

KNOWLEDGE CLASSIFICATION 1

Topic One

Introduction to knowledge Classification

Week 1

Content

- Definition of major terms
- Classification theories
- Need and purpose of library classification
- Types of classification

Definition of major terms

A subject refers to an organized systematized body of ideas whose extensions and intensions are likely to fall coherently within a field of interest

Macro subject is a subject of great extension and small intensions usually embodied in a whole book single volume or multi volume

Micro subject is a subject of small extension and great intensions usually embodied in an article in periodical or part of a book

Basic subject is a subject without any isolate idea as component

Special subject is that subject whose extension and intensions are equal to those of its thought content

Classificationist is person who makes a scheme of classification

Classifier is person who classifies materials

Classification is the process of separating things on the basis of their differences and putting them together on the basis of their similarities

Characteristic is the basis on which we classify things. It can also be an attribute by which things are assembled or isolated' in.

The conditions for characteristic to be used in classification are

1st should be able to get at least two divisions as the result of its application.

2nd condition is that it is present in those things we are going to classify.

3rd it should be visible and identifiable that you should be able to see it.

4th it should be relevant to the purpose of the classification.

5th it should be permanent for the classification.

Classification theories

There are two theories of classification that is descriptive theory and dynamic theory of classification.

1. **Descriptive theory** describes the activities/procedures and letters in the adopted library classification. Where by the classification of things on the basis of the likeness and unlikeness.

The main contributors are

☞ **E.C Richardson** he provided his description theory through theories and practices, in his theory he named it criteria theory. In his criteria he provided three rules:

☞ A classification should follow as nearly possible the order of things. it means the classes if they originate in different times should follow the same order of time

☞ A classification should be carried out in the most detailed.it means should be provided with in the notation which will allow far indefinite sub divisions using mixed symbols but with a base.

☞ A classification should be provided with a detailed and specific index.

☞ **H.E Bliss** he wrote a book on library classification the name of his book is organisation of knowledge in libraries in 1973 where he provided 32 principles of library classification covering a versed spectrum of library classification.

2. Dynamic Theory It was started by Ranganathan the father of library science. It was later developed and fundraised by other proponent the basis for his theory was in India and the USA. This theory designed schemes under the scientific basis which should be applied when designing classification scheme. To him work should be in plans of work which included three plans:

☞ 1st Plan of work is important that is the idea plan. Things that can be put under the idea plan for example identification, characteristic, how to divide subjects, development of subject, and basis of classification.

☞ 2nd Label plan means the meaning of the subject, one should apply name to represent those ideas it should be based on various rules, canons, principals.

☞ 3rd Notation plan means what type of notation should be used and how to make annotation powerful, by which notation is able to represent any type of concepts

Need and purpose of library classification

Library classification is the arrangement of books on shelves or descriptions of them, in the manner which is most useful to those who read.

Need for library classification

- ☞ To enable the librarian to lay hands on required document on given subject
- ☞ To arrange books in shelves
- ☞ To make it easy for the users to locate documents in shelves using shelf guide
- ☞ To provide effective reference services to users in classified collections
- ☞ To save time of readers as well as that of the librarian in assisting them
- ☞ To create system out of disorder and provide a view of document on a subject
- ☞ To provide maximum use of collection of documents
- ☞ To satisfy the laws of library science.

Purpose of library classification

- ☞ To arrange documents in a most convenient way to both the users and staff.
- ☞ To bring documents together especially those which are closely related

- ☞ To allow inserting of new documents to correct places in the arrangement.
- ☞ Library classification is used in the organization of books for display.
- ☞ It is used to arrange entries in classified part of catalogue.
- ☞ To assist the library staff to prepare a list of documents for a library.
- ☞ To help in finding the most helpful place for each of new ones amongst existing ones.

Types of classification used for classifying universe of information

- ☞ **Library classification** is concerned with documents with the aim being of arranging them in most helpful and permanent order.
- ☞ **Knowledge classification** is aimed at grouping ideas on basis of their degree of filiation and arranges them in helpful sequence.
- ☞ **Abstract classification** is use of variety of models prepared according to abstracting principles.

Differentiate between Library classification and Knowledge classification

Library classification	Knowledge classification
Librarians are interested in studying the mutual relations between concepts and sequences	Philosophers are interested in studying the mutual relations between ideas and their sequences

Librarians have formulated schemes of library classification	Philosophers have formulated schemes of knowledge classification
Schemes are produced to arrange documents so that users can access	Schemes have been produced for their own sake or mental satisfaction
The librarians are interested in practical classification which is helpful to users	The philosophers are interested in theoretical aspects of classification
The have provided continued subdivisions of subjects	They have not provided sufficient details of subdivisions.
Each subject has distinct class number and notation.	The philosophers don't have class numbers for knowledge.
Generalia class is provided	There is no Generalia class provided
schemes must have an index	There is no need for an index in scheme
Schemes are influenced by knowledge classification	Schemes are not influenced by those of classification.



Topic Two

Materials for Classification

Content

- Cutter tables for Book number
- Documents for classification (Books and Non-book materials)
- Classification Schemes to assign Class numbers
- Knowledge classification
- Parts determination and assignment

Definition of terms

Call number is a combination of class number, book number and collection number of an information material in a library.

Class Number is an ordinal number which fixes the place of a subject relative to other subjects in a scheme of classification.

Book Number is a number which fixes the place of a document in a library relative to other documents having the same class number.

Collection number is representation of group to which particular document belongs.

Volume number is a number which represents the number of individual volume in case of the multivolume publication.

Several systems of classifying materials

- ☞ Alphabetical
- ☞ Numerical
- ☞ Alphanumerical
- ☞ Chorological
- ☞ Geographical


Cutter tables for Book number

The two most frequently used schemes for assigning books numbers are generally used with the classification with which they are closely associated.

☞ **Cutter Tables** the most popular book number scheme used with the DDC was devised by Charles Ammi Cutter. The notations are called cutter numbers and assigning them is referred to as “cuttering” or “to cutter”. The most frequently used version of cutter scheme is the

Cutter-Sanborn Three Figure Author Table, by Kate E. Sanborn, where the cutter scheme is altered to have three figures. The cutter table consists of three or more initial letters from a surname or a surname and a three-digit number. Letters E, I, J, K, O, U, Y and Z are followed by two-digit numbers. The cutter number includes the initial letter

of the author's name and then the corresponding number. Examples Abbot Ab2, Aldridge Al12, Schneider Sch57,

 **Library of Congress Author Numbers** The author number consists of the initial letter of the author's name or main entry followed by a number derived according to the directions given in the tables that follow. The numbers are used decimally.

LC cutter table

(1) after the initial vowels								
For the second letter:	b	d	l-m	n	p	r	s-t	u-y
Use number:	2	3	4	5	6	7	8	9
(2) after the initial letter S								
For the second letter:	a	ch	e	h-i	m-p	t	u	w-z
Use number:	2	3	4	5	6	7	8	9
(3) after the initial letters QU								
For the second letter:	a	e	l	o	r	t	y	
Use number:	3	4	5	6	7	8	9	
For initial letters Qa-Qt, use:	2-29							
(4) after other initial consonants								
For the second letter:	a	e	i	o	r	u	y	
Use number:	3	4	5	6	7	8	9	
(5) when an additional number is preferred								
For the third letter:	a-d	e-h	i-l	m-o	p-s	t-v	w-z	
Use number:	3	4	5	6	7	8	9	

In the above table the numbers in the center are applicable to letters in both adjoining columns. In order to apply the table, find the letter group nearest to the surname of the author. Add the initial letter to the same. In case the surname of the author fit between two numbers, then prefer the first number as listed in the table.

Documents for classification both Books and Non-book materials

Books

- ☞ Sears list of subject heading
- ☞ Classification scheme
- ☞ National bibliography
- ☞ Dictionaries

Non-book materials

- ☞ Table
- ☞ Chair
- ☞ Pencils
- ☞ Rubbers
- ☞ Razor blades
- ☞ Pens
- ☞ Plain papers
- ☞ Rulers
- ☞ Colon tape
- ☞ Book Trolleys

Classification Schemes used to assign Class numbers

- ☞ DDC

☞ LC

☞ UDC

☞ CC

☞ BC

Knowledge classification

Knowledge classification is classification type used for organizing any branch of knowledge.

Idea is a product of thinking, reflecting and imagining got by the intellect by the aid of logic.

Isolate is generic term to denote isolate ideas, isolate term or isolate number.

Facet is generic term to denote any component be it a basic subject or an isolate idea.

Attribute is any property or quality or quantitative measure of an entity.

Classing is an act of creating classes for subjects to which they belong to or have similarities.

Array are classes derived from a universe on the basis of a single characteristic at any one step in the progress towards its complete assortment and arranged in preferred sequence.

Schemes of Knowledge Classification

☞ **Vedic classification** this scheme divides universe of ideas into four groups called dharma, artha, kama and moksha. These classification scheme is socio-centered

- ☞ **Greek classification** this scheme was put forward by Aristotle. He divided knowledge into three groups such as theoretical philosophy, practical philosophy and productive arts.
- ☞ **Scholastic classification** the scheme divided the universe of ideas into three groups namely trivium the subjects were linguistic second one quadrivium subjects were arithmetic and third was trivium subjects were theology and ethics.
- ☞ **Baconian classification** Francis bacon examined the universe of ideas he divided the universe of ideas into three successive groups namely history, poesy and philosophy emanation from reason.
- ☞ **Kant classification** Immanuel Kant in his critique of pure reason based on the approach that a given universe of entities can always be divided into two groups on the basis of primitive human instinct. Either this is A or this is not A
- ☞ **Hobbes classification** Thomas Hobbes described divided knowledge into two groups that group one mechanics, engineering, architecture, navigation and second group acoustics, music.
- ☞ **Comte classification** Auguste Comte put forth arranged the subjects in the sequence of mathematics, astronomy, physics, chemistry, biology and social physics. Sequence each subject is virtually an application of the preceding one.
- ☞ **Ampere classification** Thomas Hobbes in his leviathan he suggested sequence in Hobbes classification Andre Marie ampere worked out his system of serial

classification he interpolated the useful arts and applied science next to the fundamental discipline on which they were considered to be independent.

☞ **Spencer classification** Herbert spencer (1820-1903) is regarded as the first philosopher who tried to put forward theory of knowledge classification. His scheme and sequences is as follows logic, mathematics, physics, chemistry, astronomy, geology, biology, psychology and sociology.

Canons

Canons of Idea Plane

1. Canons for Characteristic

Ranganathan recognized the following canons for characteristics that is canon of differentiation, canon of relevance, canon of ascertainability, canon of permanence

☞ **Canon of differentiation** According to this a canon characteristic used as the basis for the classification of universe should differentiate that is it should give rise to two classes or ranked isolates.

☞ **Canon of relevance** According to this canon characteristic used as the basis for the classification of the universe should be relevant to the purpose of the classification.

☞ **Canon of ascertainability** the canon directs that characteristic used as the basis for the classification of universe should be definite and ascertainable. For example, if

we use the date of death is not definite and ascertainable well as if we used date of birth this is ascertainable and definite.

- ☞ **Canon of permanence** this canon directs that a characteristic used as a basis for the classification of universe should continue to be unchanged so long as there is no change in the purpose of classification.

2. Canons for Succession of Characteristics

According to Ranganathan the succession of characteristic in the associated scheme of characteristic should satisfy the following three canons that is Canon of concomitance, Canon of relevant succession, Canon of consistent succession.

- ☞ **Canon of concomitance** it states that no two characteristics in the associated scheme of classification should be concomitant that is they should not give rise to the same array of subjects or isolate ideas. For example in classing boys we may use height and physic because it gives rise to two different sets of arrays but age and year of birth should not be used because both will lead to the same array.

- ☞ **Canon of relevant succession** states that the succession of characteristic in the associated scheme of characteristics should be relevant to the purpose of the classification for example if class is literature the succession should be language, form and period.

- ☞ **Canon of consistent succession** to this canon the succession of characteristics in the associated scheme of characteristics should be consistently adhered to so long

as there is no change in purpose of the classification however if the purpose is changed then characteristics should also be changed to suit new requirements.

3.Canons for Array

According to Ranganathan each array of classes in a scheme for classification should satisfy the following four canons that is Canons for exhaustiveness, Canons for exclusiveness, Canons for helpful sequence, Canons for consistent sequence:

☞ **Canons for exhaustiveness** states that the classes in an array of classes and ranked isolate in an array of ranked isolates should be totally exhaustive of their respective common immediate universe.

☞ **Canons for exclusiveness** direct that the classes in an array of classes and ranked isolate should be mutually exclusive. It becomes clear that no entity belonging to an immediate universe should belong to more than one class of the array therefore no two classes belonging to an array should overlap or have an entity in common. For example, subject literature may divide it by means of two characteristics such as by form and by country (form poetry, drama, fiction and other/ country India French, British, others.

☞ **Canons for helpful sequence** According to the canon the sequence of the classes in an array of classes and of the ranked isolates in an array of ranked isolates should be helpful to the purpose of those for whom it is intended the following are the guiding principles available for the implementation of the canon

Principals of canon for helpful sequence

- 👉 Principal of later in time and earlier in time
- 👉 Principle of later in evolution and earlier in evolution
- 👉 Principle of spatial contiguity
- 👉 Principle of increase quantity and decreasing quantity
- 👉 Principle of increasing and decreasing complexity or simplicity
- 👉 Principle of tradition and canonical sequence
- 👉 Principle of decreasing and increasing literary warrant
- 👉 Principle of alphabetical sequence

Sequences of helpful sequence

The above principles lead to the following sequences

👉 **Time sequence** according to principle of latter in time if the subjects in an array of subjects or isolates have originated in different time they should be arranged in parallel progressive time sequence except when any other overwhelming consideration rules it out.

👉 **Evolutionary sequence** the principle of latter in evolution directs that if the subjects in an array of subjects or ranked isolates belong to different stages of evolution they should be arranged parallel to evolutionary sequence except when

any other overwhelming consideration rules it out. in preference the time sequence is better than this one

☞ **Spatial sequence** says that if the subject or isolates occur contiguously in space, rough along a unidirectional line, radial line or circle they should be arranged on a parallel spatial sequence except when any other overwhelming consideration rules it out.

☞ **Quantitative measure sequence** says that if the subject in an array of subjects or isolates admit of quantitative distinction they may be arranged according to their increasing quantity if it is helpful. Similarly, the principle of decreasing quantity directs that if the subject in an array of subjects or isolates admits of quantitative distinction they may be arranged according to their decreasing quantity if it is helpful.

☞ **Complexity sequence** according to the principle of increasing complexity if the subjects in an array of subjects or isolates show different degrees of complexity they should be arranged parallel to the sequence of increasing complexity except when any other overwhelming consideration rules it out this is similar to principle of decreasing complexity.

☞ **Traditional or canonical sequence** if subjects in an array of subjects or isolates referred to in a specific sequence, although no underlying principle is discovered it will be convenient to conform to the traditional sequence.

☞ **Alphabetical sequence** directs that when no other sequence of the subjects in an array of subjects or isolates is more helpful they may be arranged alphabetical by their names current in international usage

Choice of principle

In order to arrange a universe of entities in helpful sequence it is important to first examine the attributes of entity, Next choose a suitable principle out of the principles for the helpful sequence to get a consistent sequence. This will help in the choice of a right principle keeping in view the relevant attributes.

☞ **Canons for consistent sequence** it directs that whenever similar classes or ranked isolates occur in different arrays their sequence should be parallel in all such arrays wherever insistence on such parallelism does not run counter to other more important requirements. Advantages of application of this canon are it leads to economy of time and mental effort and it minimizes the load on memory of a classifier as well as a user.

4.Canons for Chain

According to Ranganathan each chain of classes or of ranked isolates in a classification scheme should meet the requirements of the following canons.

☞ **Canon of decreasing extension** directs that while moving down a chain from its first link to its last the extension of the classes or isolates as the case may be should decrease and the intension should increase at each step. Meaning of Intensions

refers to the number of characteristics used to derive a class or ranked isolates.

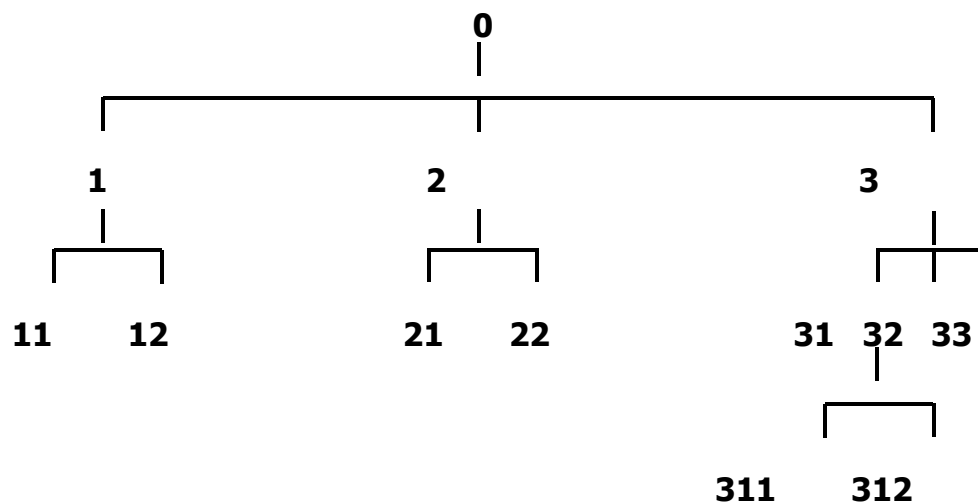
Extension is quantitative measure of a class or ranked isolates

☞ **Canon of modulation** it directs that a chain of classes or ranked isolates should comprise one class of each and every order that lies between order of first link and last link of the chain.

5.Canon for Filiatory Sequence

Canon for Filiatory sequence refers to canons which meet the requirement of coordinate classes and subordinate classes thus we have the canon for coordinate classes and the canon of subordinate classes.

Canon for subordinate classes



Let's us denote original universe by classes 0 (array of order o)

Class1, class 2 and class 3 belong to the array of order 1

Sub classes 11,12,21,22,31,32,33 belong to array of order 2

☞ **Canon of subordinate classes** A coalesced array would consist of classes in the order of 1,11,12,2,21,22,3,31,311,312,32,33. In a coalesced array according to the canon of subordinate classes if 31,311 and so on are the subclasses of 3 originating in one or other of the chains from class 3, then classes 31 and 311 should immediately follow class 3

☞ **Canon for coordinate classes** If the in a coalesced array classes 31,32,33 had originated in one and the same array and had been consecutive in it then these should not be separated from each other by any class other than classes 311,312 and so on having 31 as their common immediate universe

Canons of Verbal Plan

It is terminology denotes a system of terms used to name the classes or ranked isolates in a scheme of classification to Ranganathan he formulated the following

☞ **Canon of context** the denotation of a term in a scheme for classification should be determined in the light of the different classes or ranked isolates of lower order (upper links) belonging to the same primary chain as the class or ranked isolate denoted by the term in question.

☞ **Canon of enumeration** it directs that the denotation of a term in a scheme for classification should be determined and should be left to determine in the light of or through the sub classes or ranked isolates (lower link) enumerated in the various

chains having the class as the case may be, denoted by the term in question as their common link

☞ **Canon of currency** says the term used to denote a class or ranked isolates in a scheme for classification should be the one current among those specializing in the subject field covered by the scheme.

☞ **Canon of reticence** directs that term used to denote a class or ranked isolate in a scheme for classification should not be critical that is express any opinion of the Classificationist.

Canons of Notational Plan

A notational system consists of ordinal numbers representing classes in a scheme for classification and the following are canons

☞ **Canon of synonym** the class number of a subject in a system of class number and isolate number of an isolate idea in a system of isolate number should be unique

☞ **Canon of homonym** the subject represented by a class number in a system of class numbers and the isolate idea represented by an isolate number in a system of isolate numbers should be unique.

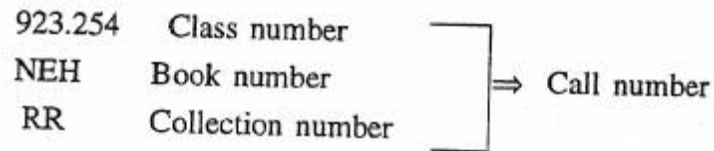
☞ **The canon of relativity** says that the number of digits including digit groups treated as a single digit in a class number or in an isolate number should be the same as the order of the subject or the isolate idea as the case may be represented by it.

- ☞ **The canon of uniformity** the number of digits in a class number or in an isolate number should be constant whatever be the order as case may be represented by it.
- ☞ **The canon of hierarchy** in a class number or in an isolate number there should be a digit to represent each of the characteristics used in constructing the class number or the isolate number as the case may be.
- ☞ **The canon of non-hierarchy** it states that in class number or in an isolate number there need not be a digit to represent each of the characteristics used in constructing the class number or isolate number as the case may be.
- ☞ **The canon of mixed base** says that the base of the notational system of scheme for classification should use two or more species of digits.
- ☞ **The canon of pure base** says that the base of the notational system of scheme for classification should use one and only one species of digits.
- ☞ **Canon of facet notation** it directs that faceted notation system should be used when the length of the base of the notation is about 10 and the universe is likely to contain more than a million or more entities or subjects.
- ☞ **Canon of non-faceted notation** it directs that anon faceted notational system may be adequate when the length of the base of the notation is about 10 and the universe is likely to contain more than million entities

- ☞ **Canon of co-extensive** in class number digits should be added successively so as represent the measure of incidence of even the very last characteristics in the succession of characteristic admitted by the universe classified and relevant to the purpose of classification.
- ☞ **Canon of under extensiveness** directs that in class number it is not essential that the digits should be continued so as to represent the measure of incidence of the later characteristic in the succession of characteristics admitted by the universe classified and relevant to the purpose of classification
- ☞ **Canon of extrapolation in array** says an array of class numbers or of isolate numbers should admit of any number of new coordinate numbers being added at the being and at end of the array.
- ☞ **Canon of interpolation in array** directs that an array of class numbers or isolate numbers should admit of the interpolation of any number of new coordinate numbers at any point in the array.
- ☞ **Canon of extrapolation in array** a chain of class numbers or isolate numbers of successive link at its end in other words the notational system should admit of the chain ending with any number being lengthened to any extent found necessary
- ☞ **Canon of interpolation in chain** directs that a chain of class number of isolate numbers should admit of the interpolation of any number of links between any two-consecutive links in the chain.

Parts determination and assignment

The call number for a document consists of three elements class number, book number and collection number. The following example will show the presence of these three elements in a call number.



The explanation of the above call number is

923.254 Biography of an Indian statesman is the subject of the book, that is Class number

NEH this are the first three letters from surname of the author Nehru that is Book number

RR the nature of the collection in the library, Reading Room Collection that is collection number

Thus, with the help of book number and collection number a document is fully individualized. It means that the call number of a document is unique. Different methods are in use to devise book number and collection number. It is left to individual libraries to follow one of these methods or, if possible, devise their own method or practice.



Topic three

Notation

Content

- Introduction to notation
- Characteristics of notation
- Types of notation

Introduction to notation

Notation is a symbol of marks or symbol in some order denoting terms or members of a series or system of things.

Ranganathan defined Notation as a system of ordinal numbers used to represent the classes in a scheme for classification.

Characteristics / Qualities of notation

There are four important qualities that notation should have three of them were suggested by Ranganathan and rest were made by other proponents

- ☞ **Uniqueness** the class number should represent one and only one meaning it is essential because of occurrences of synonyms and homonyms is harmful to a classificatory language
- ☞ **Brevity** the class numbers should be as brief as possible meaning speed of writing, pronounceability and small amount of detail should be provided.
- ☞ **Expressiveness** the class number should represent relevant and essential characteristics of the subject being classified.
- ☞ **Flexibility** the notation should accommodate new classes in the proper classes they belong to it should also permit the inserting of any new classes.
- ☞ **Simplicity** the notation should be easy to read and write so that it is easy to recognize and to remember in case it has been used.
- ☞ **Mnemonic** the number and figures used in notation should be able to be used mnemonic like when we substitute the words with letters.
- ☞ **Universal usability** once the documents are classified and assigned class numbers the symbols used should be universally used.
- ☞ **Block formation** the class numbers should be divided into convenient blocks. The notation system should have the capacity to construct such class numbers.

Types of notation

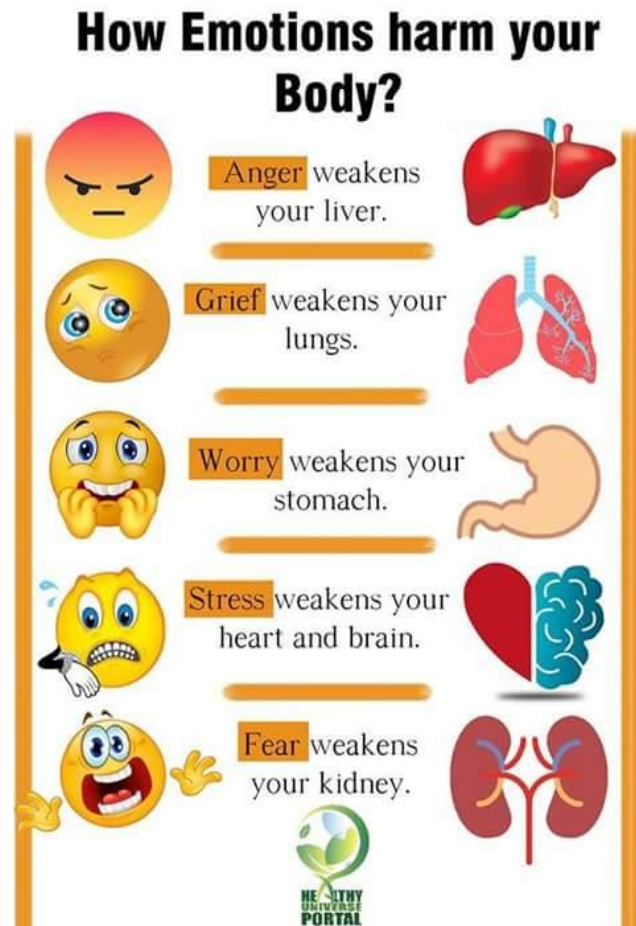
- ☞ **Pure Notation** is a type of notation which uses only one kind of digits that is either Arabic numerals or alphabetical like romans capital and small. Example of pure notation is DDC , LC
- ☞ **Mixed Notation** this is type of notation which consists of more than one kind of symbols such as Arabic symbols and roman capitals or small. Example of **MIXED** notation is colon classification
- ☞ **Non Faceted Notation** this is type of notation in which the digits constituting the class number forms one block only for example H4567. **LC**
- ☞ **Faceted Notation** this is type of notation in which the digits used in the class number are separated into logs by the help of connecting digits. Example is **Universal Decimal classification** (UDC) and in rear cases DDC

Advantages of notations

- ☞ It helps in the arrangements of documents on the shelves
- ☞ Notation mechanically maintains the sequence of subjects.
- ☞ It becomes a permanent symbol through which classification is referred to.
- ☞ Alphabetical index is possible only through notation in a classification scheme.
- ☞ Effecting working of the catalogue is dependent on notation.
- ☞ It shows the sequence and subordination and coordination of classes.

☞ It arranges entries in bibliographies and lists etc.

☞ Notation facilitates the use of mnemonics.



Topic four

Classification Schemes

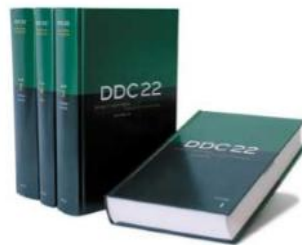
Content

- Dewey decimal classification (DDC)
 - Use of tables
 - Relative index
- Other classification schemes
 - Universal Decimal Classification (advantages and disadvantages)
 - Colon Classification (advantages and disadvantages)
 - Library of Congress (advantages and disadvantages)

Dewey decimal classification (DDC)

Dewey Decimal Classification (DDC) was created by Melville Dewey and published in 1876. Current use: School, public, and small academic libraries.

Melvil Dewey (1851-1931)



Features of the Dewey decimal classification

- ☞ It has a universal Scheme that its classes reflect all the areas of specialized knowledge developed in modern society.
- ☞ It has relative location that utilizes the decimal notation consisting of Arabic numerals for the subjects and assigning notation on the basis of thought content.
- ☞ It has a decimal notation that uses decimals for the arrangement of knowledge from 000 to 900 sub-divisions.
- ☞ The number of pages keeps on increasing each year.
- ☞ It is mnemonics which means aid it has way to aid memory for subject.
- ☞ It has integrity of numbers that incorporate new subjects.
- ☞ It has Auxiliary tables; these provide an important basis for preparing numbers.

Structure of Dewey Decimal Classification

- ☞ Schedule - A basic premise of DDC is that it is arranged by discipline and not by subject. At the broadest level, the DDC is divided into ten main classes, which together cover the entire world of knowledge. Each main class is further divided into ten divisions and each division into ten sections.
- ☞ Summaries – Summaries provide an overview of the intellectual and Notational structure of classes. Three types of summaries appear in the schedules and tables of DDC. The summaries of the schedules as a whole are found at the front of the

schedules Volume 2-3. The First Summary contains the ten main classes. The first digit in each three-digit number represents the main class.

000	Computers, information & general reference
100	Religion
200	Philosophy & psychology
300	Social sciences
400	Language
500	Science
600	Technology
700	Arts & recreation
800	Literature
900	History & geography

Types of tables of DDC

- ☞ Table 1. Standard Subdivisions
- ☞ Table 2. Geographic Areas, Historical Periods, Persons
- ☞ Table 3. Individual Literatures and the Arts.
- ☞ Table 4. Individual Languages.
- ☞ Table 5. Racial, ethnic, national groups.
- ☞ Table 6. Languages.
- ☞ Table 7. Group of Persons.

Rules governing the use of tables of DDC

Table 1 Standard Subdivisions

- ☞ The numbers from the table cannot be used independently.

- ☞ These numbers can only be attached to the class numbers from the schedules unless there is specific instruction to the contrary.
- ☞ The standard subdivisions numbers represent the form of the document author's viewpoints of writing.
- ☞ A dash at the beginning means that the numbers from the schedules has to be put in the place of the dash.
- ☞ The standard subdivision numbers which have zero at the beginning are attached to the numbers in the schedules with one, two or three zeros depending on the instructions in the schedules.
- ☞ The number of zeros is always indicated in the schedule so don't use more than one zero unless instructed.

Table2. Geographic Areas, Historical Periods, Persons

- ☞ The numbers have been limited with a dash in the being meaning they cannot be used independently so they are attached to numbers from the schedules.
- ☞ These numbers are used to represent only the geographical areas like mountains, lakes, oceans, countries and geographical groups.
- ☞ These numbers are attached to the numbers of the schedules in 2 ways.

- ☞ Under some class numbers in the schedules where there is instruction attached numbers from the table two are put the way they are.
- ☞ In case where there is no instruction given we attach numbers in table 2 by get help from 0-9 standard subdivisions.
- ☞ The use of 0-9 standard subdivisions will be guided by numbers in standard subdivisions which means that sometimes the numbers will becomes 000-000.9

Table3. Individual Literatures and the Arts

- ☞ The divisions in table 3 represent the forms of literature and arts
- ☞ The numbers in the table are applicable only with the second class of literature.
- ☞ The list class of 800 indicates the base numbers to which these base numbers from table three have to be attached only be attached.
- ☞ The numbers cannot be used alone

Table 4 Individual Languages

- ☞ The numbers in table 4 are subdivisions of individual languages
- ☞ These numbers are applicable only with languages from 400 class
- ☞ These numbers are applicable to individual languages numbers and not to numbers which represent group of languages
- ☞ 400 class individual languages indicate the base number to which these numbers are attached

Relative index

Relative index is appended to the schedules of book classification. It is the most important feature of this scheme arranged in an alphabetical order.

- ☞ Aims to include all topics expressed in the main tables together with every likely synonym.
- ☞ The index is comprehensive one but exhaustive.
- ☞ The topics which are further sub-divided in the table are entered in the bold face type.
- ☞ The specific items in the sub-divisions are entered directly under their own name.
- ☞ The index is relative in the sense that each phase of the subject is noted.
- ☞ The use of the index is not limited to locating topic in the tables, in fact the reader's key to the shelf arrangement in every library in with DDC being used.

Advantages of DDC

- ☞ The DDC has a long history of expansion and adaptation to the needs of users.
- ☞ The DDC is published in various forms and versions abridged and online versions
- ☞ The DDC uses very well recognized Arabic numerals and the numbered notation.
- ☞ The break down is well structured showing the relationship of subjects.
- ☞ The class numbers are easy to write type and remember since their short.
- ☞ It has an excellent relative index and the schedules are inexpensive.

- ☞ The Classification scheme allows expansion so that new subjects can be included.
- ☞ Widely accepted in libraries worldwide.
- ☞ It has frequent revisions.

Disadvantages of DDC

- ☞ The ten main classes make its base too short resulting in lengthy numbers.
- ☞ The subdivision by only 10 places leads to the squeezing of subjects.
- ☞ The arrangement of classes has been criticized, especially the separation of language from literature; social sciences from history; psychology from medicine.
- ☞ There is a bias towards Protestant/American aspects prevalent in both the history and religion disciplines.
- ☞ Some disciplines that are closely related, yet quite separate numerically like literature 800-899 and languages 400-499.
- ☞ There are some classes like 'Technology,' in the 600s which the call numbers are very crowded and others that are very sparse.
- ☞ The DDC is not as easily expandable as classification systems like the Library of Congress Classification system when new subjects or technologies emerge.
- ☞ There is the potential for very large classification call numbers as a result of number building, and the need for extreme accuracy by some libraries.

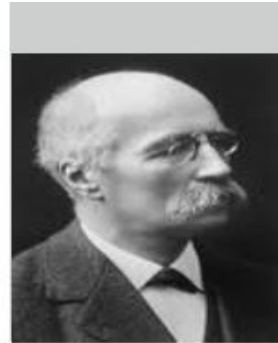
Other classification schemes

Universal Decimal Classification (advantages and disadvantages)

The Universal Decimal Classification (UDC) scheme of classification was developed in the year 1895 by the Belgium Barrister Paul Otlet and Nobel Prize winner Henri La Fontaine.



Paul Otlet
(1869-1944)



Henri La Fontaine
(1854-1943)

The main table of UDC

0	Generalities: Methodology, Documentation, Scripts etc.
1	Philosophy, Metaphysics, Logic, Ethics, Psychology
2	Religion, Theology
3	Social Sciences; including Statistics, Law, Education
4	Vacant
5	Pure Science, Mathematics and Natural Sciences
6	Applied Sciences, Medicine and Technology
7	The Arts including Architecture, Photography, Recreation, Entertainment
8	Language, Linguistics, Literature
9	Geography, Biography, History

Purpose of UDC

☞ To provide a method for arranging books on library shelves so as to help users

- ☞ To provide a method of arranging sub-titles of the books in a catalogue
- ☞ To classify the recorded knowledge.
- ☞ To retrieve the document or locate the document.

Features of UDC

- ☞ UDC is a practical scheme based on the demands of reports and periodical literature rather than the framework of a theory.
- ☞ It lays more stress to achieve co-extensive class numbers detailed specification than the achievement of a sequence of subjects for optimum helpfulness.
- ☞ It provides a standard system covering all the disciplines and may be used in any type of library.
- ☞ It is a general classification scheme and not a bundle of special classification.
- ☞ The scheme reflects exhaustive enumeration in the schedule with due provision for synthesis or coordination.
- ☞ It is amenable to adjustments to meet the special needs because a citation order in any given class allows alternative treatment.
- ☞ It has an International body for its maintenance and revision with full cooperation of its users

Advantages Universal Decimal Classification

- ☞ UDC's disposition can easily be converted in a digital computer format.

- ☞ The UDC has been published in many version Full, Abridged, and Web formats.
- ☞ The UDC notation can be used in different languages worldwide use.
- ☞ It is easily updated and enables worldwide standardized indexing.
- ☞ It is easier to manipulate the UDC to accommodate advances in knowledge
- ☞ Its notation consists of numerals and signs, which are understood internationally.
- ☞ It has comprehensive vocabulary of terms used for indexing and retrieval.
- ☞ It is best suited to special libraries, museums, archives and in document centers.

Disadvantages Universal Decimal Classification

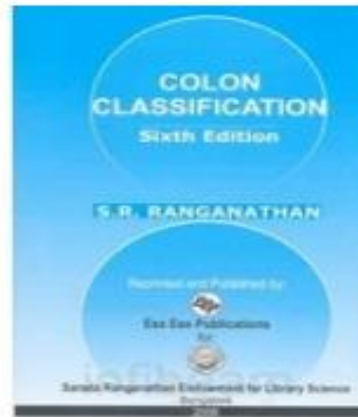
- ☞ The notation often tends to be long and appears clumsy as a result.
- ☞ User participation in revision delays revision of schedules.
- ☞ The UDC lacks conformity and uniformity across libraries that use it.
- ☞ It is not possible to put the newly developed class into existing class.
- ☞ The libraries using UDC but do not fully exploit UDC.
- ☞ Not synthetic with its hierarchical structure in the main classes.
- ☞ It is not accurate due to punctuation inconsistently applied in a code language.
- ☞ UDC has auxiliaries and the signs of association which are not elegant.

Colon Classification (advantages and disadvantages)

Colon Classification was created by S. R. Ranganathan, published in 1933. It is an inspiration for development of all schemes since Schedule One volume containing many schedules includes Subclasses based on universal facets ("PMEST")



(1892-1972)



The features of CC

- ☞ It provided schedules for different facets in each basic class.
- ☞ It provided special schedules for common subdivisions like geographical and language divisions.
- ☞ It used mixed notation consisting of capital letters, small letters, Arabic numerals and the colon.
- ☞ It used decimal fraction and octave notation for purpose of hospitality in array.
- ☞ It used eight special devices the colon device, geographical device, chronological device, favored category device, classic device, alphabetical device, subject device and bias number device.

- ☞ It gave a new phenomenon for constructing the book number be individualized.
- ☞ It used the concept of phases.

Advantages Colon Classification

- ☞ It is very innovative and it is much imitated by other classification schemes
- ☞ The classification scheme is hospitable and flexible
- ☞ It has many revisions and adaptations
- ☞ CC is capable of giving a unique number for almost every subject.
- ☞ It has a systematic order and the degree of detail due to analysis and synthesis
- ☞ It is claimed to be effectively used in a computer-aided document finding.
- ☞ It helps in construction of class numbers by provided rules and means of combining the numbers

Disadvantages Colon Classification

- ☞ It is too compact making it difficult to use at times
- ☞ It has Long, complex notation
- ☞ It is Poorly suited to shelving books
- ☞ There exists no machinery to keep up the revision work.
- ☞ The guidance provided in the recently publication is not enough and lacks clarity
- ☞ It calls for a manual with examples to explain the application of various rules.

☞ It is far from simple, the virtue most cherished by the users.

Library of Congress (advantages and disadvantages)

Library of Congress Classification (LC) was developed largely by Herbert Putnam the schedule was published in 1898 and its Current use is in Medium to large academic libraries

Features of LC

- ☞ it has schedule forty-seven separately published
- ☞ it has Asymmetrical hierarchical class structure Index
- ☞ No comprehensive index although LCSH substitutes to some extent indexes
- ☞ It has a mixed Notation both numbers and letters

Advantages Library of Congress

- ☞ It is widely accepted and specific in its nature
- ☞ The LC has relative short index
- ☞ It has constant updates
- ☞ It has short notation
- ☞ It has worked well and it good for medium and large libraries

Disadvantages Library of Congress

- ☞ LC lack of comprehensive index
- ☞ It has inconsistencies among schedules

☞ LC has bulky schedules

☞ It is difficult to use

☞ LC uses mixed notation which are confusing

Difference between the classification scheme

DDC	UDC	LC	CC	BC
Frist issued in 1876	Frist issued in 1905	Frist issued in 1901	Frist issued in 1933	Frist issued in 1910
Frist language of print was English	Frist language of print was French and German	Frist language of print was English	Frist language of print was English	Frist language of print was English
Its species of classification is almost enumerative	Its species of classification is almost faceted	Its species of classification is enumerative	Its species of classification is faceted	Its species of classification is almost faceted
It is theory is guided by implicit principles	It is theory is guided by principles leading to many subjective decisions	It lacks a sound theory	It is theory is guided by definite, objective principles	It is theory is guided by theoretical principles
It has 10 main classes of subject	It has 10 main classes of subject but class 400 is vacant	It has 20 main classes of subjects	It has 33 main classes of subjects	It has 24 main classes
It uses pure notation	It uses mixed notation	It uses mixed notation	It uses mixed notation	It uses mixed notation
It uses Arabic	It uses both	It uses both	It uses both	It uses both

numerals as digits	roman and Arabic digits	roman capital and Arabic numeral digits	roman and Arabic numerals	roman and Arabic numerals
It is ease to read, write and remember	It is comparatively easy to read, write and remember	It is difficult to read, write and remember	It is easy to read, write and remember if you know roman letters	It is easy to read, write and remember
The Scheme is widely used in libraries	The scheme is rarely used in most libraries	The scheme is used in large libraries	The scheme is used in documentation centers	The scheme is used in school libraries



Topic five

Practical Classification of library materials

Content

- Books
- None book materials

- Serials (Periodicals)
- Constructing a call number and a book number
- Subject analysis

How to determine the subject of book in the library

- ☞ Look in the title page of the document.
- ☞ Look into the subtitle or explanatory title.
- ☞ Read the introduction or preface of the book.
- ☞ Read the list or table of content.
- ☞ Read the chapters there in the book.
- ☞ Read the whole book.
- ☞ Consult the experts.

Books

None book materials

Serials (Periodicals)

Constructing a call number and a book number

Subject analysis



NAKAZZI CHRISTINE

KNOWLEDGE CLASSIFICATION 1

SEM 2 2025