is synonymous with certification, though not always. Membership of a professional body, as a legal requirement, can in some professions form the primary formal basis for gaining entry to and setting up practice within the profession. Many professional bodies also act as learned societies for the academic disciplines underlying their professions.



## **African Library & Information Associations & Institutions**

### **4.3.1 Role/Mission of Professional Bodies**

The mission of the professional societies is primarily educational and informational. Their influence flows from their continuing and highly visible functions: to publish professional journals, develop professional excellence, to raise public awareness, and to make awards.

Through their work, they help to define and set standards for their professional fields and to promote high standards of quality through awards and other forms of recognition.

One particularly important function of professional societies relative to research publishing professional journals is shared with commercial publishers, some of which are large and influential forces in their own right. Because commercial publishers are for-profit ventures, however, their mission differs in an important way from that of the societies.

With the exception of a few leading general journals such as *Science*, *Nature*, and the *Proceedings of the National Academy of Sciences*, the prestigious outlets for research scholars tend to be the high-impact, single-discipline journals published by professional societies.

In addition to this for example the Nigerian Library Association (NLA) has created an online forum to share ideas and resources. This forum has



greatly impacted new librarians to learn and be acquainted with the trends in librarianship.

Current issues and trend in the information profession are made known and ideas are shared among members on the forum.

Disciplinary societies have a great deal of influence through their journals in terms of their willingness to publish, their review procedures for papers submitted to a journal, and their ability to create new journals for sub disciplines.

In addition, disciplinary society newsletters can be used to facilitate communication among disciplines.

Disciplinary societies could help their members by founding or promoting new journals, new sections, and other kinds of homes for emerging interdisciplinary subjects.

They can also help researchers by giving awards and recognition for interdisciplinary work; this would help faculty who are working on interdisciplinary projects and who must demonstrate the value of their work to review committees that might not be familiar with either the interdisciplinary field or the interdisciplinary journals of significance to it.

Professional societies often host seminars, meetings and colloquiums that bring together scientists in different disciplines to learn about diverse fields and research topics, to learn the languages of different fields, and to discover where these research topics overlap.



#### **4.3.2 Forms of Professional Associations**

Some examples of professional bodies and associations in Nigeria includes;

- Nigerian Library Association (NLA)
- Institute of Chartered Accountants of Nigeria (ICAN)
- Chartered Institute of Bankers of Nigeria (CIBNG)
- Chartered Institute of Taxation of Nigeria (CITN)
- Nigeria Institute of Estate Surveyors & Valuers (NIESV)

- Association of General & Private Medical Practitioners of Nigeria (AGMPN)
- Association of National Accountants of Nigeria (ANAN)



#### **4.4 Summary**

Professional Association refers to a group of people in the same profession who come together to form a professional organization called an association or a society. Now that you've read through this unit you ought to have grasped the role of different professional bodies and associations as it relates to information transfer.

Video <https://www.youtube.com/watch?v=891X5cLESH4>



#### **4.5 References/Further Reading/Web Resources**

Adebamowo, O. (2006). Issues and themes in library studies. Lagos:Hadolad Ventures.  
National Universities Commission List of Nigerian Universities and Year founded (2015).



#### **4.6 Possible Answers to Self-Assessment Exercise**

- What are the means of transferring of information by professional associations?

## **MODULE 5      LIBRARIES AND INFORMATION IN THE EDUCATIONAL AND LEARNING PROCESS**

### **Introduction**

This module takes you through the importance of Library and Information Centres in the Educational and Learning process. It attempts to define Library and Information Centre as the light house for information dissemination, which is an important component of any educational institution and hub of the teaching and learning activities where students, researchers and teachers can explore the vast resources of information. You learn in this module the types of libraries as well as social issues relating to libraries and information centres

- Unit 1:        Importance of Library and Information Centres in Learning Process
- Unit 2:        Types of Libraries
- Unit 3:        Social Issues Relating to Libraries and Information Centres
- Unit 4 :        Information worker

### **UNIT 1:      IMPORTANCE OF LIBRARY/INFORMATION CENTRES IN LEARNING    PROCESS AND PROFESSIONAL QUALITY OF INFORMATION WORKER**

#### **Unit Structure**

- 1.1    Introduction
- 1.2    Learning Outcomes
- 1.3    The Library
  - 1.3.1   Importance of Library and Information Centres in Learning Process
  - 1.3.2   Teaching Role of a Library
  - 1.3.3   Resource Sharing and Library Networks
  - 1.3.4   Library as Source for Good Habit Formation and Rehabilitation
  - 1.3.4   Creativity – Introducing New Tools and Teaching Skills
  - 1.3.5   Library Software/Applications
  - 1.3.6   Library as a Preservation Center for Knowledge and Cultural Heritage
  - 1.3.7   Professional Quality of information worker
  - 1.5.1   Possessing factual and theoretical knowledge,
  - 1.3.2   Finding and accessing information,

- 1.3.3 Ability to apply information,
- 1.3.4 Communication skills,
- 1.3.5 Motivation
- 1.3.6 Intellectual capabilities
- 1.4 Summary
- 1.5 References/Further Readings/Web Resources
- 1.6 Possible Answers to Self-Assessment Exercise



## **1.1 Introduction**

The library has traditionally been seen as the ‘heart of the learning’ serving the particular community and users or institution. However, it is noted that the metaphor has been used loosely and with little evidence that it reflects institutional realities. “Students and Teachers alike fail to involve library resources and services in regular learning and instruction, turning to the library principally as a study hall or reserve book room.

On the other hand, Information workers gather, process and analyze information by technological means. Information contained in databases, document, repositories and Intranets are frequently used to carry out due diligence and assist decision making. This unit takes into account the various professional qualities and advancement of an information worker. It attempts to explain the various qualities required for successful advancement of any information worker.



## **1.2 Learning Outcomes**

By the end of this unit, you should be able to:

- discuss the concept library and Information Centres
- analyse the importance of library and Information Centres in learning process
- evaluate professional quality of information worker
- discuss the qualities of information worker



## **1.3 The library**

There has been a constant concern about the role and status of the library.

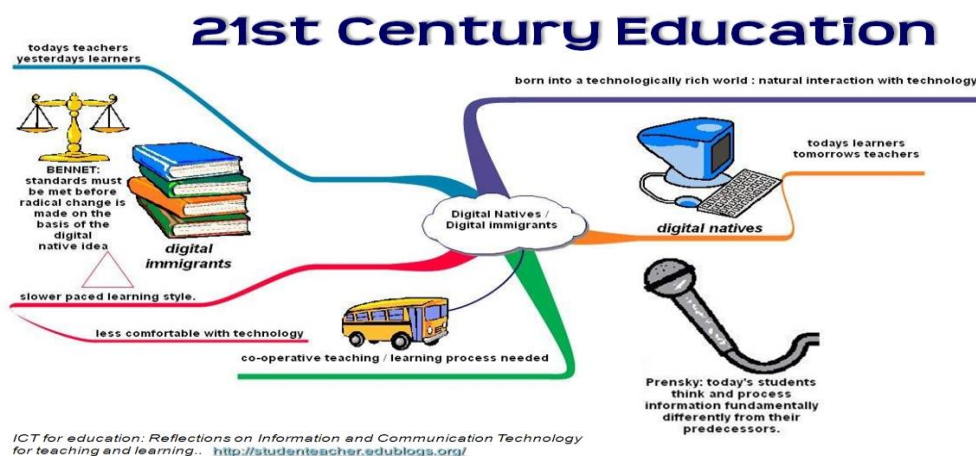
Many authors have pointed out that libraries will have to change and the roles and responsibilities of librarians need to be redefined.

At the start of the 21st century, libraries explore service developments to support a series of new scenarios:

- New publication and scholarly communication scenarios;
- More intensive use and delivering of digital resources;
- Serving increasingly heterogeneous student population;
- Continuing high demand from students for traditional resources;
- New modes of study, including ICT-based and distance learning, with which libraries have had little contribution in the past;
- Ever-reducing levels of resources, particularly in staffing, leading to huge pressures on individual staff and a severe challenge to management.

The new student-centred paradigm and new learning and teaching methods have created the need for a redefinition of the roles and responsibilities of librarians in learning and teaching processes. There is a growing literature that discusses bibliographic instruction, user education, and more recently, information literacy. However, the topic is mainly discussed among librarians and information professionals and is hardly explicitly and extensively recognized in other circles.

**Figure 15**



## SELF-ASSESSMENT EXERCISE 1

- The library has traditionally been seen as the ‘heart of the .....’ serving the particular community and users or institution?
- At the start of the 21st century, libraries explore service developments to support a series of new scenarios. Mention any two (2) highlighted in this unit

### **1.3.1 Importance of Library and Information Centres in Learning Process**

The importance of library and information centres in learning processes cannot be overemphasized. Though the importance of library abound, this section of the unit will expose you to some of the importance of library and information centres provide to learning processes thus:

### **1.3.2 Teaching Role of a Library**

The library engages the users in activities intended to make them critical thinkers, problem solvers, independent information seekers and lifelong learners. The library teaches the library users how to access, store, retrieve and use information. Users are also taught how to carry out cross referencing to access information and cite bibliographies for proper referencing. Training to acquire relevant skills should be the focus of librarians and information professionals of today. This will improve the development of structured databases with proper indexing of information for easy access in the library and on the Internet. It was asserted that the school of information is training the next generation of information professionals with the skills to manage and preserve information in the age of the Internet

A library facilitates the planning and implementation of learning programmes that will equip the students with the skills and knowledge necessary to succeed in a constantly changing social and economic environment. Through resource-based programmes, students acquire skills to collect, critically analyze and organize information, solve problem and communicate their understandings.” Library provides a contact point and physical place for teachers and learners to meet outside the structure of the classroom, thus, allowing people with different perspectives to interact in a knowledge space that is both larger and more general than the one shared by any single discipline or affinity group. If you need knowledge or awareness on a variety of topics visit the library, with the help of library staff you can be introduced to books on the topics in which you can study and learn. Researchers, teachers, and students increasingly rely on global networks for the creation, storage and dissemination of knowledge.

This is made possible by the library. A researcher needs to investigate or make inquiries into particular fields of endeavor. Library resources will assist a great deal. A library serves as a wealth of resources for researchers: a research scholar may never be able to successfully conduct his investigations and researches without the help of library resources either in a digital form or otherwise. It is a place to rub mind with notable and renowned authors and researchers. Libraries often provide quiet

areas for studying, and they also offer common areas to facilitate group study and collaboration hence provide a conducive environment for learning and research. Libraries are one of the few places where young and old, school children, college students and adult learners can all participate in learning.

### **1.3.2 Resource Sharing and Library Networks**

Resource sharing and networking is a viable method of communicating information resources among libraries in this era. It is argued that no library, no matter how it is funded can acquire all the materials needed by her users; therefore, the way to achieve cooperation among libraries is through the establishment of consortiums a syndication arrangement which enables libraries to work together more effectively and efficiently. Using ICT made it possible for libraries to communicate and share resources.

The creation, sharing and usage of digital content and services are far greater in this generation than ever before. The impact of ICT to achieve networking and resources sharing has greatly been felt in most Nigerian libraries. “Library serves a practical role in sharing expensive resources needed for every course offered in a university. It makes learning easy by providing resources (books and non-book) for patrons.

Library serves as a knowledge sharing centre and also serves a practical role in sharing expensive resources. Libraries also provide the services of librarians who are experts at finding and organizing information and interpret information needs. Libraries serve social and intellectual roles in bringing together people and ideas, thus allowing people with different perspectives to interact in a knowledge space that is both larger and more general than that shared by any single discipline or affinity group.

Libraries help to connect with other researchers thereby enhancing the value of the library’s services. The library also provides resources for research and avenue to publish research findings. If a researcher wishes to publish a book or his findings in journals, the librarians can help him to locate the most appropriate journal, or publisher to approach.

### **1.3.3 Library as Source for Good Habit Formation and Rehabilitation**

If youths take to reading they will be able to refrain from evil habits such as loitering, stealing, smoking and gambling. And this can be done by reading literatures that educate on its danger. Every institution shall have a library for the use of all categories of users, adequately stocked with



both recreational and instructional books, and the users shall be encouraged to make use of it.

Libraries are capable of imparting new knowledge (teaching), modifying existing knowledge (learning) and providing research resources. Library provides and promotes quality fiction to develop and sustain in students the habit and enjoyment of reading for pleasure and to enrich students' intellectual, aesthetic, cultural and emotional growth. Resources and services in the libraries are very essential means for refraining from bad habits and also capable of reforming and rehabilitating individuals.

#### **1.4.4 Creativity – Introducing New Tools and Teaching Skills**

Technology cannot work in isolation without a professional to manage it.

In the face of advancement in information provision, it is important that libraries and librarians evolve and be innovative. The new roles of LIS professionals include advocate, consortia manager, consultant, content manager, facilitator, guide/teacher, intermediary, knowledge manager, researcher, sifter and web designer. Library provides opportunities for independent reading and studying; library is a resource and location for independent reading, personal exploration, project research, and individual assessment.

The library enables the individual to obtain spiritual growth, inspirational, and recreational activity through reading, and therefore the opportunity of interacting with the society's wealth and accumulated knowledge.

Library caters for differences in learning and teaching styles through the provision of information and equality of access to a wide range of materials, fiction and nonfiction, print, audio, video and digital resources.

Libraries promote learning as exploration and self-development. The library provides a school-wide programme that addresses information literacy and ICT literacy skills development across key learning areas; by providing training opportunities for teachers in the use of new information resources and ICTs and their use in curriculum contexts.

A library is a knowledge center that is dynamic, where not only the librarian, the “books” (whether real or virtual), and the users engage in an interchange of ideas but the library architecture acts as not only a surrounding framework, but also as a healthy “space” where ideas can flourish, live, grow and even be protected. The school library provides relevant, dynamic and responsive collection of information resources to support the school curriculum, and facilitates access to information through school library systems and services.

### **1.4.5 Library Software/Applications**

The libraries of the 21st century have devised means of reaching the library users beyond the library walls. The world over, libraries have adopted systems and software to ensure availability and accessibility of information resources to users. Today, users can access library collections through their systems (and often from home). Automating a library is a unique decision that makes the library activities easy for prompt service delivery to the users. Introduction of software to enhance the various functions of the library is a breakthrough in this era as those software include library 2.0.

Library 2.0 technologies were built into library software to ensure that library users and librarians interact to accelerate service delivery to adequately satisfy users' needs. It is evident that libraries are waking up to the task and lots of innovations are into library services as to keep to the pace of users' needs; this is because new software are been introduced.

This also brings to the fore why effort to address the current limitations of the legacy catalogue and to offer users more powerful searching tools is shifting libraries to use the new generation user-centered solutions.

Next-generation library catalogue has both commercial and open-source versions has a new interface that makes use of federated searches and deep indexing to search beyond local collections and discover electronic content as well as digital collections. In addition, the next generation library catalogues offer user-centered features such as social networking integration, faceted browsing and relevancy-ranking. Another current solution to ease access to resources on the next-generation catalogues is the Discovery interface.

Discovery interfaces present a new search experience for library uses, including tagging, book reviews, enlarged scope, integration, relevancy ranking, faceted navigation, user-centered features, search term recommendations and syndication with web search engines. Discovery layer software seeks to provide a search experience that is simpler to use, but at the same time gives users more options to refine their searches and browse library resources,

Libraries promote and exploit new technologies and new models of scholarly communications. A library provides a platform for continuous education which improves an individual. It provides facilities that enhance online research (that is, computer, internet connection and access, etc). It is indicated that libraries are utilizing the computing powers of ICT to promote communication and dissemination of information resources.

### **1.4.6 Library as a Preservation Center for Knowledge and Cultural Heritage**

A library serves a great deal to preserve culture and heritage. Libraries constitute a major part of memory and reflect the diversity of Arts, languages and Cultures of that society. Libraries are source for preservation of documents and cultural materials which affirm the views of the respondents. Library stores, preserves and promotes the scholarship of faculty and students through the school's digital repository. Libraries serve a cultural role in preserving and organizing artifacts and ideas.

Great works of literature, art, and science must be preserved and made accessible to future learners. Libraries preserve objects through careful storage procedures, policies of borrowing and use, and repair and maintenance as needed. Libraries are a physical manifestation of the values of an entity. Libraries serve a cultural role in preserving personal, organization and a nation's memories. Great works of literature, art, and science are preserved and made accessible to future learners.

### **1.3.6 Professional Qualities of Information Worker**

Information centres and corporate libraries are normally given the task to collect, organise and manage information within the organisation. Managing knowledge (formal and informal) within the organisation is a demanding task. Informal knowledge management is more complex and different form that of formal or explicit knowledge.

It requires dealing with human elements and closely related to human resource management, appraisal system, organisation's culture and business practices. As organisations become conscious of the value of keeping knowledge within the organisation, they will require knowledge managers to manage knowledge within the organisation and prevent knowledge flow. Thus, knowledge management goes beyond information management to include capturing skills, experiences and other type of informal knowledge.

All information workers need the following characteristics:

- Possessing factual and theoretical knowledge,
- Finding and accessing information,
- Ability to apply information,
- Communication skills,
- Motivation and
- Intellectual capabilities.

### **1.3.7 Possessing Factual and Theoretical Knowledge**

Knowledge workers are conversant with specific factual and theoretical information. School teachers possess information regarding specialized subject matter, teaching strategies, and learning theories. The sales representative commands factual knowledge concerning the product he or she sells and theoretical knowledge about how to attract customers in that product. Prospective knowledge workers may need years of formal education to master the information needed to enter a particular field of work. Because knowledge is always being created, this type of employee will be acquiring additional information on a continual basis.

### **1.3.8 Finding and Accessing Information**

At a time when the operations of today's information society depend on knowledge that is continually growing and changing, distribution of information within organizations has become challenging due to the massive amount of information with which employees need to be acquainted with. Knowledge workers must therefore know how to independently identify and find such material. Such employees need to know which sources provide the information they need and how to use these sources in order to locate information successfully.

### **1.3.9 Ability to Apply Information**

Knowledge workers use information to answer questions, solve problems, complete writing assignments, and generate ideas. Use of analogical reasoning and relevance judgment enables employees to address successfully personal and customer service-related issues. Analogical reasoning is a knowledge-based problem-solving process in which persons apply information from precedents to new situations. Relevance judgment is the process by which individuals decide whether or not a precedent is applicable to the problem at hand. The non-repetitive nature of knowledge workers' jobs makes crucial the ability to apply information to new situations.

### **1.3.10 Communication Skills:**

Knowledge work is characterized by close contact with customers, supervisors, subordinates, and team mates. Successful knowledge workers present clearly, in spoken and written word, both factual and theoretical information. These employees listen with understanding and ask for clarification when they do not understand what is being said to them. Knowledge workers must be able to speak, read, write, and listen in one-on-one and group settings. Emphasis on quality customer service and customization of goods and services to meet individual customer

needs and wants brings knowledge workers into close contact with customers. The goals of organizational effectiveness and continual improvement of products, together with the need to continually consider new information in order to accomplish work, require communication between supervisor and supervised and among team mates or colleagues. Knowledge workers possess communications skills that enable them to collaborate with one another for goal-setting, decision-making, and idea generating purposes.

### **1.3.11 Motivation:**

The nature of knowledge work requires continual expansion, in terms of mastery of information and skill development, on the part of those who do this type of work. Knowledge workers must become and remain interested in finding information, memorizing that information, and applying it to their work. Because new technological developments call on knowledge workers to change continuously the way they accomplish their work, these individuals must maintain a desire to apply their talents toward incorporating new information and new technologies into their work.

### **1.3.12 Intellectual Capabilities:**

Knowledge workers must have the intellectual capability to acquire the skills discussed above. Such intellectual capacities include those concerned with the understanding, recall, processing and application of specialized information. Persons who perform knowledge work must possess the abilities needed to acquire appropriate communication skills and to learn how to figure out where and how information can be located.

Knowledge workers are able to learn how to read and write at post-secondary levels and to perform abstract reasoning. They also have the intellectual capacity to understand the value of acquiring and maintaining the knowledge and skills needed to accomplish their work.

## **SELF-ASSESSMENT EXERCISE 2**

- List three (3) importance service the library provides for learning processes
- List any Three (3) qualities of an information worker.



## **1.4 Summary**

Now that you have read through this unit you should be able to explain the importance of library and information centres in learning process. The

library has traditionally been seen as the ‘heart of the learning’ serving the academic community of its parent institution. There has been a continuous concern about the role and status of the library. Now that you have read through this unit, you ought to have mastered and understand very well the professional qualities of an information worker. Information workers gather, process and analyze information by technological means. All information workers require these qualities for successful advancement in their information work; Possessing factual and theoretical knowledge, Finding and accessing information, Ability to apply information, Communication skills, motivation and Intellectual capabilities

Video <https://www.youtube.com/watch?v=Aa5Fd71DjUs>

Video <https://www.youtube.com/watch?v=hLLXOQRv238>



### 1.5 References/Further Reading/Web Resources

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## 1.6 Possible Answers to Self-Assessment Exercise

### Self-Assessment Exercise 1

- learning
- i. New publication and scholarly communication scenarios;
- ii. More intensive use and delivering of digital resources;

### Self-Assessment Exercise 2

- i. Resource Sharing and Library Networks
- ii. Teaching role
- iii. Creativity – Introducing New Tools and Teaching Skills (among others)
- i. motivation, ii. Intellectual capability, iii. Possessing Factual and Theoretical Knowledge

## UNIT 2      TYPES OF LIBRARIES AND INFORMATION CENTRE

### Unit Structure

- 2.1 Introduction
- 2.2 Learning Outcomes
- 2.3 The Library
  - 2.3.1 The Types Libraries
  - 2.3.2 Public library
  - 2.3.3 Academic library
  - 2.3.4 Special Library
  - 2.3.5 Private Library
  - 2.3.6 Virtual Library
  - 2.3.7 National Library
- 2.4 Summary
- 2.5 References/Further Readings/Web Resources
- 2.6 Possible Answers to Self-Assessment Exercise



### 2.1 Introduction

This unit takes into account the various types of Library and Information Centres. It attempts to provide several definitions of library, their characteristics and utility in information system and services. Both libraries and information centers are involved in the acquisition of materials. Librarians familiar with the bibliographical tools of the world, identify, locate, and acquire foreign and domestic publications for the library. In this sphere of activity, the libraries support the centers:

- Library
- Public library
- Academic Library
- Special Library
- Private libraries
- Virtual Libraries
- National library

Library originated from the Latin word “liber” which means A BOOK.

Earlier a library was “a place where books were written or kept”. This term was often used as a “collection of books” and a librarian as a keeper or guard of books. This word has taken centuries to become central point of all social actions and has got recognition as a social institution.





## 2.2 Learning Outcomes

By the end of this unit, you should be able to:

- discuss the meaning of library
- evaluate the various types of library



## 2.3 The Library

For a better understanding of this unit, it is necessary to define what a library is. At the elementary stage library is referred to as:

- a collection of literacy documents or record kept for reference or loan
- a depository house built to contain books and other materials for reading and studying
- a collection of standard programmes and subroutines that are stored and available for immediate use.
- A building that houses a collection of books and other materials.

Advanced definitions of Library however are as follows:

- The online Dictionary, Thesaurus and Encyclopedia described the library as a place in which literary and artistic materials, such as books, periodicals newspapers, pamphlets, prints, records, and tapes, are kept for reading, reference, or lending. In a digital sense, a library may be more than a building that houses a collection of books and other materials as the Internet has opened up an avalanche of online and electronic resources for accessing documents on various fields of interest.
- A library is a collection of sources, resources, and services, and the structure in which it is housed; it is organized for use and maintained by a public body, an institution, or a private individual. It can mean the collection itself, the building or room that houses such a collection, or both.
- The term library has itself acquired a secondary meaning: "a collection of useful material for common use." This sense is used in fields such as computer science, mathematics, statistics, electronics and biology. It can also be used by publishers in naming series of related books, e.g. The Library of Agricultural Sciences. Libraries are defined as organized collection of published and

unpublished books and audiovisual materials with the aid of services of staff that are able to provide and interpret such material as required, to meet the informative research, educational and recreational needs of its users.

Libraries are regarded as agencies through which sources of information of accumulated knowledge and experiences are selected, acquired, organized, preserved and disseminated to those who need them. Libraries are essential tools in learning at any level. It is the intellectual centre of the society containing records not only the intellectual but also of cultural, economic and social inclination.

Libraries are established for the systematic collection, organization, preservation and dissemination of knowledge and information. It is very important for man to preserve and maintain the valuable knowledge and information contained in the books and documents because we want to preserve our knowledge and wisdom for the coming generations. By preserving the documents in a library this knowledge can be made available to others so that they can benefit from it. Library makes available all the records of knowledge of the past and present, whereas a man acquires that conserved knowledge to choose as between good and bad, the right or wrong, which distinguish him from the other animals that have no rational power or thinking. A good well equipped library is a *sine qua non* for the intellectual, moral, and spiritual advancement and elevation of the people of a community. It is an indispensable element of the absolute well-being of the citizens and that of the nation at large.

People acquire education through certain institutions, schools, agencies, welfare bodies, museums, and organizations, and library is the most outstanding of such institution. A school, a club, an enterprise of a society can never alone impart education; each of them is dependent upon a library a centre of wholesome education and the quencher of thirst for concrete, fathomless, ultimate knowledge. The central mission of a library is to collect, organize, preserve, and provide access to knowledge and information. In fulfilling this mission, libraries preserve a important record of culture that can be passed down to succeeding generations.

Libraries are an essential link in this communication between the past, present, and future. Whether the cultural record is contained in books or in electronic formats, libraries ensure that the record is preserved and made available for later use. Libraries provide people with access to the information they need to work, play, learn, and govern.

Library does not mean merely a collection of books. It is a learned institution equipped with treasures of knowledge maintained, organized, and managed by trained personnel to educate the children, men and

women continuously and assist in their self-improvement through an effective and prompt dissemination of information embodied in the resources. A research scholar can never successfully conduct his investigations and researches without the help of a library and a librarian.

Librarian, as an information officer or a scientific officer possesses, of necessity, definite subject background and knows best the subject area to be covered by an investigator in his narrow field of the problem in hand that he wants to attack.

### SELF-ASSESSMENT EXERCISE 1

- Define Library according to the online Dictionary, Thesaurus and Encyclopedia
- Library originated from the Latin word “liber” which means a.....?

#### 2.3.1 Types of Libraries

The scope of a library as an effective aid to study and education is virtually multitudinous.

**Figure 16**



#### 2.3.2 Public library

Definition of a Public Library as a non-profit library established for the use of the general public and maintained chiefly by public funds. In other words, a public library is for the public, by the public and of the public. It provides service to every citizen irrespective of one's birth, caste, colour, gender, social, economic and educational standard without any cost.

Libraries of all categories are generally used for five purposes, i.e., education, information, recreation, aesthetic appreciation and research.

A public library which is very often called a peoples 'university' is a democratic institution operated for the people by the people that conserves and organizes human know. The scope or command of a public

library that meets not specific but general requirements of the public thus remains quite broader in its vision.

It differs from the other types of libraries in that by offering opportunities of informal self-education it inculcates reading habit amongst all types of general readers and, as a consequence, maintains a sizeable collection of light literatures, i.e., fictions, novels, story books, etc., for recreational studies, and a child 's corner equipped with juvenile literature. Among its broad-based functions to perform in educating the general public as well as the children, the following ones can be quoted:

- it facilitates informal self-education of all people in the community;
- enriches and further develops the subjects on which individuals are undertaking formal education;
- meets the informational needs of all;
- creates and further develops civic sense and habits of the citizens;
- supports educational, civic, and cultural activities of groups and organizations;
- encourages wholesome recreation and constructive use of leisure time
- provides children, young people, men and women opportunity to:
- educate themselves continuously,
- keep abreast of progress in all fields of knowledge, and
- maintain freedom of expression and constructively critical attitude to all public issues and world affairs.

***A public library is a social institution.*** It plays a significant role in the welfare of a society. There are a number of factors responsible for the evolution of public libraries. These are:

- Peoples' urge for knowledge
- Improvement of literacy level through self-education
- As an Information dissemination centre
- Need for life- long learning centre
- To be Community's intellectual centre
- As a Recreation centre
- Advancements in science and technology with the developments in computer and communication technologies, it is possible for the public libraries to provide quick information through mass media and internet.

- **Missions of the Public Library**

The following key missions that relate to information, literacy, education and culture should be at the core of public library services:

- Creating and strengthening reading habits in children from an early age;
- Supporting both individual and self-conducted education as well as formal education at all levels;
- Providing opportunities for personal creative development;
- Stimulating the imagination and creativity of children and young people;
- Promoting awareness of cultural heritage, appreciation of the arts, scientific achievements and innovations;
- Providing access to cultural expressions of all performing arts;
- Fostering inter-cultural dialogue and favouring cultural diversity;
- Supporting the oral tradition;
- Ensuring access for citizens to all sorts of community information;
- Providing adequate information services to local enterprises, associations and interest groups;
- Facilitating the development of information and computer literacy skills; and
- Supporting and participating in literacy activities and programmes for all age groups, and initiating such activities, if necessary.

In short, the UNESCO Public Library Manifesto suggests that a public library is expected to play its role mainly in three principal areas viz.

information, education and culture. It has to serve as a:

- centre for information;
- centre for self-education;
- centre for culture; and
- centre for local cultural materials

**The Objectives and Functions of Public Libraries According to S. R. Ranganathan are given below.**

- Help the life-long self-education of one and all;
- Furnish up-to-date facts and information on all subjects to one and all;
- Distribute in an unbiased and balanced way all recorded information to the citizens to help them discharge their duties towards local, national and international affairs;
- Convey new knowledge to the researchers as early as possible;
- Preserve the cultural heritage of the country;
- Provide facility for fruitful utilization of leisure time; and

- Work for the continued social well-being of citizens as the in-charge of all material.

The functions of the public libraries are, summarized below: Most of the countries have legislation for public library system and they are set up considering the organizational structure and geographical distribution to reach all the people, i.e., in all states, districts and villages. In order to attract users to the library and to sustain their interest in reading, the library organizes cultural activities such as lectures, discussions, film shows, musical concerts, plays and art exhibitions and story hours for children. It not only serves as a repository of books, but as a cultural centre also. A public library, therefore, plays a very important role in building well-informed, skilled and productive citizens.

Now that you have read through this unit, you ought to have mastered and understand very well the mission, purpose objective and functions of public library. A public library which is very often called a peoples 'university. A public library is a social institution that plays a significant role in the welfare of a society.

### **2.3.3 Academic Library**

Academic Library primary objective is to meet the academic needs of the particular institution for which it is created to serve. Academic libraries comprise of school libraries, college libraries, and university libraries whose prime objective is to meet the academic needs of the particular institution for which it is meant to serve.

The purpose of a university library differs, in varying degree, from that of a school or college library in that the former adheres extensive and particular emphasis to research projects apart from the curricular needs of the institution. Besides aiding in the studies of children and assisting the teachers in their teaching and periodical research , a school library is primarily concerned to pro-create an urge for reading amongst the children who here get a first-hand-knowledge to use the library resources most effectively in their future career.

This institution serves to build up a strong mental base and character of the children. Before accounting their role in education abruptly, it may be pertinent here to recall the definitions of these various kinds of institutions which are not often self-explanatory to the general public so that the various parts played by them in the furtherance of education can be clearly and concisely gleaned.

The role of the library in any academic institution can be realized only in the context of the institution's philosophy of education. This is true of

most of the libraries of the world's academic institutions. Education is a process of learning with an aim to develop the capabilities among the people. Academic libraries which comprise school, college and university libraries have normally four types of users based on the level of education they cater to.

These are: a) Students b) Teachers c) Research scholars d) Administrative, professional and other staff of the institution Their objectives, functions, sources of finance, qualifications, designations, and strength of staff differ according to the type of a library. Building up a collection of books, periodicals, reference books and other multiple media material constitutes an integral part of learning, teaching and research.

The services such as provision of reading facilities, lending and reference services, etc., also vary in these libraries.

- **The objectives of an Academic Library are to:**
- serve the needs of the academic community;
- collect and store all kinds of reading and reference material;
- provide reading areas for users;
- render lending service appropriate to students, teachers and researchers;
- provide an active reference and information service.
- **Academic libraries are grouped into three categories. These are:**
- School libraries
- College libraries
- University libraries

#### **2.4.2.1 School Libraries**

##### **Objectives of School Libraries**

All types of schools have a library with the objectives to:

- awaken and foster interest in reading books;
- create love for books;
- promote reading habits; and
- inculcate communication skills through extra-curricular activities like storytelling, viewing and discussions on audio/visual programmes workshops etc.

**Functions of School Libraries** In order to attract students to the library and develop their interest and curiosity, a school library should:

- acquire a good stock of teaching - learning material for students and teachers;
- display books in classified order;
- provide functional physical facilities such as building, furniture and equipment; and
- hire qualified committed staff.

Schools at primary, secondary and senior secondary levels require similar consideration as mentioned above.

The school library services include:

- Lending
- Reading
- Reference service, and
- Guidance and advisory services with the objective of inculcating interest of children for reading books and other reading material.

The support of a library at the college level is essential to broaden the minds of the young students to meet new challenges. Compared to school education, college education is totally different for students. There are a large number of students in each class, and therefore, it is not possible for the teachers to give individual attention to each student. However, the students have to, depend on college library for their studies and develop a habit of self-learning.

#### **2.4.2.2 College Library**

**Objectives of a College Library**

The major objectives of a college library are to:

- give the enrolled students a wider and deeper understanding of the various disciplines; □ provide guidance to students for higher studies and self-learning;
- prepare the students for shouldering higher responsibilities in schools, government departments, civic organizations, commercial establishments, business and industrial companies, etc;
- train them to become more enlightened, knowledgeable and responsible citizens; and
- prepare them for varied professions like law, medicine, engineering, technology, etc.



## Functions of a College Library

The basic functions of a college library are to:

- assist its parent body to carry out the requirements of its teachers and students regarding reading, study and research;
- provide physical facilities such as functional building, furniture, equipment, etc. ; provide latest editions and multiple copies of curriculum based textbooks and recommended books for their study;
- equip the library with a wide range of reference books;
- develop collection of latest books in different subjects and periodicals including their back volumes;
- procure multiple media material and computer aided teaching learning material;
- subscribe to important newspapers and other light material such as popular fiction, biographies, travelogues, art books, etc. for recreation purpose; and
- preserve previous years' question papers to help the students.

College Library Services College library staff provides the following services:

- Provide reading, lending and textbook services;
- Guide students in the use of manual or computer catalogue;
- Assist in locating books and reference books from the shelves;
- Train and instruct students to use library resources in an effective and efficient manner
- Provide information, reference and referral services to all library members;
- Display new books and lists of multiple media material;
- Procure adequate multiple media material and equipment to render them usable; and
- Reprographic service.

### 2.4.2.3 University Library

A university library is established, administered and maintained to assist the university in five major functions such as - teaching and learning; research and generation of new knowledge; dissemination and publication of research results; conservation of knowledge and ideas; and extension programmes. The university libraries have to play a very challenging and difficult role to satisfy the demands of larger group of students, research and post-doctoral research scholars, members of the various academic and

executive bodies of the management, administrative and professional staff of the university.

- **Objectives of a University Library**

A University library plays a very important role by supporting and helping the university in achieving its aims and objectives. It has to cope with the multidimensional activities of the university. The objectives of a university library are to:

- provide intellectual and managerial leadership among the professionals in various fields of government, industry, health, engineering, law, medicine, defence, education, agriculture and inculcate in them a sense of social purpose;
- guide research workers in all areas mentioned above so that the results of research could be harnessed to improve the quality of life of the people; and
- conserve knowledge and ideas for posterity.

- ***Functions of a University Library***

The major functions of the university library are to:

- develop collections of print and media resources in a wide variety of subjects for learning, teaching, research, publication, etc.; organize and store the acquired collection/knowledge for use by the readers;
- provide a variety of library, documentation and information services, both responsive and anticipatory; and
- encourage students, researchers and teachers in using the library for pleasure, self-discovery, personal growth and sharpening of intellectual skill.

- **Services of a University Library**

The nature and efficiency of services provided vary from library to library. With the introduction of information and communication technologies, most of the university libraries have automated their library operations using Library Management Software and are providing a variety of services which were not provided before. University library provides services as mentioned below.

- Reading and lending service;
- Bibliographic instruction and library orientation;

- Assistance in the use of the library catalogue and locating documents;
- Reference and information services;
- Current Awareness Services (CAS);
- Selective Dissemination of Information (SDI);
- Bibliographic services;
- Inter-Library Loan (ILL) service;
- Reprographic services;
- Maintenance of News Paper Clippings;
- Maintenance of vertical files containing pamphlets, prospectuses, reports, and question papers of previous years' examinations;
- Reservation of documents;
- User education;
- Exhibition and special displays;
- Special lectures, demonstration of new software and services; and
- User oriented seminars, workshops.

### **2.3.4 Special Library**

Special library is a collection of books and other printed, graphic or recorded material dealing with a limited field of knowledge and provided by a learned society, research organization, industrial or commercial undertaking, government department or even an educational institution. It may also be a special branch of a public library serving certain interests or occupational groups such as a technical library or a special subject library, meeting the needs of all enquiries on that given subject such as music library.

A Special library deals with special user groups, has special subject collections and provides special services. These libraries are established to meet the information requirements of the organisations to which they are attached. They are generally devoted to Research and Development (R&D) activities and procure all types of documents in the form of handbooks, technical reports, state-of-the-art reports, bibliographies, current awareness bulletin, periodicals, indexes, abstracts, directories, documentation lists and accession lists.

The special library has been historically, and remains today, an integral, functioning unit of the organization in which it is found, dedicated to the proposition that it exists only to offer the information which the organization needs in order to build, prosper, advance, and achieve its ultimate ends. The highly specialized libraries do necessarily contain certain amount of materials on bordering or allied subjects for instance,

the library of the Institute of Agriculture should include such subjects as agronomy, plant breeding, soil science and forestry.

A special library which is specialized in a particular field of knowledge differs in its mandate from other types of libraries on the following grounds:

- periodical literature is of prime importance and forms the major part of the collection □ reports, standards, specifications form a considerable quantity;
- it files information rather than material which calls for the introduction of special techniques (mechanical indexing, information retrieval system, etc.) for organization;
- information here is most up-to-date more than the textbooks, periodical literatures or published reports;
- it ensures quickest dissemination of information. A library is not, however, merely a conserver of the past events, experiences, and knowledge.

The preservation of the physical object called the book, for example, may not be important in itself. What is important is for the library to transmit to the incoming generations the ideas which the book contains. 'Through the instructional staff of the academic institutions the knowledge and ideas conserved by a library are revitalized and put to use in the education of youth who are to be leaders in society and workers in the field of research, and through the methods of research the students are given an opportunity for independent works, and then the libraries and laboratories become inescapable and vital aids in an endeavor which is directed toward the expansion of man's fund of knowledge. While the library makes this direct contribution to the advancement of knowledge, it serves as the principal training ground for those who undertake investigations in the fields of science, technology, industry, and the like.

### • **Objectives of a Special Library**

A special library is an integral part of a parent institution and fully supports its programmes and activities. The main objectives of a special library are to develop current as well as retrospective collection in core subjects based on the projects and programmes of the parent organization.

Their aim is to provide promptly the latest information about the significant developments in the field whenever requested by the users. It provides all types of academic, technical and documentary support to render appropriate services to the specialists.

### ***Functions and Services of a Special Library***

A special library performs various functions and provides services as mentioned below.

- Performs exhaustive literature search to compile comprehensive lists;
- Selects, procures, organizes, stores and retrieves current information required by the users;
- Analyses, synthesizes and evaluates available information;
- Provides state-of-the-art-reports, critical reviews, monographs, research reports, reprints,
- Provides indexes, abstracts and extracts;
- Prepares accession lists, bulletins, newsletters, summaries, handbooks or manuals; bibliographies;
- Issues documents including inter-library loan;
- Renders reference and referral services; and
- Provides Current Awareness Services (CAS), Selective Dissemination of Information (SDI), and Translation Services.

### **2.3.5 Private Libraries**

Private libraries are libraries established, owned and funded by individuals or families. The collections could be single or multi-discipline. Therefore the size of the collection is mostly small based on the owner's research and reading interest. For instance, a private library owned by a lawyer is highly dominated by law materials (books) and serials.

The use of a private library is regulated and controlled by the owners, examples of prominent and notable individuals that owned private libraries include: President Thomas Jefferson of United States of America who owned a private library numbering over 6000 volumes and sold it to the Library of Congress in 1814. Dr. Namdi Azikiwe, donated his private library to the University of Nigeria, Nsukka, after the burning down of the library during the Nigeria-Biafra War. Chief Obafemi Awolowo, donated his private library to former Ogun State University now Olabisi Onabanjo University. In Nigeria today, there are many private libraries owned by individuals based on their different areas of interest. The major function of a private library is to provide specialized information services to the owner.

### 2.3.6 Virtual Libraries

The Association of Research libraries (ASL) in a publication described digital collections as unlimited access to document surrogates: they extend to digital artifacts that cannot be represented or distributed in printed formats. Online Glossary defined digital library as a collection of texts, images, etc, encoded so as to be stored, retrieved, and read by computer. Furthermore, a digital library is a collection of documents in organized electronic form, available on the Internet or on CD ROM disks.

It is the traditional/conventional physical library that provides a basis for the digital library. Another further development from the digital library is the advent of Virtual Library (VL).

The building blocks required for such a library may not exist, and the chemical steps for such a library may not have been tested. But the materials needed like journals are barred to a location, which can be decoded through passwords. This is a library in which the information collections are in an electronic accessible format. It is a library that exists without any form of physical space or location.

It is a technological way to bring together the information resources of different libraries in the Web so that users can access their information needs at their own comfort and convenience. A virtual library is a “library without walls” in which the collections do not exist on paper, microform, or other tangible form at a physical location but are electronically accessible in digital format via computer networks. The term virtual library came about as a result of the exponential growth of information resources on the Web.

However, as information resources increased on a daily basis, users are faced with the problems of how to find information on the Internet; and how to be sure that the information accessed are of good quality (e.g. authoritative source). It is pertinent to note that virtual libraries exist in cyberspace only, they have no buildings, and the information resources are in digital format and are accessible via the Internet.

### 2.3.7 National library

National Library is a library maintained out of government funds and serves the nation as a whole. The books are mainly for reference. They usually receive material through legal deposit legislation. The function of such a library is to collect and preserve for posterity all the published records viz. books, periodicals, newspapers and other printed and multimedia material of the country's cultural heritage. This is best done by a law requiring publishers to deposit copies of all publications

produced by them and by purchasing books on their country published in other countries. A legal deposit normally has penalty clauses to enable the act to be enforced.

National libraries collect and preserve the nation's literature. Most national libraries receive, by legal right (or copyright, or deposit), free copies of each book and periodical printed in the country. A National Library is a library specifically established and funded by the government of a country to serve as the pre-eminent repository of information for that country. In National Library, a limited number of books are lent out to readers under certain terms and conditions. It rarely allows citizens to borrow rare, valuable or significant works.

- **Objectives and Functions of a National Library**

The main objective of a National Library is to identify, acquire, organize, store and retrieve all print and non-print documents published within or on a particular country and by or on all the nationals of that country in other countries. The functions of the national library are to:

- provide leadership among the nation's libraries;
- serve as a permanent depository for all publications issued in the country;
- acquire other types of material;
- provide bibliographical services;
- serve as a coordinating centre for co-operative activities; and
- provide service to the government.

- **Example of a National Library is the National Library of Nigeria. Unique Functions:**

Apart from the general functions of libraries, the National library was established to perform some unique functions. Here are some of the functions:

- It collects and provides comprehensive collections that reflect the national heritage of the nation.
- The National library serves as a depository centre for all publications (print and non-print materials) published within and outside the country.
- It is responsible for issuance of the International Standard Book Number (ISBN) and the International Standard Serial Number (ISSN) to publishers and authors in a country. Any publication or information resource without these international identifiers is sub-standard and illegal.

- It compiles and publishes the National Bibliography of Nigeria.
- The National library represents the country in all library and information technology matters in the international conference.
- It is responsible for the publication of the Union catalogues and directories of libraries in the country.
- It provides leadership role through facilitating the development of library activities.

Now that you have read through this unit, you ought to know more about national library, its objective and function. In summary, National Libraries collect and preserve the nation's literature. National Library is a library maintained out of government funds and serves the nation as a whole. The main objective of a National Library is to identify, acquire, organize, store and retrieve all print and non-print documents published within or on a particular country and by or on all the nationals of that country in other countries

### SELF-ASSESSMENT EXERCISE 2

- A ..... library plays a very important role by supporting and helping the university in achieving its aims and objectives?
- A.....Library is a library maintained out of government funds and serves the nation as a whole?
- List three (3) categories of Library discussed in this unit



### 2.4 Summary

Now that you read through this unit, you ought to have grasped the understanding of what library is all about, how library was defined in the past and its present notion. Also, you have read through this unit, you ought to have mastered and understand very well the types and purpose of academic libraries. You ought to have grasped the meaning of what a private library is and its function. By now you should be knowledgeable about what a special library is, its collections functions and objectives.

These libraries are established to meet the information requirements of the organisations to which they are attached. You should be familiar with digital library and virtual library, their advantages and disadvantages. In the past library is seen as a physical space with physical collections..Now it is seen as a place where information resources are accessed and information services are rendered by professionals. Academic libraries comprise of school libraries, college libraries, and university libraries whose prime objective is to meet the academic needs of the particular



institution for which it is created to serve. They create information that informs the decisions or actions of others.

Private libraries are libraries established, owned and funded by individuals or families. The major function of a private library is to provide specialized information services to the owner. Digital library is a collection of documents in organized electronic form, available on the Internet or on CD. It saves and/or reduces the physical space taken up by library materials. The virtual library relies on power and computer networks in order to be available for use.

Video <https://www.youtube.com/watch?v=r-bS5OCa-Q>



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## 2.6 Possible Answers to Self-Assessment Exercise

### Self-Assessment Exercise 1

- a place in which literary and artistic materials, such as books, periodicals newspapers, pamphlets, prints, records, and tapes, are kept for reading, reference, or lending
- Book

### Self-Assessment Exercise 2

- National
- University
- a. School libraries
- b. College libraries
- c. University libraries

## **UNIT 3      SOCIAL ISSUES RELATING TO LIBRARIES AND INFORMATION CENTRES**

### **Unit Structure**

- 1.1 Introduction
- 1.2 Learning Outcomes
- 1.3 Social Issue
  - 1.3.1 Attitude to technology
  - 1.3.2 Training and Library staff
  - 1.3.3 Current trend in libraries
  - 1.3.4 Changing role of LIS professionals
- 1.4 Summary
- 3.5 References/Further Readings/Web Resources
- 3.6 Possible Answers to Self-Assessment Exercise



### **3.1 Introduction**

This unit takes into account the various concepts related to social issues of Library and Information Work. It attempts to define the Librarians Attitudes to Technology, Training, Current Trends and Changing Roles of LIS Professionals.

Training is generally recognized to be essential in introducing successful change in the workplace. Furthermore, it is a key strategy in overcoming any resistance to change and in providing staff with the requisite skills as both New Library and Building the New Library Network identified:

- Attitudes to Technology
- Training and Library staff
- Current Trends in Libraries
- Changing Roles of LIS Professionals



### **3.2 Learning Outcomes**

By the end of this unit, you should be able to:

- evaluation the library staff attitude to technology
- discuss the role of training library staff in attitudinal change to ICT
- discuss the current trends in libraries as a result of ICTs
- analyse the roles played by LIS professionals in today's world



### **3.3 Social Issues**

The advent of new technology into the place of work and into society generally, can be very terrifying for some people. The media and academia have contributed to the discussion as to why people are frightened of new technology, from dishwashers to computers, giving rise to expressions such as techno phobia, cyber phobia, computer anxiety and techno stress to describe such fears.

Now let us look at social issues relating to libraries and information centres one by one:

#### **3.3.1 Attitudes to Technology**

Human fears of technology may emerge because of its introduction, or increase in use, appears to threaten the status quo that could be a change in the schedule of work that was happily undertaken for the past years, or the fear of being left behind, or replaced by others who have the relevant technological skills. Change generally can bring both uncertainty and discomfort into our lives. It may provoke strong emotional reactions in people ranging from the confusion, fear and stress often associated with loss and bereavement.

The effects of automation on library staff have been a focus of research for the last 20 years and the introduction of automated library systems was a major point in the working lives of library staff since it involved learning new technologies, new processes and procedures. Years of routine were reversed instantly with the introduction of a computer for staff to work with. More recently, change might have involved moving to a more modern library management system or the acquisition of Blu-rays and e-journals all of which might prove very intimidating for staff in libraries with little or no prior experience of such innovations. It is argued that libraries generally are in a period of general uncertainty which can be worrying for staff and might provoke hostility or resistance to the introduction of new technologies.

Attitudes chiefly positive attitudes are assumed to be fundamental in the acceptance, implementation and success of new technologies. For ICT systems to be successful, it is suggested that staff need positive attitudes. Implementing information communication technology (ICT) in the library depends largely on the attitudes of library staff to its usage. The application of ICT has caused significant changes in libraries; for Example, automated cataloguing, circulation, information retrieval, electronic document delivery, and databases.

The advent of the Internet, digitization, and the ability to access library and research materials from remote locations created dramatic changes by the end of the twentieth century. It is observed that expert systems, wireless networks, virtual collections, interactive web interfaces, virtual reference services and personal web portals have brought changes since the start of the new millennium. There have been fast and significant changes in librarianship, where digital and electronic libraries complement and in some cases replace traditional libraries.

It should be noted that the drastic change in library practices brought about by rapid changes in information communication technology is posing challenges to the Librarians in recent time, particularly in the developing countries. To cope with these challenges posed by ICT, Librarians in developed countries moved quickly to learn and adopt new information technologies. Computers, software, CD-ROM, email, Internet, networks and other information management and communication technologies were introduced to perform different library functions and to provide innovative user services.

At the same time, library staff raised their level of knowledge of new information technologies through continuing education programs, professional training, and through revisions in their library and information school curriculums. This helped them to leverage the benefits of new technologies. Ultimately their libraries became well equipped with sufficient hardware, appropriate software and effective technology-based materials.

### **3.3.2 Training and Library Staff**

Training appears to affect perceptions of technological change and attitudes to ICT and change. Good training is shown to have valuable effects on staff and their reactions to new technologies. Staff saw training as a means of building their morale, curing techno stress and reassuring them of their ability to do the job. Training without the necessary skills or understanding of staff fears might strengthen anxieties about using ICT.

Training, then, must not take place for the sake of training and must provide the necessary skills, be of the right amount, of good quality and may have to combat fears, as well as promote understanding and confidence in using ICT. Time is a vital for good training. It is important that staff have the opportunity for hands on practice during a training programme, such as taking time away from the desk to practice. Similarly, once staffs have undergone training, they should be able to put their skills to use straight away. Different training methods suit different people. It is noted that library staff prefer training which includes self-teaching with support within a specific framework and training programme.



*Virtual library:* The access point as well as the graphic records are in electronic/digital form when these electronic/digital libraries are connected via various networks, particularly the INTERNET, this is called virtual library. A "library without walls" in which the collections do not exist on paper, microform, or other tangible form at a physical location but are electronically accessible in digital format via computer networks. Such libraries exist only on a very limited scale, but in most traditional print-based libraries in the United States, catalogs and periodical indexes are available online, and some periodicals and reference works may be available in electronic full-text. Some libraries and library systems call themselves "virtual" because they offer online services.

### **3.3.4 Changing Roles of LIS Professionals**

Presently, librarians are playing an integrated role beyond their traditional job. In a fast changing world, there are new demands and influences on libraries and information centers. Using modern technologies, libraries all over the world are now shifting their emphasis from traditional to multidimensional work force.

Library and Information professionals are supposed to play versatile role in different areas of libraries and information centers to meet the hope and needs of the present situation. Some of these roles include:

*Advocate:* Library and Information Science professionals act as lawyer when they deal with the issue relating to law such as copyright law, intellectual property right, etc. Librarian champion the cause of academic libraries through various advocacy programs to promote the library and resources. They can communicate news about the library through newsletters, web sites and memos to parents and staff. Their work is to keep principals and teachers up to date on what is happening in the library and to promote library activities and special projects. Schools are learning communities encompassing students, teachers, administrators and parents. Librarians must communicate the mission, goals and objectives of the resource centre to the entire user community.

*Consortia manager:* The Library and Information Science professional is responsible for coordinating and overseeing consortium operations, including strategic planning, systems development and project management. Related responsibilities include facilitating communication among the participating libraries. In addition to these responsibilities, the Librarian for Consortium Operations acts as the consortium's representative with vendors for contracted products and services. For them to perform these and other roles expected of them, they need to acquire certain skills which may include but not limited these.



- **Skills Required for the New Age Library and Information Science Professionals**

The electronic environment of the 21st century will demand a range of skills from Library and Information Science professionals, including:

- Technical skills.
  - Information Technology (IT) skills.
  - Managerial skills.
- 
- **Skills required fulfilling the changing role of libraries are:**
  - Library and information handling skills.
  - Service orientation.
  - ICT knowledge skills.
  - Communication and training skills.
  - Marketing and presentation skills.
  - Understanding of cultural diversity.
  - Knowledge mapping skills

In a nutshell, it can be said that the Library and information professional communities are being affected by a range of ICT developments and so find their roles changing worldwide. A librarian with diverse talents and training, and who is flexible, will be able to meet the challenges of future library landscape.



### **3.4 Summary**

Now that you read through this unit, you ought to have grasped the understanding of the attitude of library and information professionals to information and communication technologies. Also, you ought to have grasped the understanding of place of training and the use of new technologies in libraries. You have read through this unit, you should be familiar with the emerging trends in our libraries courtesy of ICT. You should be able to define the 21st century role of library and information professional.

The advent of new technology into the workplace and into society generally, can be very frightening for some people. Human fears of technology may emerge because of its introduction, or increase in use, appears to threaten the status quo.

Changes in information and communication technology is posing challenges to the Librarians in recent time.

Training is generally acknowledged to be essential in introducing successful change in the workplace. Training appears to affect perceptions of technological change and attitudes to ICT and change. The concept of Library and Library professionals has changed as changes takes places in the field. Different types of libraries are born into our society, as a result of the emergence of ICT. The example of such library include; hybrid, virtual, digital and automated. Presently, librarians are playing an integrated role beyond their traditional job. Some of these roles include advocate and consortia manager. For them to perform these and other roles expected of them, they need to acquire certain skills.

#### **Self-Assessment Exercise 1.**

- All but ONE is NOT a name given to people who are frightened of new technology?
- cyber phobia
- techno phobia
- techno stress
- height phobia
- List the three (3) main skills required for the New Age Library and Information Science Professionals.
- Highlight the three (3) different types of libraries that are born into our society, as a result of the emergence of ICT

Video <https://www.youtube.com/watch?v=dBHEoKiic2w>



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### **3.4**



### 3.6 Possible Answers to Self-Assessment Exercise

**Self-Assessment Exercise 1.**

- D= height phobia
- Technical skills.
- Information Technology (IT) skills.
- Managerial skills.
- Hybrid library
- Automated library
- Digital library

## **UNIT 4      INFORMATION WORKER, INSTITUTIONS AND ORGANIZATIONS**

### **Unit Structure**

- 4.1    Introduction
- 4.2    Learning Outcomes
- 4.3    Information worker
  - 4.3.1   Information institutions and organisations
  - 4.3.2   Responsibilities of Information institutions and organisations
- 4.5.   Summary
- 4. 6   References/Further Readings/Web Resources
- 4.7   Possible Answers to Self-Assessment Exercise(s)



### **4.1      Introduction**

In the last unit, you learnt about Social Issues Relating to Libraries and Information Centres. In this unit you will learn about information work.

Who he/she is and other things associated with information and knowledge worker. The term information worker and knowledge worker will be used interchangeably as we discuss in this unit. In addition, it is ideal for you to know about information Institutions and Organisations that are involved in the acquisition of Information resources for public use. In the literature, the notion of an institution embodies several elements: formal and informal rules of behaviour, ways and means of enforcing these rules, procedures for mediation of conflicts, sanctions in the case of breach of the rules, and organisations supporting market transactions or other human interactions.



### **4.2      Learning Outcomes**

By the end of this unit, you should be able to:

- discuss the concept of information worker
- analyse between information/knowledge worker and blue collar worker
- discuss with examples the different Information Institutions and Organisations



### 4.3 Information Worker

An information worker, therefore, is a worker who uses information to assist in making decisions or taking actions, or creates information that informs the decisions or actions of others. As computing technology infused into organizations, it became a new tool for understanding an organization's data. In many cases, it did little more than consolidate data, and make the data more presentable to knowledge workers. Over time, though, computer programming became more sophisticated.

Some of the knowledge of knowledge workers found its way into computer programs and computers became more capable of applying knowledge to data without human interference. This development started to spread knowledge through the organization, but usually in very small, and very specific ways. This was the first instance of information work: people without fundamental knowledge were able to apply the knowledge of others to data, and act on those insights without a direct connection or consultation with the holder of the knowledge.

One important differentiator of the knowledge worker was that he or she owned their means of production which literally means people have brains, and they bring their brains to bear. Unlike blue-collar workers who do not own the factory equipment they use to produce products, knowledge workers own the knowledge and skills they apply to create value. Some use the term knowledge worker as a synonym for professional, which now accounts for approximately twenty-five percent of the workforce in industries like financial services, high-tech, healthcare, pharmaceuticals, and media. Knowledge work, in this now classic definition, is too narrow to define the type of work that have evolved over the last thirty years.

The application of computing power to data was also becoming more accessible, as programs developed that allowed non-computer specialists, usually knowledge workers, to create documents and databases that codified their knowledge. As these applications were shared, they too added to the disbursement of knowledge throughout organizations, but specialized knowledge remained far from pervasive. Knowledge work had expanded from those who knew personally, to those who could leverage knowledge embedded in computer systems.

As the personal computing revolution took hold, it became obvious that work itself was changing. The percentage of people working with data was increasing, and was no longer limited to the creation, collection and forwarding of that information to "knowledge workers." Data was staying local and being used to help workers of all types make better decisions

about their work product, in real-time. These workers did not have throngs of knowledge workers to send their work to for interpretation and augmentation, but rather used the knowledge that was now embedded in software to filter, organize and collect insight from the data most relevant to them.

These workers became known as information workers. Let us step back, however, and use manufacturing to explore the evolution of information work and its relationship to business operations. It can be argued that blue-collar workers applied knowledge all the time as well. They just did so in ways that increased the value of physical assets rather than information or financial assets.

**Figure 18**



*Information worker*

### **SELF-ASSESSMENT EXERCISE 1**

- Who is an Information/Knowledge Worker?
- Differentiate between an information worker and blue-collar worker

#### **4.3.1 Information Institutions and Organisations**

Conceptually, ‘public access to information’ refers to “the presence of a robust system through which information is made available to citizens and others.” Such a system represents a combination of intellectual, physical, and social elements that affect the availability of information to individuals. In other words, in discussing the issue of public access to information, it is important to recognize that any measurement of its practical outworking needs to take into account how individuals perceive the quality of information in the public domain, the nature of the communicative infrastructure in place to facilitate access, and how that

information is ultimately utilized by individuals as members of a particular polity.

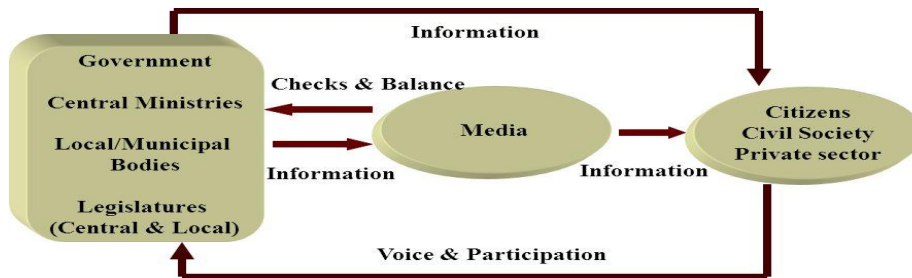
Librarians familiar with the bibliographical tools of the world, identify, locate, and acquire foreign and domestic publications for the library. In this sphere of activity, the libraries support the centers; another significant difference between libraries and centers is that libraries provide their users with material in its original format. The original format in this sense would include complete books, journals, and other items which may be on film.

- The end product of an information analysis center is an analysis or an evaluation or a state-of the-art report produced by the center from a variety of sources including books, journals, patents, and other sources. The stored information in an information center is usually in a condensed form. It may be in card files, on film, on punched cards, or on tape. The center is less concerned with retaining a large collection of books, journals, and other publications, since these materials are presumably available in the library.
- Defining a telecentre is problematical. The word “telecentre” broadly refers to a facility “that offers the public access to advanced IT [information technology] and telecommunications equipment, together with some degree of support and training and a range of information-based services”.
- Multipurpose centres can be defined as an integrated community development centre. Ideally, community participation should form the basis of such a centre, which has to meet people’s information needs by providing relevant services. The aim is to empower the poorest and most disadvantaged communities with access to government and non-government information and services. They are described as “one stop shops” through which communities can access government services, information technology and training.



**Figure 19**

### Information Institutions & Flows



#### 4.3.2 Responsibilities of Information institutions and organisations

The professional responsibilities of Information Institutions and organisations should include the following:

- *As providers of resources:* They can help to enhance the amount of available resources by making stakeholders aware of the importance of sharing. In particular, as far as the sharing of content is concerned, they can operate by promoting digitization campaigns and the open access approach. These actions may result in a vast amount of new digital information accessible online which can be exploited by advanced services.
- Within a digital framework, Information Institutions and organisations are certainly the best carrying out content description, maintenance and preservation of resources. By exploiting their large experience acquired in the past, they can contribute to the long-term availability and to the quality of the resources disseminated by the digital libraries (DLs).
- Long-term availability also requires the implementation of models able to support the sustainability of the resources provided. Information Institutions and organisations, either alone or as members of library consortia, can also act as the organisations deputed to define and put in place these models.
- As main resource providers, Information Institutions and organisations can work jointly on the definition of common policies and standards. An agreement on these aspects would strongly contribute towards facilitating the design and

development of the new complex services required to fulfill the emerging user needs.

- In the future Information Institutions and organisations can also play an important role as mediators between the infrastructure and the user communities. In particular, they can proactively promote and facilitate the creation of DLs that respond to the needs of the user communities. They can also assist users by providing, if necessary, the skills required to select, update and exploit the DL content and services.
- It is not hard to realize that in near future Information Institutions and organisations would be globalized and maximum services will be available from remote places.

### SELF-ASSESSMENT EXERCISE 2

- A..... is problematical. The word “telecentre” broadly refers to a facility “that offers the public access to advanced IT [information technology] and telecommunications equipment?”
- Define the term ‘Multipurpose centres’ according the context of this course



### 4.4 Summary

Now that you read through this unit, you ought to have grasped the understanding of who an Information Worker is. Information worker is a person who uses information to assist in making decisions or taking actions, or a person who creates information that informs the decisions or actions of others. knowledge worker owned their means of production which literally means people have brains, and they bring their brains to work An information worker is a worker who uses information to assist in making decisions or taking actions, or creates information that informs the decisions or actions of others. Also, Information Institutions and Organisations are involved in the acquisition of Information resources for public use. A telecentre is an example of information organisation

Video <https://www.youtube.com/watch?v=Aa5Fd71DjUs>  
<https://www.youtube.com/watch?v=Aicpho54cb4>



#### 4.5 References/Further Reading/Web Resources

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#### 4.6 Possible Answers to Self-Assessment Exercise

##### Self-Assessment Exercise 1

- An information worker is a worker who **uses information** to assist in making **decisions or taking actions**, or creates information that informs the decisions or actions of others.
- Information/Knowledge worker owned their means of production which literally means people have brains, and they bring their brains to bear, whereas blue-collar workers not own the factory equipment they use to produce products

##### Self-Assessment Exercise 2

- telecentre
- As an integrated community development centre.