



## **Introduction to Library and Information Science**

Library and Information Science (LIS) is a field that aims to provide the right information to the right user at the right time and in the right amount. This field has evolved over time, from a focus on administrative procedures and technical systems to a broader focus on information management and dissemination.

## **Definition of Information Science**

Information Science is the study of the lifecycle of information, from production to retrieval, including storage, organization, and provision of information to users. It is a field that links and mediates between various sciences.

## **Libraries as Institutions**

Libraries are essential institutions for collecting and storing information, and they play a vital role in education, research, and community development.

## **Types of Libraries**

**There are several types of libraries, including:**

**Public Libraries:** Provide access to information and cultural resources for the general public.

**Academic Libraries:** Support the research and learning needs of students and faculty in higher education institutions.

**School Libraries:** Provide resources and services to support the educational needs of students and teachers in schools.



**Digital Libraries:** Provide access to digital resources and services through the internet.

### **Importance of Information in Society**

Information plays a vital role in social, economic, and cultural development, and libraries are essential institutions for providing access to information.

### **Library Services**

**Libraries offer a range of services, including:**

**Circulation Services:** Providing access to library materials.

**Reference Services:** Assisting users in finding information and answering research questions.

**Information Services:** Providing access to databases, online resources, and other information services.

### **Relationship between LIS and Other Fields**

**LIS is related to various fields, including:**

**Psychology:** Understanding user behavior and information needs.

**Statistics:** Analyzing data to understand library usage and user demographics.

**Electronics:** Using technology to manage and provide access to information.

**Education:** Supporting learning and research needs of students and faculty.



## Fields of LIS

The fields of LIS include:

**Information Production:** Publishing and creating information resources.

**Collection Development:** Acquiring and managing library materials.

**Technical Processing:** Organizing and maintaining library collections.

**Library Services:** Providing access to library materials and services.

**Management and Organization:** Managing library operations and services.

## Data, Information, Knowledge, and Wisdom

The relationship between data, information, knowledge, and wisdom can be understood as follows:

**Data:** Raw, unprocessed facts.

**Information:** Organized and processed data that conveys meaning.

**Knowledge:** The application and understanding of information.

**Wisdom:** The highest level of knowledge, based on experience and sound judgment.

## The Difference Between Information, Data, Knowledge, and Wisdom

**Data:**



Data is raw, unorganized facts, similar to raw material that needs to be processed. Data is like scattered LEGO pieces, which in and of themselves have no meaning or utility.

### **Information:**

Information is organized and processed data that carries a specific meaning and utility. It is the result of arranging and assembling LEGO pieces to form meaningful shapes.

### **How does data become information?**

Data becomes information when we organize, analyze, and interpret it within a specific context.

### **Knowledge:**

Knowledge is the result of applying, understanding, and using information in a practical and effective way. It is the stage at which we grasp the complete picture formed by the LEGO model.

### **The Difference Between Knowledge and Information:**

#### **Information**

Information is merely a description of things, while knowledge is an understanding of how and why those things work.

#### **Wisdom:**

Wisdom is the pinnacle of enlightened knowledge based on experience and sound judgment. This is the stage where we become capable of building new and innovative LEGO models.

### **The Ladder of Knowledge:**

**University of Mosul**

**College of Art**

**Dept. of information and knowledge Techniques**



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To understand the relationship between data, information, knowledge, and wisdom more deeply, we can visualize these concepts in the form of a Ladder of Knowledge. This ladder consists of four rungs, each representing a level of understanding.

### **The Importance of the Ladder of Knowledge:**

The Ladder of Knowledge helps us understand the interconnectedness between these concepts and illustrates how we gradually build our understanding of the world around us.