COURSE GUIDE

LIS 302
KNOWLEDGE ORGANISATION (CLASSIFICATION) II

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CONTENTS **PAGE**

INTRODUCTION

The two-credit unit-load LIS 302 Knowledge Organization (Classification) II course is a one-semester minimum prerequisite. It is the second unit of Knowledge Organisation I (LIS 301) which was taught in the preceding semester. Like the preceding course, LIS 302 is a mandatory course in the university's Department of Library and Information Science for all undergraduates, with the objective of teaching students and supporting them in developing practical knowledge of how knowledge is organized. The course examined overview of concepts; classification of simple and compound subject documents; introduction and application to common and simple auxiliaries; postulation approach and system approach to classification; description and use of sears list of subject headings; filling rules; technological issues in library classification; facet analysis and sequence; classification and organization of electronic and web resources; current trend in library classification; basic skills and competencies of knowledge organisation librarian; basic skills and competencies of users of knowledge organisation tools; applications of classification schemes and challenges in Nigerian libraries Practicum: UDC, Bliss, Colon Classification Schemes etc.; on-line classification; MARC, OCLC, World CAT

COURSE AIMS

The goal of this course is to provide you a general understanding of how information resources are organized and classified. These include approaches to classification; description and use of sears list of subject headings; filling rules; technological issues in library classification; facet analysis and sequence; classification and organization of electronic and web resources; current trend in library classification; basic skills and competencies of knowledge organisation librarian; basic skills and competencies of users of knowledge organisation tools; applications of classification schemes and challenges in Nigerian libraries practicum; traditional and faceted classification schemes etc.; on-line classification

COURSE OBJECTIVES

Some course objectives must be considered in order to attain the above goals. Each unit in this study guide includes precise objectives that will help you keep track of your progress while you study.

At the end of this unit, you will be able to:

- Discuss the concepts of classification and subject cataloguing
- Describe the steps involved in determination of subjects in documents

- Describe the structure of the Sears List of Subject Headings (SLSH) and the Library of Congress Subject Headings (LCSH) and the Library of Congress Subject Headings (LCSH)
- Identify the various filing codes used by libraries
- Describe the two major methods of filing used by libraries
- define systematic library classification
- Identify factors determining the arrangement/organization of library information resources
- Understand the concept of citation order
- Describe the PMEST and the factors that redefine it
- Provide a good background of the UDC
- Describe the Coverage and main classes of the Universal Decimal Classification
- Identify the tables of the UDC
- Describe the rationale for the development of the CC
- Describe the use of the Colon Classification
- Describe the characteristics of the Bliss Classification
- Identify the current trends in library classification.
- Describe the Machine Readable Catalogue
- Discuss the application of the Online Classification.
- Describe the Online Computer Library Center (OCLC).
- Discuss Competencies required in knowledge organisation

WORKING THROUGH THIS COURSE

To completely finish this course, you must proceed through the modules and carefully read the study units, complete the practical exercises and assessments, and double-click on the links supplied to open and read them. Read the suggested books and other materials, and be sure to attend the practical part of this course. Students must always participate in online facilitation and in-person facilitation in the study center. Each unit of study comprises an introduction, end-of-unit objectives, a conclusion, and a summary that tells you in a nutshell what you learned in that unit. Above all, the Tutor-Marked Assignment (TMA) is used to assess what you've learned. You can save the courseware to your device and study it while you're not connected to the internet.

ASSESSMENT

Formative and summative evaluations are the two basic types of assessments. You will be able to evaluate your learning output through formative tests at the end of each unit of study. Summative assessments are used by the institution to evaluate your academic success in the courseware you studied. Objectives and sub-objective questions make up the summative assessment, which is a Computer-Based Test (CBT).

There are three continuous evaluations of 10% each, and final tests are worth 70%. You must complete all of the computer-based tests as well as the final exam.

STUDY UNITS

There are 16 units in the course, divided into six modules. The modules and units are presented as follows

Module 1 Overview of Concepts

Unit 1 Concept of Classification and Subject Cataloguing
Unit 2 Major Subject Headings

Module 2 Filing

Unit 1 Filing Rules
Unit 2 Filing Problems and Their Solutions Based On ALA Code

Module 3 Classification Processes

Unit 1 Introduction and Application of Common and Simple Auxiliaries; Postulation Approach and System Approach to Classification
Unit 2 Technological Issues in Library Classification
Unit 3 Citation Order
Unit 4 Applications of Classification Schemes and Challenges in Nigerian Libraries

Module 4: Traditional Classification Schemes

Unit 1 Dewey Decimal Classification (DDC) Scheme
Unit 2 Library of Congress Classification (LCC) Scheme

Module 5 Classifications Schemes for Specialist Collections (Faceted Schemes)

Unit 1 Universal Decimal Classification (UDC)
Unit 2 Colon Classification (CC)
Unit3 Bibliographic Classification (by Bliss)

Module 6 Contemporary Issues in Classification

Unit 1 Current Trends in Library Classification
Unit 2 Online Cataloguing & Classification and OCLC
Unit 3 Basic Competencies Required in Knowledge Organisation

MAIN COURSE

CONTENTS **PAGE**

MODULE 1 OVERVIEW OF CONCEPTS

Module 1 has two units covering concepts of classification and subject cataloguing including description of classification of simple and compound subject documents; types of subjects, steps involved in determination of subject, and lists of subject headings. It also covers major subject headings.

Unit 1 Concept of Classification and Subject Cataloguing
Unit 2 Major Subject Headings

UNIT 1 CONCEPTS OF CLASSIFICATION AND SUBJECT CATALOGUING

CONTENTS

1.0 INTRODUCTION

In this unit, we shall discuss the concepts of classification and subject cataloguing of information resources, categories of simple and compound subject documents and steps involved in determination of subjects in documents for eventual classification and ultimately, for ease of access and location of information resources in the library. Under the categories of subjects, we shall discuss: broad subjects, basic subjects, derived subjects, mono subjects, simple subject, superimposed subjects, and compound subjects. We shall also describe steps involved in determination of subject

2.0 OBJECTIVES

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

- discuss the concepts of classification and subject cataloguing
- describe the categories of simple and compound subject documents by Scope nand structure
- describe the various steps involved in determination of subjects in documents

3.0 MAIN CONTENT

3.1 Concept of Classification

Literarily, classification refers to the grouping of things according to their degree of similarity and differences. It encompasses the notion of the process of grouping like things together. It is the process of grouping things or abstract concepts or ideas based on their common characteristics. Characteristics here refers to the attributes by which entities and; or concepts are grouped together, or by which subjects are subdivided. Characteristics are, therefore, the determining factors in classification because classification tends to bring together items that are related by virtue of certain common characteristics which they posses.

The word, classification is derived from the word, class. A class is a group of things which have similar characteristics or attributes or have some quality in common by which they may be usefully separated from other things. During classification, all the entities that are members of a class or group as produced, share a t least one common attribute or characteristic which members of all the other groups or classes invariably do not posses.

Library classification is the arrangement of library information resources (book and non-book materials) of a library or group of libraries, into classes according to their similar characteristics. It implies the division of the entire array of library information resources into groups; and then the subsequent arrangement of such groups or classes into preferred sequences and creating mechanisms for their easy retrieval as and when required. The ultimate goal of library classification is to ensure that library information resources are used to their full potential. It is designed to achieve a specific goal: to improve the identification, location, and retrieval of information resources in a library. The search for resources will be unguided, misguided, and random without library classification. This will waste time and cause frustration. As a result, classification was created to avoid wasting time and frustration when using library information resources.

3.2 Subject Cataloguing

The phase of cataloguing associated with the attribution of subject(s) to an item in a collection is known as subject cataloguing. It encompasses all professional strategies and processes for identifying a work's subject matter or substance, as well as selecting a subject and an appropriate word or item from a heading list or thesaurus to describe it. It follows the library's cataloguing routine's descriptive cataloguing. Subject headings or subject numbers could be used to designate subjects. The linking of related subjects in the catalog is also part of subject cataloguing.

The goal of subject cataloguing, according to the Sears list of subject headings (1994: xiii), is to "list all items on a specific subject that a library holds in its collection under one uniform word or phrase." The concept behind subject cataloguing is that consumers of big libraries, such as academic and research libraries are unlikely to remember the author or title of a document. Rather, they're looking for documents about a certain topic that a user is researching, learning, or writing about (Aina, 2004). As a result, cataloguers assign subject headers to every document cataloged in that library, allowing users to find books on certain topics.

To add materials to a library collection, the first two questions a classifier should ask are:

- What is this about? The second question is: where will our users expect to find this?
- Where will the users expect to find this?

Following the determination of a work's subject, the next step is to assign it a class number that accurately depicts its subject matter while also defining its shelf location. A work can often be classed in more than one discipline, which is something that consumers should be aware of. A work on employee psychological testing, for example, might be classed as psychology at 153.94 or management at 658.31125 using DDC. However, if the material is meant for psychology students and scholars, it should be listed with other psychology texts. If the book's intended audience is business administration students, however, it should be grouped alongside other management texts. It is vital to underline that the user's needs take precedence over all other factors. This emphasizes the importance of a classifier's subject knowledge as well as a deep understanding of the demands of the collection's users.

3.3 Classification of Simple and Compound Subject Documents; types of subjects

Categorisation of subjects can be done in two broad ways: by scope and by structure

3.3.1 Types of Subjects by Scope

By scope subjects can be categorised into 4 types:

i. Broad Subjects: These are subjects which cover broad subject areas. They usually form the main classes of major classification scemes. They include such subjects as Languages, sciences, social sciences, technology etc.

ii. Basic subjects: These are subjects found within broad subjects. e.g. within social sciences, the basic subjects include economics, political science etc. Within sciences, the basic subjects include mathematics, biology, chemistry etc.

iii. Derived subjects: These are subjects derived from the basic subjects. For instance, biochemistry derived from biology and chemistry; geophysicsderived from geology and physics.

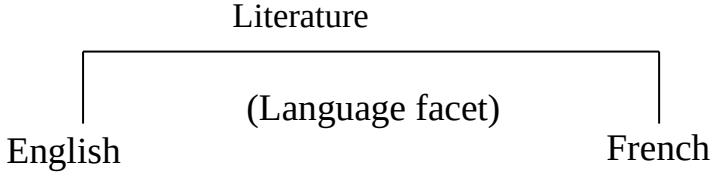
iv. Mono subjects: These are subjects that are centred around one issue with little or no room for breakdown into further subjects. They are regarded as the smallest unit of subjects e.g. research, classification, newspapers, tables etc.

3.3.2 Types of Subjects by Structure

There are 5 forms of subject found in literature: simple, superimposed, aggregate, compound and complex subjects.

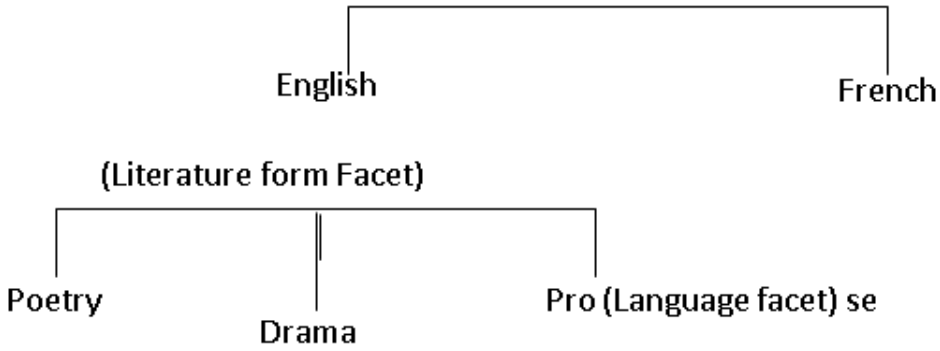
1. Simple Subject: - These are subjects which have only one thing and characteristic. E.g. banking, cataloguing, chemistry, election.

2. Superimposed Subjects: These are subjects consisting of two simple subjects from only one focus i.e. reflecting only one facet e.g. English literature is a simple subject since it has one facet (language).



3. Compound Subject: - These are subjects made up of several simple subjects from more than one focus. When a subject consists of more than one focus from the same main class.
E.g. 1: English poetry is a compound subject because it combines two foci, one from the language facet and the other from the literary form facet e.g.

Literature



E.g. 2: Expatriates Teachers is a compound subject because it combines two foci from two different facets in the same main class (Education). The two foci are teaching and teachers both in education

4. Complex Subject or Phase Subject: - A subject could be said to be complex when a it contains foci from more than one main class eg. the influence of Christianity on English literature. This contains two foci from two different main classes: religion and literature.

Simple and compound subjects create little or no problem in classification. Complex subjects create problems because of their phase relationship (their relationship with other subjects).

Phase relationship is the interaction of a main class with another. A phase is the part of a complex subject from one main class eg “influence of Christianity” is one phase while “on English literature” is another phase.

3.4 Steps Involved in Determination of Subject: What Is this about?

To prepare subject entries or assign subject(s) for books, the following steps may be taken:

1. Read the title, table of contents, introduction, preface, author's or editor's foreword & opening chapter, publisher's blurbs, and reviews of the work in question. This is to get a sense of the book's

topic matter. Subject assignment is an abstraction method that lowers a book's total content to a set of pre-determined subject concepts or subject numbers.

A classifier does not have unlimited time to investigate subjects and classify materials. Classifiers are expected to develop skills at work that will allow them to accurately and quickly determine the subject of new information resources, ensuring that they are shelved in the correct position among other things in the collection. Classifiers with a lot of experience don't have to be concerned about the extremely difficult analytical processes they're performing. Some fundamental strategies can now be used by inexperienced classifiers. When classifying new content, the first place to look is the title of the piece. In many cases, this will be sufficient to supply classifiers with all of the data they want. In a DDC-enabled library, a work named An Introduction to Psychology will almost probably be classified as 150. Even in situations that appear to be basic, such as this one, it's a good idea to check the table of contents page. If the table of contents indicates that the material is about educational psychology, the number would be 370.15 rather than 150.

In many cases, the title does not convey any information about the content of the work. The title "the Bay of Pigs," for example, does not immediately convey that the work is about the American Revolutionary War. Other title information in a publication may help determine the subject; following that, the contents page's chapter and section titles should be scanned. If the work's topic remains a mystery, look at the brief publisher's introduction on the front cover to see what it's about. The preface by the author or editor, as well as the introduction, may provide supplementary information. Other areas/sources to investigate include publisher blurbs and the book review page (if provided). Consult the library's list of subject headings or thesaurus to identify an acceptable phrase for the predetermined subject matter and to maintain uniformity and consistency.

1. Sometimes, there is a scope note accompanying a subject in the list. Read this note actually to satisfy yourself that the subject is adequate. Also check if the subject may need geographical or other forms of subdivision.
2. Also examine the “see” and “see also” reference (in the SLSH) and the “NT”, “BT” and “RT” (in the LCSH) and other terms that describe the book more adequately and accurately.

After taking into consideration necessary factors and making proper judgements, assign subjects heading(s) for the document based on the

nature and content of the document and what is prescribed in the subject heading list in use. While it might be easy to assign subject(s) to certain topics, others may pose a great challenge to the cataloguer. For instance, a book with the title "introduction to librarianship" might have as its subject "librarianship" while a book with the title "History of libraries in Nigeria" might have as subject "Libraries – Nigeria – History". However, it is not simple to choose a subject heading for a book when a given concept has a number of different verbal equivalence e.g. storms, cyclones, dust storms, hurricanes, tunder storms, tornadoes, typhones, winds.

3.5 Lists of Subject Headings

These are publications serving as standard tools for the assignment of subject(s) to information materials. They are used in the library to establish an appropriate term for the subject matter of the book and to ensure uniformity and consistency in choice and form of the words. The most popular subject heading lists around the world include:

i. The Sears List of Subject Headings (SLSH) first published in 1923.
ii. The Library of Congress List of Subject Headings (LCSH) first published in 1897
iii. ALA list of subject heading, (ALSH) (American library Association) first published in 1895.
iv. Medical Subject Headings (MESH)

4.0 CONCLUSION

Classification is a major library and information activity band a significant key in the location and use of information resources. It is the role of libraries and librarians to facilitate the classification and subject analysis of information resources for ease of access of the items.

5.0 SUMMARY

In this unit, we have discussed the concepts of classification and subject cataloguing of information resources, categories of simple and compound subject documents and steps involved in determination of subjects in documents for eventual classification and ultimately, for ease of access and location of information resources in the library if you recall, we discussed the following types of subjects: broad subjects, basic subjects, derived subjects, mono subjects, simple subject, superimposed subjects, and compound subjects.

SELF-ASSESSMENT EXERCISE

i Describe the various steps involved in determination of subjects in documents.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is Classification?
2 What is Subject Cataloguing?
3 Discuss the major categories of Subjects by Scope nand structure
4 Describe the Steps Involved in Determination of Subject

7.0 REFERENCES/FURTHER READING

Anglo – American cataloguing Rules, 2nd. Ed. (1988) Rev. prepared by the Joint Steering Committee for the Revision of AACR. Edited by Michael Gorman and Paul Winkler. Chicago: American Library Association.

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UNIT 2 MAJOR SUBJECT HEADINGS

1.0 INTRODUCTION

Having discussed the concepts of classification and subject heading lists, this unit will introduce you to the Description and use of major subject headings including Sears List of Subject Headings (SLSH) and the Library of Congress Subject Headings (LCSH). We will also discuss the physical features and use of the heading lists in assignment of subjects to information resources.

2.0 OBJECTIVES

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

- Describe the structure of the Sears List of Subject Headings (SLSH) and the Library of Congress Subject Headings (LCSH)
- Describe the structure of the Library of Congress Subject Headings (LCSH)
- Identify the differences between SLSH AND LCSH

3.0 MAIN CONTENT

3.1 Description and Use of Sears List of Subject Headings (SLSH)

The SLSH was first published in 1923. It is a similar and simplified version of the Library of Congress Subject Heading. It's latest edition (15^{th} edition) was published in 1994. The SLSH is in bold and light face type arranged alphabetically. The subject headings in bold face type are primary or usable or preferred headings assigned to books while those in light face type follow those in bold face type and are unused headings.

3.1.1 Physical Characteristics of SLSH

Each bold face type primary heading has at most 4 sets of subject headings subordinated to it namely: UF, BT, NT and RT sets of subject headings.

Below is a typical entry in the SLISH.

HOUSES: (May subdiv. Geograhically) 643; 728

Use for general materials on building in which people live. Materials on residential building, from the standpoint of style and design are entered under DOMESTIC ARCHITECTURE

UF Dwellings, Homes, Residences.

SA Types of houses e.g. Earth sheltered house etc.

BT BUILDINGS

NT Apartment houses, Housing kitchens, Rooms

RT Building, House construction.

The bold face type primary heading may be assigned to a book on that subject. Following a bold face primary subject heading may be the note "may subdivide geographically" (for subjects, which can be treated geographically.

Classification numbers from the DDC follow many of the bold face type primary subject headings ease the assignment of class marks to books on a subject. However, it is advisable to check the classification schedules first to confirm the correctness of the class mark before assigning it to the subject.

Sometimes, there is a scope note accompanying a bold face type primary heading. The essence of the scope note is to

a. Specify the range of use of a bold face type primary heading.
b. Draw distinction between related readings.

(See above)

Sets of related subject heading arranged alphabetically are subordinated to a bold face type primary heading.

The first set is usually preceded by the UF sign. The headings are in light face type. The UF sign signifies that each of the subordinated light face headings are not usable. From each of the headings preceded by a UF

code, a 'see' cross reference can be made to the primary heading if the library has a book on the primary heading. E.g.

Librarianship
See
Library Science

The 2nd set of headings that may be subordinated to a primary heading is that preceded by the 'BT' sign. The heading consists of broad subject headings and are in bold face type. The BT sign signifies that a 'see also' cross reference should be made from each of the subordinated bold face type headings to the primary heading if the library has books on the primary heading. E.g.

Information Science
See Also
Library Science

The 3rd set of headings is that preceded by the 'NT' sign. The headings consist of terms narrower than the primary headings and are in bold face type.

The NT headings can be applied in two ways:

i. They consist of headings that are as usable as the primary heading and can as well be considered for use for the publication in hand if the heading is more suitable than the primary headings. But for an NT heading to be used, the cataloguer has to turn to the page where it appears as a bold face type primary heading.

ii. Where a library has book(s) on the subordinated NT headings, the cataloguer should make a "see also" across reference from a chosen primary heading for a book to each of the subordinated bold face NT headings.

Example.

Library Science
See Also
Cataloguing

The last set of subordinated headings is usually preceded by 'RT' sign. The headings are in bold face and consist of terms related to the primary heading. The RT headings can be applied same way as the NT headings. E.g.

Library Science
See Also

Library Services

3.2 Library of Congress Subject Headings (LCSH)

The LCSH was first published in 1909 (though in parts from 1909 – 1914) with the title subject headings used in the Dictionary catalogues of the library of congress. The second edition was published in 1919. The title changed to library of congress subject headings when the 8th edition was published in 1975. The 16th edition which is the latest in libraries LCSH made use of the following codes: "X" (now replaced by UF) "XX" (now replaced by BT and RT), "see also" (now replaced by RT and NT)

Physical Features of the LCSH
Below is a typical entry of the LCSH.

BOOKS AND READING (May Subd. Geog) Z1003 – Z1003.5

Here are entered works on the significance of books in people's lives, including their attitudes toward and interest in reading, work on the art of reading are entered under reading:

UF Appraisal of books
Books – Appraisal.
Reading and books
Reading habit
Choice of books.

BT Reading

RT Reading interest.

SA Subdivision Books and reading under classes of persons, ethnic groups or names of individual.

NT Best Sellers
Blind – Books and reading
Books –Reviews
Prohibited Books.
Reference books.
SOCIOLOGICAL ASPECTS
UNITED STATES

Only the primary subject headings and in the primary subdivisions preceeded by a dash (-) sign are in bold face type. A bold face type primary heading may be followed by the legend (May subdivisions Geog) which shows that the heading may be subdivided by places according to the rules in the manual. Following the legend may be class numbers which may be one or in range. Scope notes giving guidance or clarification in the meaning or application of the heading may follow in separate paragraphs (library of congress subject headings, 1993)

A maximum of four sets of secondary headings proceeded by the same codes as in the SLSH are subordinated to the bold face type primary heading, all in light face type (unlike the SLSH) These includes UF, BT, RT and NT headings. Again, unlike in the SLSH, the NT headings are listed after the RTs in the LCSH.

4.0 CONCLUSION

Subject cataloguing is done with the use of Subject Heading lists. The essence is to ensure consistency and continuity in the assignment of subjects. It is also a major library and information science activity and a significant key in the assignment of class marks to information resources. It is also an activity that requires skills by librarians in order to ensure the assignment of subjects as accurately as possible.

5.0 SUMMARY

In this unit, we have discussed the use of the major Subject Heading lists, namely the Sears List of Subject Headings (SLSH) and the Library of Congress Subject Headings (LCSH). Effort was also made to describe their physical features and distinguishing differences. If you recall, we discussed that a maximum of four sets of secondary headings preceded by the same codes as in the SLSH are subordinated to the bold face type primary heading, all in light face type (unlike the SLSH) These includes UF, BT, RT and NT headings. Again, unlike in the SLSH, the NT headings are listed after the RTs in the LCSH.

SELF-ASSESSMENT EXERCISE

1. Identify the differences between SLSH AND LCSH

6.0 TUTOR-MARKED ASSIGNMENT

1. What are the major physical features of the Sears List of Subject Headings (SLSH)?
2. What are the attributes of the Library of Congress Subject Headings?

3. In what ways does the LCSH differ from the SLSH

7.0 REFERENCES/FURTHER READING

Ekere, F. C. & Mole, A. J. C. (2014). *Theory and Practice of Cataloguing and Classification.* Enugu: Praise House Publishers.

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MODULE 2 FILING

Module 2 focuses on filing rules, filing problems and their solutions. It also covers meaning of filing, methods of filing such as the word by word and letter by letter filing

Unit 1 Filing rules
Unit 2 Filing problems and their solutions

UNIT 1 FILING RULES

CONTENTS

1.0 INTRODUCTION

Filing is an essential aspect of library service which is concerned with the systematic arrangement of catalogue entries for ease of access by the library users. Filing actually follows the classification of information resources. In this unit, we shall be discussing the concept and essence of filing, the various filing codes used by libraries, and the two major methods of filing used by libraries.

2.0 OBJECTIVES

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

- define the concept and essence of filing
- identify the various filing codes used by libraries
- describe the two major methods of filing used by libraries

3.0 MAIN CONTENT

3.1 Meaning of Filing

The cataloguing and generation of entries are followed by the filing of catalogue entries. Shelf order is determined by filing order, which is frequently the inverse of citation order, in which generic features of a subject are shelved before more particular aspects. This makes obvious sense, as library patrons would expect broad parts of a topic to be shelved first, followed by narrower portions. The order of filing appears to be a problem only when all of the pieces are missing.

For example:

Cars - would be shelved before:
Cars - United States would be shelved before:
Cars - Manufacture would be shelved before:
Cars - Aluminum would be shelved before:
Cars Chassis

It is however, difficult to apply the above formulae in the arts, humanities and social science where similar formulae can be also devised.

For example:
Subject - place- time
History - Yoruba Land – 18th century
Filing Order:
History
History – 18th c
History – Yoruba Land
History – Yoruba – 18th c

An example for a film library:
[genre-process-space-time]
Musicals – Choreography- Nigeria – 1980s

Filing order:

Music
Music – 1980s
Music – Choreography
Music – Choreography - 1980s
Music – Choreography – Nigeria
Music – Choreography – Nigeria – 1980s

Due to the complex nature of filing, various published codes of rules for filing catalogue entries are available to enable filing to be done in a consistent order. The following are some of them.

1. ALA Rule for filing catalogue cards by P. A. Sealy – first published in 1942, 2nd ed., 1975. This is the most widely used rule (Edoka, 2000)
2. Filing rules to the Dictionary catalogue of the library of congress – 1956
3. Rules for a Dictionary catalogue by C. A. Cutter 4th ed. 1904
4. Specification of alphabetical arrangement and the filing order of numerals and symbols by British Standard Institution (BSI) 1969
5. AACR II Filling Rule.

3.2 Methods of Filing

There are 2 principal methods employed in filing
1. Word by word
2. Letter by letter

3.2.1 Word by Word Filing

This is also called "noting before something" or "blank to zee (z)". It is the filing of catalogue entries by words. All entries are arranged word by word and between filing entry words letter by letter. It is an alphabetical arrangement whereby the space between two words is given precedence over a letter in the filing sequence. With the word by word method (nothing before something), the space between words (nothing) is taken into account. Therefore, all items beginning with a simple word are dealt with first, before the words with appendages, suffices etc. In word-by-word filing, the base word followed by another word is given precedence and is filed before another word that has the base word as part of it. The word-by-word filing becomes problematic when names are hyphenated or begin with "Mc" and when foreign words and abbreviations are used.

3.2.2 Letter by Letter Filing

Also called the all-through filing, in this method, entries are filed in alphabetical order of all the letters of an entry beginning with the heading whether or not there is a single word involved or two more words. In the letter-by-letter filing, entries are filed in a single alphabetical linear order. A letter in an alphabet under this system takes precedence over the space between two words. The space between word is ignored. The letter by letter system is less confusing in that hyphens and gaps between references books such as encyclopedias are arranged in this method. It also appears to be more straightforward but is problematic when there are long names.

Word by Word	**Letter by Letter**
New church	Newark
New heaven	New Castle
New York	New church.
Newark	New Heaven
Newcastle	New York

4.0 CONCLUSION

Filing is also a major library and information science activity and a significant key in the location of information resources. It follows cataloguing and classification of information resources. It gives meaning to the classification process. It is very significant because it can mar the work of the classifier if it not accurately done. It therefore requires a lot of vigilance and accuracy. That is why it requires the use of rules and prescribed methods which guide its application.

5.0 SUMMARY

In this unit, we have discussed filing and filing rules. Effort was also made to describe the two major filing rules and their application. If you remember, these include: the **Word by Word and the Letter by Letter filing rules**. Their accurate application is important in ensuring location of catalogue entries and information resources in library collections.

SELF-ASSESSMENT EXERCISE

1. Identify the various filing codes used by libraries

6.0 TUTOR-MARKED ASSIGNMENT

1. What is filing, and why is it important in libraries?
2 List four filing codes you have learnt?
3 In what ways does the Word by Word filing rule differ from the letter by Letter?

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UNIT 2 FILING PROBLEMS AND THEIR SOLUTIONS

CONTENTS

1.0 INTRODUCTION

Like other human activities, filing has some problems posed to librarians. Such problems are also not without solutions. In this unit, we shall be discussing the major filing problems and solutions to them.

2.0 OBJECTIVES

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

- Identify major filing problems in libraries
- Determine solutions to the various filing problems

3.0 MAIN CONTENT

3.1 Abbreviations

ALA code prescribes that abbreviations should be filed as if spelt in full in the language of the entry except Mrs., Mr., or Miss which are filled as written.

E.g. Word by word	letter by letter
4. NPF	5. NPF
5. Nigerian	4. Nigerians
6. Schools	6. schools
1. AACR II	1. AACR II
3. Anglophone	2. Anglophone
2. Anglo Territory	3. Anglo Territory

3.2 Initials

Each initial is treated as a word i.e. 'letter word'. Consequently, in word by word filing. Group of initial are filed before longer words beginning with the same initial letter.

Word by word	letter by letter
1. A. A. Ukaegbu	1. A. A. Ukaegbu
2. A. D. I. Njoku	3. A. D. I. Njoku
3. A. M. A. Nwosu	4. A. M. A. Nwosu
4. Abstract	2. Abstract
5. American	5. American

3.3 Numerals

Numerals are filed as if spelt out in the language of the entry. i.e. spell as spoken. Use 'and' before the last element in compound numbers.

E.g. 1000 = One thousand.
1223 = One thousand, two hundred and twenty-three.

Word by word		letter by letter
6.	6 famous poets	6
4.	1000 American poems	5
3.	Once upon a time	3
2.	14 visions of the world	2
1.	14^{th}	1

3.4 Hyphenated Words

File As:

(A) Separate Words – If each part of the words is a complete form e.g.
Mark – Anthony
John – Paul

(B). **One Word** –

i. If the words appear in entries in two forms. That is when a hyphenated word is sometimes written as one word and there is an entry in the library catalogue under the complete form of the word

African – American	African American
Book – binding	Bookbinding
Press mark	Pressmark

Then file as one word and make a "see reference" from the separate form to the compound form

ii. If the first part of the hyphenated word cannot stand alone. That is, when hyphenated word begins with a prefix or combining form that cannot stand alone e.g.

Socio-economic
Bi-election
Electro-magnetism.
Ex-convict.
Anti-malaria

3.5 Proper Names with A Prefix

Spell as written but file, as pronounced and as one word. E. g. The prefix M' (with an elision) and Mc should be filed as if spell Mac.
Different Spellings – Use any one form of entry for words which are spelt in more than one way and make a see reference from the unused to the used form e.g. color **see** colour.

4.0 CONCLUSION

Filing of information resources comes with it, some technical problems. These problems have been examined with the view to enabling librarians address them properly and ensure consistency in the filing of entries. Librarians should be conscious of these problems, which is why this unit is very significant.

5.0 SUMMARY

In this unit, we have discussed filing problems based on ALA Code. Effort was also made to describe the solutions based on the ALA rules. These problems include issues of initials, abbreviations, numerals, hyphens, and proper names. The proper handling of these issues will no doubt be important in ensuring accurate filing of catalogue entries and information resources in library collections.

SELF-ASSESSMENT EXERCISE

i. Identify and discuss major filing problems Nigeria Libraries.

6.0 TUTOR-MARKED ASSIGNMENT

1. What is the guiding principle for the filing of initials?
2 How are numerals filed in libraries?
3 What is the rule for the filing of abbreviations as entries?

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MODULE 3 CLASSIFICATION PROCESSES

Module 3 discusses approaches to classification, technological issues in library classification, citation order, and applications of classification schemes and challenges in Nigerian libraries

Unit 1 Introduction and Application of Common and Simple Auxiliaries; Postulation Approach and System Approach to Classification.
Unit 2 Technological Issues in Library Classification
Unit 3 Citation Order
Unit 4 Applications of Classification Schemes and Challenges in Nigerian Libraries

UNIT 1 INTRODUCTION AND APPLICATION OF COMMON AND SIMPLE AUXILIARIES; POSTULATION APPROACH AND SYSTEM APPROACH TO CLASSIFICATION

CONTENTS

1.0 INTRODUCTION

In this unit, we will discuss the history and development of knowledge classification, Application of Common and Simple Auxiliaries; Approaches to Classification, History of Knowledge Classification, Origin of Modern Library Classification, Systematic Library Classification and factors determining the arrangement/organization of library information resources today.

2.0 OBJECTIVES

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

- discuss the history and development of knowledge classification,
- discuss the application of common and simple auxiliaries;
- identify approaches to classification,
- discuss origin of modern library classification,
- define systematic library classification
- identify factors determining the arrangement/organization of library information resources

3.0 MAIN CONTENT

3.1 Origin of Modern Library Classification

Until 1876, when the first subject classification scheme appeared, the arrangement of books was by one of the following method,

1. Size of book
2. Colour of book
3. Date of publication
4. Press or publisher
5. Author and title

In the circumstances in which they were utilized, all or some of these configurations had some merit. Even today, some libraries organize all fiction by author and title because it has been proven to be effective for fiction. Thousands of books can be found in modern libraries. If all library items are organized using one of the traditional ways of arrangement, it will be nearly hard to find any book. A user may have to sift through a large number of books in order to find the book of his or her choosing.

The adaptation of an existing philosophical theory of knowledge to the organizing of library materials led to the establishment of modern library categorization. Francis Bacon's "outline of knowledge," which was divided into subjects such as history, philosophy, and poetry, was the first philosophical system. Another categorization system was the Brunel classification, which was also used to organize books in libraries. Melvil Dewey created the DDC in 1876, based in significant part on W.T Harris' decimal notation method.

The basis for traditional library classification is philosophic classification. The classification of materials and the classification of knowledge are inextricably linked. While material classification was the first method of

arranging library items, the present customary method uses knowledge classification or philosophic classification. Philosophical categorization organizes knowledge in a style, i.e., registering, assessing, and classifying thoughts, ideas, and concepts, and so represents the entire range of human learning.

The records that express and preserve knowledge as reflected in books and other media are classified in libraries. Because of the physical format of the substance, it allows for modifications as needed. Literary warrant is the term for this practical adjustment. Literary warrant, according to English librarian Windham Hulme, is a classification scheme for book subjects that differs from philosophic or scientific knowledge classification. The term can also refer to the amount of books available on a particular topic.

3.2 Systematic Library Classification

Systematic book classification refers to two processes

1. The making of a scheme of a classification which is an orderly arrangement of categories of class or subject terms in ranks or hierarchy with notation or symbols with ordinal values assigned to each term in the hierarchy. The people who perform this activity are known as classificationist.
2. Using the scheme of classification to assign subject notation or number to books and people who are engaged in this are called classifiers.

The following are the two ways in which library classification organizes information resources. To begin, find connections between several domains of study. The primary and secondary areas of knowledge are listed in library categorization schemes, just as they are in animal kingdom classification. As a result, they create a knowledge taxonomy by categorizing it into areas such as Social, Natural, and Applied Sciences, among others. Second, library classification organizes books on shelves, such as gathering all history books together and keeping Ancient History books near but separate from Medieval History books.
The distance between books on certain themes on the book shelves represents the distance between various subjects in the library. The library is modeled after a physical representation of a knowledge structure. The subject of a book determines where it should be placed on the library shelf. Determining the topic can be difficult at times. A good example is a book about the impact of colonialism on the culture of the people of South Eastern Nigeria.

The books must be labeled in such a way that the subject is identified on the label to maintain them in the right shelf order, and to realize that their shelve arrangement is dictated by their subject rather than their author or title. It is occasionally feasible to just name the work after the subject, such as religion, but this is uncommon. If subject titles were used to establish suitable shelf order, religion would be separated from related fields such as sociology by history, geography, economics, and music, among others, assuming the logical structure in that instance is alphabetical. In order to establish a functional arrangement of resources on library shelves, subjects need be marked by a code or set of symbols.

Advantages of Systematic Library Classification

1. It arranges book in an order convenient for both the reader and the Liberian. Since the need of book is by their subject content, access to them by subject is therefore helpful.

2. It enables books to be inserted into organized groups and allows for the return of books to their location on the shelf after use.

3. It allows for a systematic and representative book selection and revision of stock. Books of the same subject affinity filed together makes easy for the librarian to identify gaps in the collection for acquisition.

4. Through the medium of the catalogue, systematic classification analyses the contents of books and justaposes (brings side by side) subject together.

5. It allows for clear and efficient guiding of the stock of a library. This is made possible through the call numbers which helps libraries to determine which items belong to a given library.

6. It helps to save the time of the user by bensuring quick location and retrieval of library resources.

7. It helps libraries to carry out special tasks such as stock taking and recording of library materials.

8. It promotes achievement of specificity in arrangement, location, and retrieval of information materials.

Disadvantages of Systematic Library Classification

1. No classification scheme can assemble at one place all the books that a reader may require on a topic as only one relationship out of many that a book has can be shown on the shelf. Eg the world book

encyclopedia contains a great deal of useful information on Nigeria and Africa it cannot be arranged on the shelf with books or Nigeria or Africa. But on general materials.

2. With the constant change in knowledge, no classification can remain perfect for all time. Accommodation of new subjects is sure to cause re-arrangement and sometimes hold changes.

3. Classification is a skilled task requiring greater subject knowledge and more training than the librarian often possess.

4. Classification appears complex and obscure and not a readily comprehended arrangement like the alphabetical and chronological arrangement. The user therefore requires a great deal of guidance to use the materials arranged by any of the existing classification schemes effectively.

5. Unavoidable disorder of the book shelves makes library classification seem to be irrelevant. In many cases, the book shelves are scattered and disorganized making the call numbers useless. This makes some library users to prefer to go to the shelves to search for needed materials randomly rather than go through the catalogue.

3.3 Factors Determining the Arrangement/Organization of Library Information Resources Today

1. Subject is the most significant attribute for all factual literature (imaginative literature, like
   a. Fiction may require the use of form). Subject is therefore the major factor which determines the organization of materials in the library. Other factors may play a role in determining the organization of the materials. These factors include:
2. Literary form of presentation i.e. factual literature vs imaginative literature, and within imaginative literature, arrangement is based on literary form.
3. Age of users or readers.
4. Type or condition of material e.g. reference, serial, Africana, reserved, loan materials (This is also known as parallel arrangement)
5. Frequency of use of books.
6. Size of books (over-size or undersize books)
7. Other physical characteristics (phonodiscs, phonotapes, microphones, microfilms, micro fiches, micro opaques)
8. Language of presentation.
9. Display.

10. Peculiarities e.g. form of presentation (periodicals).
11. Date of publication (arrangement of early books by date)
12. Value or demand of material e.g. reserved collections.

Arrangement of materials by the above factors are not usually exclusive e.g. a book may be both a reference work and book for children. Therefore, it may be proper to integrate a good number of the above listed factors with subject factor (subject arrangement). This will enhance the overall cataloguing and classification of the materials and ensure that the materials are efficiently and effectively organized.

The most significant feature of all books except imaginative literature (fiction) is the subject. Subject arrangement is therefore the most helpful, systematic and scholarly form of arrangement. Consequently, most libraries today employ subject arrangement in their classification.

A classifier should always question “where will the consumers expect to find it, i.e. the class mark / call number)?” after identifying what the information resource is about (Subject). while adding books to a library's collection This means that once the subject of a work has been determined, the next step is to assign it a class number that accurately conveys the item's subject while also establishing its shelf location. Depending on the demands of the user, a work can be validly classified in two or more disciplines in the majority of circumstances. A work on employee psychological testing, for example, might be classified as 153.94 psychology or 658.31125 management by DDC. If the book is aimed at psychology students, it should be put with other psychological works. However, if the book's intended audience is business administration students, it should be kept in the same shelf as other management textbooks. The premise is that the user's needs take precedence over all other considerations. Aside from topic knowledge, the classifier should be well-versed on the requirements of the collection's users.

4.0 CONCLUSION

Library classification organizes the records which express and preserve knowledge as embodied in books and other media. Systematic book classification refers to two processes: The making of a scheme of a classification, and using the scheme of classification to assign subject notation or number to books. Library classification has two modes of organization. First, by recognizing similarities between areas of knowledge, Second, by organizing books on shelves. Library classification is used to illustrate the distance between various themes on the library shelves by displaying the distance between books in the disciplines.

5.0 SUMMARY

In this unit, we have discussed the history and development of knowledge (ed) classification, the application of common and simple auxiliaries; approaches to classification, origin of modern library classification, systematic library classification and factors determining the arrangement/organization of library information resources. These are very important for subsequent discussions on the classification of information resources.

SELF-ASSESSMENT EXERCISE

1. Identify approaches to classification.

6.0 TUTOR-MARKED ASSIGNMENT

Capitalize the first words (1-6)

1. Discuss the history and development of knowledge classification,
2. Discuss the application of common and simple auxiliaries;
3. Identify approaches to classification,
4. Discuss origin of modern library classification,
5. Define systematic library classification
6. Identify factors determining the arrangement/organization of library Information resources

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UNIT 2 TECHNOLOGICAL ISSUES IN LIBRARY CLASSIFICATION

CONTENT

1.0 INTRODUCTION

Existing classification systems may not provide adequate subject coverage or a desirable shelf layout of resources for libraries with tightly concentrated collections. Many libraries may not need to classify or reclassify their whole collection, but they may have unique collections that need to be restructured since they aren't being used to their full potential. This may entail the development of a new classification scheme to meet the needs of local users. In some ways, this would be a really simple procedure. Creating a classification scheme can be relatively straightforward and quick, as seen below. However, because it entails generating new indexes, relabeling, re-catalogying, re-classification, re-shelving, and re-filing of materials, putting such a new system into practice will be a resource-intensive and costly exercise. This unit focuses on technological challenges in library classification, such as developing notation in a faceted classification and producing a faceted classification.

2.0 OBJECTIVES

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

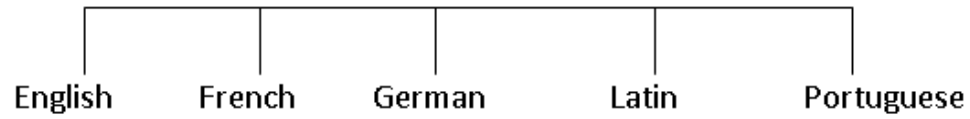
- Discuss Facet Analysis and Sequence
- create a faceted classification scheme
- develop a notation in a faceted classification
- development of notation in a faceted classification

3.0 MAIN CONTENT

3.1 Facet Analysis and Sequence

Facet analysis is the process of subdividing a class (discipline) into sub-classes by applying the characteristics of division common to the class one at a time and in a sequence or order relevant to the study of the class. The aggregate of sub-classes produced from the application of single characteristics of division is called a facet. Within a facet, an individual sub-classes is called a focus. Eg literature subdivided by language will produce English, French, German, Latin etc.

Literature



The aggregate of sub classes in literature ie (English, French, German, Latin, and Portuguese) is the language facet of the class literature. English language component of the sub-classes is a focus of the language facet of the class literature.

All classification schemes employ the principle of grouping knowledge into discipline or main classes. Each of the main classes covering a field or range of subjects is referred to as a term of great extension (because of their wide coverage). The main class term is divided into divisions-subdivisions and sections until the most specific subject in the class is isolated. The division of a class or discipline is by the application of the characteristic of a division common to the class. The application of the characteristics is one at a time in an order relevant to the study of the class or discipline. Less helpful characteristics are ignored eg. colour of book.

At each stage of a division of a class into subclasses, the field of coverage of a resultant sub-class is reduced making it a term of small extension while the quality conveyed by a subclass increases making it a term of great intention. It therefore, implies that the more specific a subject is, the greater will be the intention (quality) and smaller the extension (coverage).

Each of the divisions, sub-division and section of a class is subordinated to the main class heading. In other words, the categories of sub-classes produced by the division of main classes are arranged in rank or hierarchy from the general subject to the specific subjects in subordinate or coordinate relationship.

A classification scheme therefore begins with terms of great extension with small intention and proceeds to terms of great intention with small extension. Eg in DDC

Technology	- 600
Engineering	- 620
Applied physics	- 621
Steam Engine	- 621.1
Portable	- 621.15
Stationery	- 621.16
Turbine	- 621.165
Mining Engineering	- 622
Agriculture	- 630

3.1.1 Creating a Faceted Classification

Existing classification systems may not provide adequate subject coverage or a desirable shelf layout of resources for libraries with tightly concentrated collections. Many libraries may not need to classify or reclassify their whole collection, but they may have unique collections that need to be restructured since they aren't being used to their full potential. This may entail the development of a new classification scheme to meet the needs of local users. In some ways, this appears to be a straightforward approach. As shown below, creating a classification scheme is relatively simple and quick. However, because it entails generating new indexes, relabeling, recataloguing, reclassification, reshelving, and refiling of materials, putting such a new system into practice will be a resource-intensive and costly exercise.

The development of a special classification scheme must begin with a clear knowledge of the role it will serve in the library once the decision to reclassify resources has been made, and if the current scheme does not appear to be suitable. "Why is a new scheme being constructed, and why can't an old system be used?" is the first and most crucial question. It's critical to remember that there are already other classification schemes in use, many of which have nothing to do with the library. Why not apply the categorization technique employed in record and video stores to classify a collection of music CDs or motion picture and video records, for example? It is critical to be able to acquire access. The purpose is not to participate in an academic exercise, but to make the collection more accessible. It's critical to have a good understanding of the scheme's potential consumers' needs.

It's also worth mentioning that once all outlying areas have been treated, the reach of a strategy that focuses on a small area can actually be quite vast. After recognizing the need for a completely new scheme, the first

stage is to define core themes, which are then followed by a consideration of the range of subsidiary issues that must be covered. A comprehensive list of topics is unquestionably required. A bottom-up or top-down approach can be used to construct the whole topic list. The top-down method begins with the identification of main classes, which are subsequently subdivided into sub classes. Although this appears to be a common strategy, it may appear to be unduly prescriptive. It's a good idea to make a complete topic list before making selections about how the subject should be organized (the bottom-up strategy).

Structure: facets, classes and subclasses

Many topics can be broken down into individual components or facets. There are a variety of formulae that can be used to determine which facets are represented in a categorization scheme and in what order they are displayed. At this point, it's a good idea to give a quick summary of facet formulae. Example.

Concrete-Process	(KAISER, 1911)
Thing-Part-Material-Action-Agent	(Coates, 1960)
Personality-Matter-Energy-Space-Time	(Ranganatham (1960)
Substance, product, organism-Part, organ, structure-Constituent-Property and measure-Object of action, raw materials-Action, operation, process, behaviour-Agent, toll-General property, process, operation-Space-Time	(Vickery, 1960)
Thing-Kind-Part-Material-Property-Process-Operation-Agent-Space-Time	(Standard citation order: Mcllwaine, 2000)

They all work their way from specific to generic, albeit some are more challenging than others. Any of the equations listed above could be modified to meet the needs of a specific group or set of consumers. After the multiple facets included in the collection have been discovered, particular subjects or concepts can be allocated to individual aspects. Classes and maybe many levels of subclasses will be able to be distinguished if the facets become the main and auxiliary classes. The topic list should be extensive. Subjects that are not now included in the collection but could be in the future can also be anticipated. Allowing for future dates in the time facet is an obvious example.

Within each class, concepts must be listed in a logical order. Arrangements that could be made include:

Logical: This Shows conceptual relationships

Eg.: Chemistry, Mathematics, Physics, (gradation by specialty)

- Procedural: This shows progression
  Eg: writing a CV, filling out a job application, interview technique.
- Chronological: This shows movement through time
  Eg: Ancient, Middle Age, Modern, Silurian.
- Alphabetical: This is where no other relationships can be identified, or where alphabetical order of arrangement is most helpful to users of the collection.

3.2 Development of Notation in a Faceted Classification

Notations are symbols with ordinal values that represent the classification's terms. Notation is a set of symbols that, when used as a code, indicate the subjects found in the schedules of a categorization scheme, allowing them to be filed at the appropriate position in a physical sequence. Each concept must have a notational symbol, such as a number, letter, or other symbol, that allows it to be represented in 'shorthand.' The notation or code for social science in DDC, for example, is 300; in LCC, the notation or code for social science is H.

Notation must convey order

The shelf-order must be specified without ambiguity in the notation. In the English-speaking world, users of the approach are most likely familiar with self-evidently organized Roman letters and Arabic numerals. It's necessary to consider whether AB12 should come before or after 12AB when using mixed notation.

The Notation should be simple and brief

Notational brevity can be achieved by using letters (with a base of 26) rather than numbers (with a base of 10). It can also be done by deleting unnecessary data. The concept of "motion picture" does not need to be represented in the notation if a collection only contains works on motion pictures, for example.

The Notation should be memorable

The use of mnemonics, both literal and systematic, should be done with caution. However, because useful topic order is commonly forgotten, literal mnemonics should be used in a time facet, such as the UDC section. Systematic mnemonics should be employed if and when possible because they serve as a powerful memory aid without endangering the scheme's general structure.

The notation should be hospitable to the insertion of new subjects

The appropriate portion of the classification scheme should be updated with new subjects. Using enumerative techniques to leave gaps in the notation, this can be performed. Instructions on how to accommodate new subjects by expanding timetables should also be included.

Notation might show hierarchy: expressiveness
Enumerative classification schemes, as opposed to faceted classification schemes, have this advantage.

The Notation should allow for flexibility
It is quite a good practice to allow for flexibility.

4.0 CONCLUSION

This unit has revealed that all classification schemes employ the principle of grouping knowledge into discipline or main classes. Each of the main classes covering a field or range of subjects is referred to as a term of great extension. The main class term is further divided into divisions-subdivisions and sections. The division of a class or discipline is by the application of the characteristic of a division common to the class. The application of the characteristics is one at a time in an order relevant to the study of the class or discipline. A classification scheme therefore begins with terms of great extension with small intention and proceeds to terms of great intention with small extension.

5.0 SUMMARY

This subject covers the importance and use of technology in library classification, as well as the creation of a faceted classification scheme, the development of a notation in a faceted classification, and the attributes of notation in faceted classification. It should be able to convey order; it should be very short and brief; it should be easy to remember; it should be adaptable to new themes; it should represent hierarchy; and it should allow for flexibility.

SELF-ASSESSMENT EXERCISE

1. Discuss Facet Analysis and Sequence .

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the conditions for the creation of a faceted classification scheme.
2. How can you develop a notation in a faceted classification?
3. What are the qualities of notation in faceted classification?

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UNIT 3 CITATION ORDER

CONTENTS

1.0 INTRODUCTION

In the previous unit, we looked at application of technology in library classification, including the creation of a faceted classification scheme. In this unit, the focus will be on citation order, including the factors that can redefine PMEST, and structure of subjects.

2.0 OBJECTIVES

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

- Define the concept of citation order
- Describe the PMEST and the factors that redefine it
- Describe the structure of subjects

3.0 MAIN CONTENT

3.1 Citation Order

Citation order refers to the order in which a class's intrinsic division features are applied. The value of each trait to the subject's study determines this. In a built notation, citation order merely refers to the order in which the pieces of the notation are cited. The most typical rule is to start with the most particular concept and work your way down to the most general. Kaiser (1911) created the citation order of 'Concrete – Process' in an early attempt to implement consistency in citation. However, for many complex themes with two or more concrete entities, this is insufficient.

In his "Thing-Part-Material-Action" citation sequence, Coates devised a more thorough and helpful ordering in 1960. Although not every topic

will contain all four characteristics, when they do, they should be cited in the order in which they appear. As an example:

Suits – Lining – Polyester - Ironing
Cars – Chassis – Aluminum - Manufacture

Ranganathan established the citation order, "Personality - Matter - Energy- Space –Time" (PMEST) in his Colon Classification and allowed for more than one level of the personality facet or element.

Personality Matter Energy Space Time

Cars - Chassis - Aluminum - Manufacture – United States – 1970s

The following principles may be employed to achieve citation order.

1. The principle of decreasing concreteness known as PMEST for short, where

P stands for - Personality
M - Matter
E - Energy
S - Space
T - Time

Personality is the most concrete (important) category of facet in a subject. Eg Agriculture, the personality facet is crop.

Matter- the category of facet which reflects substance, materials etc. it would be identified in most technologies or natural sciences but is generally absent in theoretical disciplines like law, economics, literature etc.

Energy- the category of facet which is marked by the use of energy such as activities, operations, processes, problems and properties.
Space –refers to country and area treatment of subject.
Time-refers to period in the treatment of subjects eg
Library science/Lib. Service/Material/operation / Area/ Period
Class Public Books Acquisition Nig 1960
Personality Matter Energy Space Time

3.1.1 Factors That Can Redefine PMEST

i. *Historical Consideration:* It should be noted that personality facet may differ from class to class e.g. in history, nation or state, are regarded as the personality facet and not the space facet as would be the case in some disciplines like agriculture.

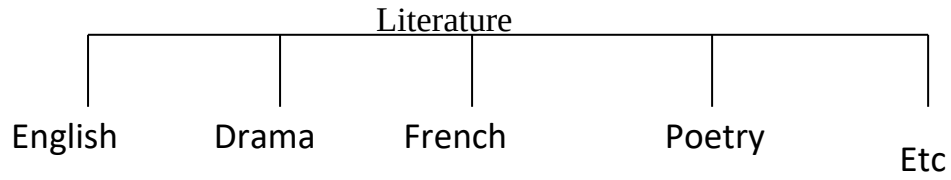
ii. Educational and scientific consensus

This refers to the principle of how a subject is studied. Law for eg is studied within a particular legal system (Nigerian law, English law, Roman law) rather than within a particular legal problem (contract, tort). Therefore, a country is the personality facet of the subject law.

iii. Purpose. The purpose or objective of the discipline can also help to determine the order of application of characteristics of division for eg. library science, the objective is to run an efficient library services, therefore, library services is the first personality facet characteristics.

Having decided on the order of application of characteristics of division, it is important to observe the rule of the application of one characteristic of division at a time. This will ensure the production of sub-classes that are mutually exclusive and therefore prevent cross-classification. Cross classification is the result of the application of more than one characteristics of division at a time.

E.g. using language and form at the same time.



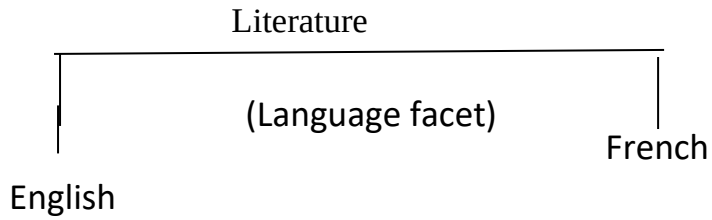
A book on English drama can be accomodated in two sub-classes in the cross classification arrangement shown above and a situation like this defeats the purpose of the classification which is designed to locate information quickly and without ambiquity. Cross classification must be avoided in classification because it produces sub-classes which are not mutually exclusive.

3.1.2 Structure of Subjects

There are 5 forms of subject found in literature: simple, superimposed, aggregate, compound and complex subjects.

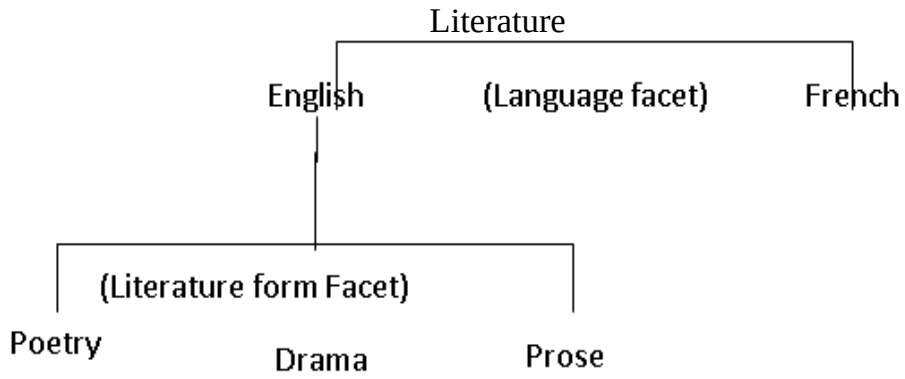
Simple Subject: - These are subjects which have only one thing and characteristic. E.g. banking, cataloguing, chemistry, election.

Superimposed Subjects: These are subjects consisting of two simple subjects from only one focus i.e. reflecting only one facet e.g. English literature is a simple subject since it has one facet (language).



Compound Subject: - These are subjects made up of several simple subjects from more than one focus. When a subject consists of more than one focus from the same main class.

E.g. 1: English poetry is a compound subject because it combines two foci, one from the language facet and the other from the literary form facet eg.



E.g. 2: Expatriates Teachers is a compound subject because it combines two foci from two different facets in the same main class (Education). The two foci are teaching and teachers both in education

Complex Subject: - When a subject contains foci from more than one main class eg. the influence of Christianity on English literature. This contains two foci from two different main classes: religion and literature.

Simple and compound subjects create little or no problem in classification. Complex subjects create problems because of their phase relationship (their relationship with other subjects)

Phase Relationship: This is the interaction of a main class with another. A phase is the part of a complex subject from one main class eg "influence of Christianity" is one phase while "on English literature" is another phase.

Different Kinds of Phase Relationship

There are three main kinds of phase relationship

(1) Influence phase (2) Bias phase (3) Tool phase

(1) Influence Phase: - This refers to the relationship of one subject influencing the other. e.g. "the influence of Christianity on English literature" (the subject is English literature).

(2) Bias Phase:- This is more of a form of presentation of works tailored to a people with particular subject interest for eg statistics for economists, politic in libraries, history of politics. Statistics for the first, second and third works respectively.

(3) Tool Phase:- This occurs when one factor is used as a tool or method to investigate another factor. Eg the statistical study of road accident (subject is road accident, economic implications of illiteracy (illiteracy is the subject)

In faceted systems, where the classifier has considerable flexibility in how ideas are joined, the question of citation and filing order is critical. Citation order is mostly predefined in enumerative schemes, and it is represented in the schedule entries. In enumerative schemes, the filing order is also made explicit. In DDC, for example, notations are filed in numerical order: A filing sequence/order must be stated in schemes that contain notational symbols like the colon and do not have a self-evident order, such as UDC and CC.

4.0 CONCLUSION

The significance of each attribute to the study of the subject determines the order in which the characteristics of division inherent to a class are applied, also known as Citation Order. The most typical rule is to start with the most particular concept and work your way down to the most general. In his Colon Classification, Ranganathan established the citation sequence Personality - Matter - Energy - Space -Time (PMEST), which allowed for multiple levels of the personality facet or element.

5.0 SUMMARY

The unit explored the PMEST and the variables that characterize it, as well as the structure of subjects, with a focus on citation order. P for Personality, M for Matter, E for Energy, S for Space, and T for Time were given and defined as the concept of decreasing concreteness with five elements: P for Personality, M for Matter, E for Energy, S for Space, and T for Time. In classification, the sequence of citations is particularly important.

SELF-ASSESSMENT EXERCISE

i. Discuss the concept of citation order.

6.0 TUTOR-MARKED ASSIGNMENT

1. Define the term citation order.
2. Describe the PMEST and the factors that redefine it
3. Describe the structure of subjects

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UNIT 4 APPLICATIONS OF CLASSIFICATION SCHEMES AND CHALLENGES IN NIGERIAN LIBRARIES

CONTENT

1.0 INTRODUCTION

Modern library classification employs philosophy classification as it organizes, knowledge in style registering, evaluating a classifying thoughts, ideas and concepts representing the whole field of human learning. These along with the format, rules and principles of each system are published for practical applications by libraries and are known as classification scheme. Library classification schemes are logical arrangements of subjects plus a system of symbols representing those subjects. Each classification scheme organizes the entire body of knowledge into classes and further division and subdivision done in line with the format, rules and principles if each scheme. In this unit, we shall be discussing application of classification schemes and challenges in Nigerian libraries. Covered in this unit include: features of classification scheme, and challenges in Nigerian and African libraries.

2.0 OBJECTIVES

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

- discuss application of classification schemes
- understand challenges classification schemes in Nigerian libraries
- describe the features of existing classification schemes

- Explain what notation is and the different types of notations
- Outline the advantages and disadvantages of notations

3.1 Features of Classification Scheme

3.1.1 Generalia or General Works Class

Every classification scheme provides for generalia which accommodates works that are too general to be accommodated in any single class works included eg General Encyclopedia, general periodicals, newspapers.

3.1.2 Form Class

This class abandons the characteristics of classifying a book by subject in favour of the characteristics of classifying a book by form eg the literature class of DDC, the literary form of presentation is preferred for grouping materials (ie poetry, drama, prose etc)

3.1.3 Form Division

This is a table of numbers provided to accommodate works of all discipline treated in different form. Treatment could be by the form of presentation or mode of treatment. There are two kinds of form division.

- The outer form division- refers to physical form of presentation such as Encyclopedia, dictionaries periodicals, outlines etc.
- The inner form division: refers to the style of treatment of subject such as: theoretical, study and teaching, historical treatment etc.

3.1.4 Notation: -

Every classification scheme has notations. Notation is a system of symbols representing the subjects. The functions of notation include:

1) to indicate the precise subject content of materials; and
2) to show and determine the order of those materials on the library shelves.

Notations should provide information about the order in which materials are filed on library shelves. It must also provide information about the relationships between the many items in the collection, as well as ensure that related and unrelated subjects are shelved together.
Numbers and/or letters can be used as notational symbols. It is impossible to determine the shelf order of materials without a self-evident order established by the notation. Arabic and Roman numerals are both

acceptable, as are upper and lower case letters. In either case, the order of the digits and characters is self-evident, e.g. 1,2,3; I, II, III, a,b,c. Other symbols, such as the colon, decimal point, inverted commas, and so on, can be used to supplement the notations. Only one of these types of symbol (pure notation) or a mixture of some or all of the symbols above can be used in the notation (mixed notation). These are discussed in greater depth further down.

3.1.5 Types of Notations

Notations are basically of two types by content and two types by structure:

By content, Notations are categorized into:

1. Pure Notation
2. Mixed Notation

By structure, Notations are categorized into

1. Faceted Notation
2. Non-Faceted Notation

Pure Notation: -

This refers to the use of one kind of symbol to reflect the terms of a classification eg. in DDC, only Arabic numerals are used with 3 digit base 000-999. Eg. 831- French poetry. This is when a classification scheme uses only one kind of digits in its notational base. This could be either Arabic numerals or alphabetical letters such as Roman capital or small letters. Example of pure notation is;

Arabic numerals 0-9
Roman capitals A-Z
Roman Small Letters A-Z

Dewey Decimal Classification scheme uses pure notational system such as 0-9 in dividing the universe of knowledge.

Advantages of Pure Notation

Among the ***advantages of pure notation*** *include the following:*

1. It conveys order clearly and automatically because of the use of one kind of symbol with ordinal values

2. It is simple-it is clear, easy to apply, easy to use, say, write or remember because the symbols are distinguishable and cannot be confused.
3. It is flexible- is has the ability to reflect or accommodate new topics and also provide alternative for subjects.

The pure notation also has the following disadvantages:

1. It has a short base (in scope). Is provides fewer numbers for the whole of knowledge eg. In DDC only 10 members are allotted to the whole of knowledge.
2. Long numbers occur while classifying compound subjects.
3. Classification of complex subjects is sometimes made difficult or impossible.

The Pure Notation Also Has the Following Disadvantages*:*

1. It has a long base and therefore has room to accommodate more subjects than a pure notation with a shorter base.
2. The use of other kinds of symbols allows for the connection of topics and the classification of complex subjects.
3. It is flexible allowing for the insertion of new topics and the provision of alternative notation in the scheme for a subject.

Among the disadvantages of the pure notation include the following:

1. The combination of two or more symbols may not convey order clearly and automatically like a pure notation of one king of symbols
2. Compound subjects may be represented by long mixture of symbols which are not easy to say, write or remember.

Mixed Notation

This refers to the use of a combination of two or more kinds of symbols to represent the terms of the classification. This is a type of notation that consists of two or more kinds of species of digits such as Arabic symbols and Roman capitals or small and numerals 0-9. The LC classification scheme uses letter A-Z and Arabic numerals 1-9, e.g.

DT 515 - History of Nigeria
TA 419 - Wood preservation
TA 422 - Science and technology of wood

Example of a classification scheme that uses mixed notation is Library of Congress Classification scheme. LCC scheme classifies by the use of both alphabetical letters and Roman capitals; Arabic numerals or numbers.

Faceted Notation

This is a type of notation in which the digits used in the class number are separated into blocks by the assistance of connecting digits. According to Ranganathan, a faceted notation is the number forming a block in class number.

Non-Faceted Notation

This is also known as unipartite notation. It consists of linear, horizontal right-handed notation with all the digits written closely or segmented into blocks. Library of Congress classification scheme is an example of a scheme that uses non-faceted or block form of notation.

3.1.5. Index

An index is an alphabetical list of subject names and their notational references/subject numbers used in a categorization. The topic numbers or notations are intended to direct users to the body of the scheme for the term in question, which indicates how it relates to other terms.

All categorization schedules, like notations, must include an alphabetical subject index. The topics are given in a notational order. Users who are unfamiliar with the method must search up subject names alphabetically in the index to see how they are represented in notation.

The two types of indexes are pre-coordinate and post-coordinate indexes. While compiling the index, an indexer generates a pre-coordinate index by coordinating terms. A post-coordinate index is made up of single-concept items that the index's user coordinates. When executing Boolean or phrase searches on a search engine like Google, a post-coordinate index is used. Users are organizing the index terms as they input their phrase or search statement.

The post-coordinate approach is used in faceted classification algorithms. By coordinating separate concepts in such schemes, the classifier gives notations for compound themes. Because indexes to faceted classification schemes for alphabetical subjects can only list simple ideas and their accompanying notations, they, like the schedules themselves, may be quite brief. Enumerative categorization techniques employ the pre-coordinate methodology. Terminology and concepts are harmonized as the system is put together. Alphabetical subject indexes to enumerative

categorization schemes are usually rather large because they reflect composite subjects and their associated notations.

When establishing an index, two principles must be considered: consistency and reference. When combining terms, consistency refers to the usage of the same word form, most typically the plural form of a noun, as well as the same citation order. Referencing, on the other hand, refers to allowing different index users to utilize alternate methods to accommodate synonyms and direct the user to related concepts.

3.1.6. The Schedule

Schedules are essential for all classification schemes, just as notations and indexes. This is the logical order in which subjects and their associated notations are listed. A timetable must have certain characteristics in order to be effective. However, not all of the major categorization of schemes' schedules include all of these qualities.

3.2 Challenges in Nigerian and African Libraries: Observations from the Library of Congress Classification Scheme

The L.C. classification was made around 1900 for books in the Library of Congress. At that time, American knowledge of Africa was very limited. They had contacts with North and South Africa but did not know much about Black Africa. The publishing output from North and South African was more in relation to other parts of Africa gets about 5 places, 2 may be assigned to Egypt, 2 to South Africa and 1 to others.

Secondly, L.C. was very much influenced by colonialism. Even though America was never a colonizer, the colonial movement affected the LC scheme because it was being prepared during the era of colonialism. Thus, it gives the places to the colonial professions, e.g. British Possessions, French Possessions. The Library of Congress classification had to group the few books from Asia and Africa under colonial headings. The effect is that they produced an unhelpful order for emergent African states. Books on Nigeria for instance would follow book on Uganda simply because both were British Colonial possessions. Grouping things together under colonial headings is not a helpful way of classifying things. What is annoying is that most of these arrangements persist today. The L.C. editors have not bothered to rethink this section of the classification. At best, they would do a “cosmetic revision” and put “former” beside the old numbers and subjects. L.C. editors should have revised the numbers for Africa (the have the money) and chosen a logical and systematic arrangement of African countries and subjects as Dewey editors should have revised the numbers for Africa (they have the money) and chosen a

logical and systematic arrangement of African countries and subjects as Dewey editors have tried to do.

L.C. in its treatment of Africa displays a misunderstanding of African culture, history and terminology. Library of Congress editors could not differentiate between a people and a city. For example, Lagos and Yoruba land are listed. Just as Ilorin and Hausa. And they have not bothered to correct these mistakes.

When you have a place provided for African and then "others", there is often a problem of deciding where to classify a subject; whether under "Africa" or 'others". This is because, in some cases, "others" stands for those countries that were not colonial possessions. This is a case of ambiguity in the use of terms and this is not good for classifiers.

The Library of Congress Classification is particularly poor in its treatment of African History. The major short comings as identified by Ejiko include.

(a) Inadequate to allocation of numbers: the whole of Africa is allocated to DT, and although theoretically up to 9,999 numbers could be used, only 995 have in fact been allocated. Hereas some European countries have up to 1,000 numbers e.g. Britain: DA 1-995, Germany: DDI-905, some African countries have only a decimal number or Cuter number e.g. Chad: DT 546.4, Upper Volta: DT 553. U7. Nigeria has two numbers:
DT 513 Yoruba land, Yorubas
DT 515 Nigeria (Table 1)
Ilorin, Benin Empire, Bornu, Lagos, etc.

(b) Division of Africa into areas of Colonial influence: ex-British West African countries are separated from contiguous ex-French West African countries (this has already been discussed at length).

(c) Lack of period divisions: Although there have been improvements in Additions and Changes, still very general periods are given which are the same for each country.

These inadequacies have led some Nigerian Libraries suing (using) L.C. to make their own modifications so as to organize materials in a more rational way. The Lagos University Library, for instance has introduced substantial changes to class DT, and Kashim Ibrahim Library uses a completely different DT schedule compiled by R.D. Young, (1968) and using 1 – 8064 numbers. K.I.L. has also made substantial modifications for African ethnology, language and literature, and area tables in education, politics and the social sciences.

In the Language and Literature class P, subclass PL is allocated to the language of Eastern Asia, Oceania and Africa. The African languages cover PL 8000 – 8845. It could be seen that several Nigerian and other languages have been omitted from the schedule, e.g. Bini, IBIBIO, Idoma, Ijaw and Urhobo languages to mention a few. The implication of the omission is that a classifier is forced to lump together all the books and other graphic materials written in several languages under one number. African literature in European languages had inadequate provision, for instance the works of Nigerian authors written in English are classified with English literature (PR). Inadequate treatment for Africa is also evident in the fields of political science, ethnography, education and social sciences.

4.0 CONCLUSION

The older methods of classification gave way for the modern library classification which employs philosophy classification, organizing knowledge in style registering, evaluating a classifying thoughts, ideas and concepts. The logical arrangements of subjects using a system of symbols is what distinguished the modern library classification from the older method of colour, size, date etc.

SELF-ASSESSMENT EXERCISE

1. Discuss the challenges of classification schemes in Nigerian libraries.

5.0 SUMMARY

In this unit, we discussed application of classification schemes and challenges in Nigerian libraries.
The unit also dwelt on Features of Classification Scheme, which include Generalia or General Works Class, Form Class, Form Division, Notation, Index, and Schedule.

6.0 TUTOR-MARKED ASSIGNMENT

1. What are the Features of Classification Scheme?
2. Identify the major challenges application of classification schemes in Nigerian libraries

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MODULE 4 TRADITIONAL CLASSIFICATION SCHEMES

Module 4 has two units including the Dewey Decimal Classification (DDC) Scheme and Library of Congress Classification (LCC) Scheme and examines them in great details

UNIT 1 THE DEWEY DECIMAL CLASSIFICATION (DDC) SCHEME

CONTENTS

1.0 INTRODUCTION

In this unit, you will learn about one of the major classification schemes that are popularly used around the world, including Nigeria. It is called the Dewey Decimal Classification Scheme (DDC). We have devoted this unit to learn about the history, features, the structure, and the use of the scheme.

2.0 OBJECTIVES

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

- discuss the history Dewey Decimal Classification Scheme
- discuss the features of the DDC scheme
- Know how to use the DDC.

3.0 MAIN CONTENT

3.1 History of the DDC

Melvil Dewey was the author of the DDC. He was an American who graduated from Amherst College and was born in 1851. At the age of 23, he invented the DDC plan and applied it to the Amherst College library for the first time. It was first published in 1876 and has subsequently been translated into a variety of languages and formats, including an abridged version for use in small libraries. It grew from 44 pages in 1876, with 14 pages of front and back content, 12 pages of summaries and schedules, and 18 pages of index.
DDC is the most widely used library classification scheme in the world. It is used in more than 135 countries and translated into over 30 languages. However, it is mostly used in public libraries and school libraries. Eg. In the USA, it is used in 95% of all public and school libraries, 25% of all academic Libraries and 20% of special libraries.

3.1 Features of the DDC

3.2.1 Structure: The structure of DDC can be described in 3 aspects

(a) *DDC is a hierarchical classification.* It developed progressively from the general discipline to the specific in subordinate and coordinate relationships. It has 10 main classes which are assigned to broad disciplines. Each of the main classes is always represented by 3 digits to the left of the decimal for ease of use

MAIN CLASSES

000	= General works
100	= Philosophy, psychology
200	= Religion
300	= Social Sciences
400	= Philology, languages
500	= Natural sciences
600	= applied science

700 = Fine Arts
800 = Literature
900 = Geography, Biography, history

The main classes of DDC correspond roughly to the fundamental disciplines of knowledge which are philosophy, religion, social science, sciences, technology, Arts and history.

The DDC applies principle of hierarchy which is expressed through both notation and structure. Notational hierarchy is expressed by length of notation. Numbers are subordinate to a class whose notation is one digit short, coordinate with a class whose notation has the same number of digits; and super-ordinate to a class whose notation is one or more digits longer. E.g.

374	Adult Education
374.01	Adult education for specific purposes
374.012	Adult Basic Ed
374.013	Vocational and Occupation Ed
374.02	Methods of Instruction and Study
375	Curriculum

Structural hierarchy is another major principle used in the DDC's hierarchical structure. Apart from the ten basic classes, every issue is subservient to and a component of all the wider themes above it. Everything in the bigger topics, including the notes, applies to the subordinate classes as well.

b). DDC is a Decimal Classification- The main classes, division, sections, sub-division proceed or divide in tens. Each of the 10 main classes of DDC is divided into 10 divisions and each of the 10 divisions is subdivided into 10 sections and further subdivision of each of the 10 sections may be made in tens by the addition of a decimal point and more digits until provision is made for every subject in a discipline. Since the division in DDC is in tens, it is called a decimal classification and because the numbers are decimal and not consecutive, the order of progression is decimally arranged. Examples

DIVISIONS- The pure science class is divided into 10 division

500 - Sciences, pure
510 - Mathematics
520 - Astronomy
530 - Physics
540 - Chemistry
550 -
500 -

570 -
580 - Botanical science
590 - Zoological science

SECTION- physics is further divided into 10 sections

530 - Physical
531 – Mechanic of solids
532 - Mechanic of fluids
533 - Mechanic of gases
534 –
535 –
536 –
537 –
538 –
539 - Modern Physics (Molecula, atomic, nuclear physics)

SUBDIVISION- Mechanics of solid is further divided into 10 sub-division

531 - Mechanics of solid
531.1- Dynamic, statics and particles
531.2- Statics of solids
531.3- Dynamic of solid
531.4- -
531.9-

C). DDC is a classification by discipline-

DDC is a discipline-based classification system, not a subject-based system. Traditional academic disciplines or topics of study are used to organize basic classes. This is the DDC's most fundamental principle. Subjects are dispersed across the classification's numerous fields. Discipline is the foundation for DDC subject structure and development. This is why, depending on the field the work is addressing, distinct facets of a topic may be assigned to multiple class numbers. The inference is that a specific subject is unlikely to be found in a single location. Music (music for wedding ceremonies – 781.587); Philosophy (ethical considerations in marriage – 173); Sociology (sociological studies of marriage – 306.81) and Law (legal aspects of marriage – 346.016) are only a few examples.

All of these, however, are grouped together in the relative index under the heading "Marriage." Another example is the word ‘English,' which might appear in the 400s under language and 800s under literature.

- English language
820 - English literature
820 - English literature
821 – poetry

831 - poetry

822 – drama 832 - drama

823 - fiction 833 - fiction.

3.2.2 Notation

The DDC employs a pure notation consisting only of Arabic numerals divided decimally. A 3- figure numeral is used consistently and this makes the system easier for the user.

DDC notation is partially hierarchical and occasional expressive and has mnemonic features and quality of bravity, simplicity and flexibility.

Expressiveness is the degree to which notation assigned to topics reflect the subordinate and coordination of the topics in the hierarchy eg.

600 - Applied science
620 - Engineering
621 - Applied physics
621.1 - Steam Engine
621.15 - Portable
621.16 – Stationery
621.165 - Turbine
622 -Mining Engineering
700 -Fine Art

Subordinate topics are shown by their subordination to the topics above them and coordinate topics are shown by their linear order in the entry. These relationships are also reflected by the notation.

Partially Hierarchical: Some DDC notation do not express the subordinate and coordinate relationship in a hierarchy of topics eg.

570 - Biology
580 - Botanical science
590 - Zoological science

Botanical and Zoological sciences are subordinate topics to biology but the notation 580 and 590 do not reflect this subordination.

Mnemonic Features: DDC used mnemonic feature which are devices to aid the memory. Some divisions and sub-division of classes have the same numbers (notation where ever they occur in the different disciplines in the scheme, thus providing aid to the memory) eg

420 - English language 820 - English literature

It uses systematic mnemonic numbers. In the literature form facet which is a sub-division of the primary language facet of the main class literature, the unit digits 1,2,3,4 etc are used. Egs

820	- English literature	830	- French literature
821	– Poetry	831	- poetry
822	– Drama	832	- drama
823	- Fiction	833	- fiction

The unit digits 1-3 representing the literacy form of Poetry, Drama and fiction in the consecutive order in one language literature are the same number representing the same literacy form in other language literature.

3rd example.
973 – History of the US 709.73 – history of arts in the US
3.2.3 Rules

The rules provided in the DDC are inadequate to ensure the consistent use of the scheme.

3.2.4 The Index

The DDC index is an alphabetical relative index. It provides alphabetical references to subject terms in the classification and also shows some of the relationships between subjects distributed in the classification.

(V) Auxiliary Tables of DDC – only 2 existed in DDC scheme before the advent of the 19th edition published 1979. They were: the form or standard and the area or country tables. The 19th edition now has 5 additional tables from 3 to 7.

3.3 The classes of DDC

The DDC has ten man classes ranging from 000 to 900. The most broad class is 000, which is used for publications that are not limited to a single discipline, such as encyclopedias, newspapers, and general magazines. Information Science, Library Science, Computer Science, Journalism, and Bibliography are some of the specialist fields that deal with knowledge and information in general.

Each main class has ten divisions, which are likewise numbered 0 through 9. Two significant digits are used in this calculation, with the second digit signifying the division. For example, the number 600 is assigned to general applied science activity, while the numbers 610, 620, and 630 are assigned to medical sciences, engineering, and agricultural, respectively.

Each division is divided into ten portions, each numbered 0 through 9. Each three-digit number's third digit denotes the section. For example, 630 is used for basic agricultural activity; 631 is used for particular procedures; 632 is used for plant injuries; and 633 is used for field and plant crops. The third number is followed by a decimal point, after which divisions by ten continue to as fine a degree of classification as is possible.

3.4 Arrangement of DDC

DDC is composed of 6 major parts in four (4) volumes as follows

A. Introduction – This introduces the user to the DDC and provides vital information on how to use it
B. Tables (Volume 1) – This covers the 7 numbered tables which provide notation that can be added to the class numbers in the schedules for greater subject specificity
C. List – This provides an extensive list of comparisons between edition 19 and 20: covering relocations and reductions; comparative tables and equivalent tables
D. Schedules (Volumes 2 & 3): Knowledge organized from 001 – 999
E. Relative index (Volume 4) – Alphabetical list of subjects found in the schedules and tables

Manual – Provides advise and direction on how to classify in difficult areas

3.5 Steps in Classifying with the DDC

3.5.1 Determining the subject of a work:

Classifying a work properly depends upon determining the subject of the work in hand. Judicious use of the following sources is suggested

1. The title of the work
2. Table of contents, if genuinely discriptive
3. Chapter headings, if there is no table of contents
4. A preface (or introduction by the author)
5. An introduction (by someone other than the author)
6. CIP data
7. The text of the work and book reviews
8. Reference tools, e.g. dictionary or knowledgeable people

3.5.2. Determining the discipline for a work:

Because discipline is the primary consideration in DDC classification scheme, the classifies must then select the proper discipline, or field of study of the work. Once the subject and discipline have been determined, the classifier should then turn to the schedules. However, beginners may need to turn to the summaries beginning on page IX of Vol. 2 for a guide or refer to the relative index before proceeding to the schedules. It is therefore important to note that with or without the relative index, the classifier must rely on the structure of the classification, and various aids throughout, to arrive at the proper place to classify a work. Even the most promising citation from the relative index must be verified in the schedules because they are the only place where all the information about coverage and use of the numbers may be found.

3.5.3 Some problems in classifying using DDC

3.5.3.1 A Book with More Than One Subject

1. Rule of Application - Class a work dealing with interrelated subjects with the subject that is being acted upon. For instance, "Influence of Christianity on culture". Class this under 'culture'
2. Rule of Superiority: Class a work on two subjects with the subject receiving fuller treatment
3. First-of-two rule – If two subjects receive equal treatment, and are not used to introduce or explain one another, class the work under the subject whose number comes first in the DDC schedules. E.g. a work on "History of USA and Japan" is classed under Japan – 952 which precedes USA – 973 unless if otherwise instructed.
4. Rule of three – A work on three or more subjects that are all subdivision of a broader subject is classed in the first higher number that covers then all (unless one subject is treated more fully than the others). For instance, "Introduction to acquisition, cataloguing and preservation" may be classed under librarianship.

3.5.3.1 A Book with More Than One Discipline

1. Use interdisciplinary number provided in the schedules or relative index if one is given, if the work contain significant material on the discipline in which the interdisciplinary number is found. For instance 305.231 (a sociology number) is assigned to interdisciplinary works on child development.
2. Class works not given an interdisciplinary number in the discipline that gives the subject fuller or fullest treatment For instance, a book titled "History and geography of Nigeria" should be classed under

geography if the book is given fuller treatment on geography than on history of Nigeria.

3. Do not overlook the possibilities of main class 000 – Generalities for works from multiple disciplines.

4.0 CONCLUSION

The DDC scheme is used mostly by Public and National libraries around the world and by both small and large libraries due to flexibility in size. It has both abridged and unabridged edition. It has overwhelming strengths ease of use and application, its machine readable format and regular revision. It also has both print and online editions/formats which make it possible to be accessed in print version and online on web Dewey.

5.0 SUMMARY

This unit has discussed the DDC scheme. It has 10 main classes beginning with the General class which also covers library science. The classes represent major disciplines using Arabic numbers. DDC is divided into 10 divisions and each of the 10 divisions is subdivided into 10 sections and further subdivision of each of the 10 sections may be made in tens by the addition of a decimal point and more digits until provision is made for every subject in a discipline. The scheme is currently at its 23rd edition published in 2011 and translated into over 30 languages.

SELF-ASSESSMENT EXERCISE

1. List and discuss the features of DDC scheme.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the history of the Dewey Decimal Classification scheme.
2. List the 10 main classes of DDC scheme. 3. Briefly discuss the 5 features of DDC scheme.
4. List five strengths of DDC scheme and Five weaknesses.

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UNIT 2 LIBRARY OF CONGRESS CLASSIFICATION (LCC) SCHEME

CONTENTS

1.0 INTRODUCTION

Having studied the DDC in the preceding unit, in this unit, you will learn about another major classification scheme that is popularly used in academic libraries around the world, including Nigeria. It is called the Library of Congress Classification (LCC) Scheme. You shall learn about the history, features, the structure, Outline of the Scheme, LCC Schedules, use of the scheme and the differences between the DDC and the LCC Schemes.

2.0 OBJECTIVES

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

- discuss the history of the Library of Congress Classification (LCC) Scheme
- discuss the features of the Library of Congress Classification (LCC) Scheme
- Know how to use the Library of Congress Classification (LCC) Scheme
- Identify the LCC Schedules
- Understand the differences between the DDC and the LCC Schemes.

3.0 MAIN CONTENT

3.1 History of the LCC Scheme

The library of congress classification scheme code-named the LC was first published in 1902. The Library of Congress Classification was originally designed and developed for the use of the Library of Congress only. It was not based on any philosophical system for classifying knowledge – it was designed to classify the books of the Library of Congress collection and future expansions of the collections. The makers were guided by practical considerations rather than some theoretical principles of classification. No attempt was originally made to create a perfect general classification system which could be used by other Libraries. The scheme was devised by subject specialists after the physical arrangement of existing collection on the shelves, hence it is said to be based on literary warrant. Thus, the Library of Congress classification scheme is "co-extensive in Scope with the book stock of the Library of Congress".

The first classification system used by the Library of Congress was by size: folios, quartos, octavos and duodecimos. The books were further sub-arranged by accession. The first subject arrangement was adopted in 1812. It consisted of 18 classes, as follows:

1. Sacred History
2. Ecclesiastical History
3. Civil history, including chronology, biography, antiquities etc.
4. Geography, topography; voyages and travels;
5. Law
6. Ethics, or the moral system in general; theology and Mythology.
7. Logic, rhetoric, and criticism
8. Dictionaries, grammars and treatises on education
9. General and Local politics; political economy etc.
10. Trade and Commerce
11. Military and Naval tactics
12. Agriculture, rural economy etc.
13. Natural History etc.
14. Medicine, Surgery and Chemistry
15. Poetry, and the drama; works on fiction, wit. Etc.
16. Arts and Science and Miscellaneous Literature
17. Gazettes
18. Maps, Charts, and plans.

The last two classes, Gazettes and Maps, charts and plans are not subject divisions but rather form divisions. Under each of the 18 classes the books were subdivided by size and arranged alphabetically.

On August 24, 1814, the capital of the United States, together with the Library of Congress was burnt by British soldiers. Thomas Jefferson, the third U.S. President offered to sell his personal Library to Congress. Thus, the Library of Congress adopted a Classification Scheme devised by Thomas Jefferson himself. The Jefferson system, as it came to be called, was made up of 44 main classes.

When Ainsworth Spofford became Librarian of Congress in 1864, he set out to make the Library a true National Library of the United States. He increased the Library stock and also worked towards the erection of a new building for the Library. He also made major adjustments in both the classification and the notation.

In 1897, the Library of Congress moved to its new building. The collection had grown astronomically and the Jefferson's system of classification was no longer adequate. John Russell Young, the Librarian of Congress at that time and Herbert Putnam, who later took over from him strongly supported the plans for a new classification system. Dewey's Decimal classification, the Expansive classification of C.A. Cutter and the HALLE SCHEMA, of the German University of Halle were carefully considered for adoption. None of these commended itself for the particular needs of the Library. What was needed was a scheme that would fit the Library's collections and services as precisely as possible, without reference to outside need or influences. It is in this context that one can understand some of the special features of the Library of Congress Classification scheme.

3.2 The Outline of the Scheme

The LC scheme divided the entire body of knowledge into 20 main classes represented by 21 out of the 26 alphabets. The LC was a result of a decision of the then Library of Congress, Herbert Putman to reclassify the library and improve on the DDC scheme. The outline of the Library of Congress Classification resembles that of Cutter's Expansive Classification, because the latter was selected as the chief guide. The outline went through several modifications before the present one was adopted.

A: General works, Polygraphy
B: Part 1, B-BJ: Philosophy
B: Part 2, BL-BX: Religion
C: History, auxiliary sciences (biography, numismatics)
D: General and Old World History(Except America)
E-F: History and topography (except America)
G: Geography, Anthropology, Folklore, Manners and Customs, Recreation.

H: Social Sciences
J: Political Science
K: Law
L: Education
M: Music and Books on Music
N: Fine Arts
P: Philology or Language and Literature
Q: Science
R: Medicine
S: Agriculture
T: Technology
U: Military Science
V: Naval Science
Z: Bibliography and Library Science.

There are no main classes for the letters I,O,W,X and Y but, all the 5 letters do appear as 2nd or 3rd symbols in the notation for various LC sub classes eg A1=indexes. The working schedules are contained in 33 separate volume and 2 other volumes.

3.3 The LCC Schedules

The schedules for the Library of Congress Classification are 29 in number, for the main classes and sub-classes. Apart from these 29 schedules, there are two supplements, a partial index, and the outline of the classes. The supplements are for:

(1) PA covering Byzantine and modern Greek literature and
(2) T, Technology. The partial index is for sub-classes P-PM covering only languages and dialects. Thus, a total of 33 volumes make up the L.C. Schedules.

Subject specialists at the Library of Congress developed each of the individual schedules. They consulted bibliographies, treatises, comprehensive histories and the existing classification schemes in order to determine the scope and content of an individual class and subclass. The specialists worked on individual sub classes independently, with an editor in charge of the whole schedule. One main unifying factor is the use of letters, cardinal numbers and cutter numbers. Five letters of the alphabet – I,O,W,X and Y have not been assigned subjects.

Class Z: Bibliography and Library Science, although the last of the main classes in the alphabetical order, was actually the first to be developed. It was felt that this class would contain the bibliographical works necessary for the reclassification project.

Each schedule has a similar if not identified format. Each schedule comprises of:

1. A prefatory note, containing a brief history of the schedule and as well as remarks on the scope of the schedule.
2. A synopsis, consisting of a list of all double letters covered in the schedule.
3. An outline, in greater detail than the synopsis of the portion of the classification covered in the schedule.
4. The schedule, containing the main classification tables;
5. Any necessary auxiliary tables;
6. A detailed index, and
7. Any supplementary pages of additions and changes to the schedule.

3.2 Differences Between the DDC And the LCC Schemes

1. Notation- The DDC has pure notation as it consists of only Arabic numerals while the LC has mixed notation as it consists of a combination of letters A-Z and Arabic numerals eg
TA
422

2. Expressiveness- The DDC notation are expressive as one can easily identify the major and subordinate classes by merely looking at he notation. This is not the case with the LC.

3. Enumeration and Synthesis- the DDC is both enumerative and synthetic. It began as an enumerative classification but has slowly through the years introduced elements of analysis and synthesis (number building) the use of analysis and synthesis on a much lager scale was evident in the 17th edition which was first published in 1965. This explains why the latest edition was published in only 3 volumes. The LC is simply enumerative which is why it is published in as much as 35 volumes.

4. Structure- The structure of the DDC is hierarchical and is based on philosophical order of knowledge. The 10 main classes of DDC correspond roughly to the fundamental disciplines of Knowledge which are philosophy, religion, social sciences, natural science, applied science etc. The LC is a rough breakdown of the entire body of knowledge into 21 classes represented by 21 out of the 26 alphabets.

5. Mode of Division- the DDC has decimal classification because the divisions are in tens.
There are 10 main classes, each subdivided into 10 divisions, each further divided into 10 sections and further subdivisions made in tens by the addition of a decimal point. In the LC, the body of knowledge is divided into 21 of the 26 alphabets and further subdivided on enumerative bases using Arabic numerals.

However, both the DDC and LC have mnemonic feature, ie devices to aid the memory for instance, in the LC, the letter G stands for Geography class, while the letter M represents the Music class. Both schemes also have the qualities of flexibility and simplicity in expansion and use.

3.3 Summary of Published Book Classification Scheme and Their Year of Publication

S/N	NAME OF SCHEME	AUTHOR	YEAR OF PUBLICATION
1	Dewey Decimal Classification (DDC) scheme.	Melvil Dewey	1976.
2	Library of Congress Classification (LC) scheme.	Libraryof Congress	Published in parts in 1902 completed in 1958 except the K class
3	Universal Decimal Classification (UDC) scheme.		1905.
4	Bibliographic Classification	Bliss, H.E.	1935.
5	Colon Classification (CC)	S. R. Ranganathan	1933.
6	Subject Classification (SC)	Brown	1906.
7	Expansive Classification (EC).	Cutter	1893

4.0 CONCLUSION

The LC which as we have learnt, was was originally designed and developed for the use of the Library of Congress only was not based on any philosophical system for classifying knowledge but was designed to classify the books of the Library of Congress collection and future expansions of the collections. The first classification system used by the Library of Congress was by size: folios, quartos, octavos and duodecimos. The LC scheme divided the entire body of knowledge into 20 main classes represented by 21 out of the 26 alphabets. The LCC is different from the DDC in terms of Notation, Enumeration and Synthesis, Structure, and

Mode of Division. However, both the DDC and LC have mnemonic feature, Both schemes also have the qualities of flexibility and simplicity in expansion and use.

5.0 SUMMARY

In this unit, you have learnt about another major classification scheme popularly used in academic libraries around the world, including Nigeria, the Library of Congress Classification (LCC) Scheme. You have been taught about the history, features, structure, Outline of the Scheme, LCC Schedules, use of the scheme and the differences between the DDC and the LCC Schemes. You may recall that the first subject arrangement was adopted in 1812 and consisted of 18 classes. You may also recall that the LC scheme divided the entire body of knowledge into 20 main classes represented by 21 out of the 26 alphabets.

SELF ASSESSMENT EXERCISE

i Discuss the features of the Library of Congress Classification (LCC) Scheme.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the history of the Library of Congress Classification (LCC) Scheme
2. Discuss the features of the Library of Congress Classification (LCC) Scheme
3. Identify the LCC Schedules
4. What are the differences between the DDC and the LCC Schemes?

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MODULE 5 CLASSIFICATIONS SCHEMES FOR SPECIALIST COLLECTIONS (FACETED SCHEMES)

Module 5 discusses classifications schemes designed for specialist collections and also known as faceted schemes. These include Universal Decimal Classification Scheme (UDC), Colon Classification Scheme (CC), and Bibliographic Classification Scheme (BC)

Unit 1 Universal Decimal Classification Scheme (UDC)
Unit 2 Colon Classification Scheme (CC)
Unit 3 Bibliographic Classification Scheme (BC)

UNIT 1 UNIVERSAL DECIMAL CLASSIFICATION (UDC)

CONTENTS

1.0 INTRODUCTION

UDC is a hybrid classification technique that incorporates elements of both enumerative and faceted classification. Beginning with the Universal Decimal Categorization Scheme, this section will focus on faceted classification schemes (UDC). Faceted classification is newer than enumerative classification, having been devised in the mid-twentieth century. Faceted categorization techniques rely on synthesis, or the joining of notational elements to express a subject. Facets are the components subjects that have been fused or fitted together in this way, hence faceted classification methods.

Synthetic classification schemes are sometimes known as faceted classification schemes. The two fundamental processes involved in

implementing faceted classification are dissecting the subject into facets and synthesizing the facets to generate a notation, which are referred to as facets analysis and facets synthesizing. Ranganathan, who released the first edition of Colon Categorization (CC) in 1933, was responsible for the creation of synthetic or faceted classification. Ranganathan's primary goal was to develop a distinct classification language and theory. His goals were to:

- to obtain a useful filing order
- to completely express the specific subject of each work in a notation
- to allow the classifier to deal with new subjects

The Universal Decimal Classification will be the starting point for our consideration of the three major Faceted Schemes in this unit (UDC). The background of the UDC, its coverage, and the principal classes of the Universal Decimal Classification tables, including the Table of Common Auxiliaries, will be discussed.

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- Provide a good background of the UDC
- Describe the Coverage and main classes of the Universal Decimal Classification
- Identify the tables of the UDC

3.0 MAIN CONTENT

3.1 Background

At first look, the Universal Decimal Categorization (UDC) appears to be quite similar to Dewey's classification system, from which it was derived. The original goal was to arrange a universal bibliography of everything published throughout history using a modified and extended version of DDC (Milwaine, 2000:1). As a result, its original function was for documentation rather than shelf organization. It was first published between 1905 and 1907, and then again between 1927 and 1933 in a substantially larger edition. The Universal Decimal Classification Consortium (http://www.udcc.org) now controls all editions and translations of the scheme. The scheme is available in three different versions: small edition, regular edition, and enlarged edition. Libraries with extensive holdings should obtain a license to utilize the Master Reference File's electronic version, which is updated annually. The pocket edition of the scheme may give appropriate coverage for numerous

purposes, depending on the subject content of the collection. The pocket edition is quite affordable, and it is utilized to create various scenarios here.

3.2 Coverage

UDC's main classes are almost the same as Dewey's:

DDC		UDC	
000	Generalities	0	Generalities
	Philosophy, Psychology	1	Psychology Psychology
200	Religion	2	Religion
300	Social Sciences	3	Social sciences
400	Language	4	(currently vacant)
500	Maths and natural sciences	5	Maths and natural science
600	Applied sciences	6	Applied sciences
700	Arts	7	Arts
800	Literature	8	Language, Literature
900	Geography, history	9	Geography, history

Beyond the similarities, there are, areas of differences between the DDC and UDC.

For starters, the UDC provides for far more extensive classification than the DDC, which, while completely suitable for basic collections, may fall short on depth of coverage for specific topics.

- UDC uses a lot of synthesis to construct notations for compound subjects, hence it has a lot of features of faceted categorization. This is what qualifies UDC for specialty collections.
- UDC includes two types of synthetic device:
  - The first are the Symbols that link notations to allow the building of compound numbers for linked subjects:
  - The second is the Table of common and special isolates.

The UDC employs a variety of aspect indicators to represent relationships between ideas. The UDC, like the DDC and the LCC, covers all areas of knowledge; its standard edition also includes a complete subject list.

3.3 The Universal Decimal Classification Tables

As it is in the DDC, the UDC's auxiliary tables list concepts that can be applied to several or even all subjects. These include:

Table Ia Coordination and Extension
Table I b Relation
Table I c Language
Table I d From
Table I c Language
Table I d From
Table I e Place
Table I f Race, ethnic grouping and nationality
Table I g Time
Table I b Subject specification by notations from non-UDC sources
Table I k General characteristics (materials and persons)

3.3.1 UDC Common auxiliary signs and subdivisions: Tables I a – K

Linking signs	+,/,:	(Table I a and I b)
Language	= …	(Table I c)
Form	(o/09)	(Table I d)
Place	(I-9)	(Table I e)
Race, nationality, etc	(=…)	(Table I f)
Time	"…"	(Table I g)
Non-UDU codes, etc	# A/Z	(Table Ih)
General Characteristics	-0…	(Table I k) currently includes:
Materials	-03…	
Persons	-005…	

The next sections look at the function and application of each of these tables:

Linking Signs: Linking signs are used by UDC to organize specialised collections. The indicators give a powerful tool for the classifier to describe subjects in great detail. On the classification transition from enumerative to faceted classification, the linking signs place UDC near to faceted classification schemes.

Table Ia: Coordination and Extension

Table 1a symbols are used to expand the meaning of the class number and so provide a way to characterize works that encompass a wide range of subjects. When using DDC, the classifier is frequently forced to use the

largest available/possible inclusive number to characterize works that cover all topics; nevertheless, this may not adequately express the coverage. The classifier can express the broad coverage of a work in notation by using UDC.

To describe compound topics, the coordination symbol + (plus) is used to connect two or more non-consecutive UDC numbers. Examples:

Cereals and fruits:	633. 1+634.1
Mineralogy and metallurgy:	549+669
Iran and Iraq:	(55+567)

For sequentially listed notations of the UDC, the extension symbol / (forward slash) is used to connect the first and last number of a series to generate a number for a variety of themes. Examples:

Physics and chemistry:	53/54
Judaism and Islam	296/297
Attention, learning and creativity	159.952/954
Arctic and Antarctic	(98/99)

Concepts included in the tables and those listed in the main schedule can be linked using the coordination and extension symbols.

Table I b: Relation

The relation symbol (colon) is used to constrain rather than extend the meaning of a class number. Relationships between topic concepts can take many different forms; for example, they can be reciprocal or consumptive. If more than one distinct subject receives equal treatment in a work, the + symbol might be used to unite them. The colon, on the other hand, should be used to connect the notations, especially if no equal relationship can be determined, such as when one subject is studied in the context of another, Examples:

Aptitude testing in recruitment of staff: 159.98:658.3
Iraq – Iran War: 94(55:567) “1980/8”

The subordinate connection is another significant sort of interaction. The double colon is used in UDC to denote this.

This can be used to show that the subject after the double colon is less significant than the one before it. The single colon relationship indicator is sufficient for a variety of reasons.

The linking devices of the UDC have a significant advantage over the DDC in terms of fully indicating compound subjects. When utilizing DDC, for example, the classifier must usually pick between two or more subjects when deciding where to classify a work because the class number can only represent one of the concepts. To satisfy the demands of different users, some libraries assign distinct class marks to copies of the same work. This is one method of attempting to overcome DDC's inflexibility, but it is not encouraged. Because it uses synthetic devices, UDC has more versatility. This makes it a good choice for particular collections that require a lot of classification. The best way to demonstrate this is to compare the two methods.

UDC: 6331 + 634.1 Cereals and fruits The only notation in DDC 630 that accommodates both notions under agriculture — agriculture and related technologies – is DDC 630. Because this would be a too broad representation, which would be unacceptable for many collections, the classifier must pick between cereals and fruits.

Iran and Iraq: UDC: (55+569) DDC: -095509567

When the first area notation is used to define the area of origin and the second is used to specify the area where the topic is to be found, use of the 09 standard subdivision in DDC allows a notation for a specific geographic region to be added to a geographic area notation. As a result, the aforementioned notation can only be used if a work, for example, dealt with Iranians in Iraq.

Physics and chemistry: UDC: 53/54
DDC: 530 (or 540)

In the above case, using DDC, the classifier decides whether to place the work within physics or within chemistry.

Judaism and Islam: UDC: 296/297 DDC: 296.397
The above notation is listed in the DDC schedules. An alternative location would be at 297.282: Islam and Judaism.

Attention, learning & creativity: UDC: 159.952/.954
DDC: 153

In the above example, the broadest inclusive DDC number, for conscious mental processes and intelligence, is probably adequate.

Arctic and Antarctic: UDC: (98/99)
DDC: 98

In the above example, the DDC number represents Arctic islands and Antarctica.

As seen in the instances above, where DDC does not provide specific instructions on how to construct notations, the classifier can pick which single topic the work should be classified and shelved under. It's sometimes simple to make these decisions: one notion or issue gets greater attention, or potential readers expect it to be in a specific section of the library collection. Other times, making such decisions is challenging, as it may, for example, entail classifying the job at a higher level than it warrants. However, the broad subject coverage can be stated using UDC, however the classifier must decide which of the subject components will be referenced first and hence determine shelf location.

3.3.2 Table of Common Auxiliaries

Table 1c: Language

The language's common auxiliaries are shown in this table. These auxiliaries should not be used on their own; instead, they should be used after a subject notation to indicate the language or linguistic form of a work, if and when it is essential. Auxiliaries in languages are always preceded by an equal's symbol.

=. Examples:
=… ’0 Origins and periods of language. Please of development
= 00/=03General concepts
=1/=2 Indo-European languages
=3 Caucasian and other languages. Basque
=4 Afro-Asiatic, Nilo-SHARAN, Congo-Kordofanian, Khoisan
=5 Ural-Altaic, Japanese, Korean, Ainu, Palaeo-Siberian, Eskimo-
=6 Aleut, Dravidian, Sino-Tibetan
=7 Indo-Pacific, Australian
=8 American Indian (Amerindian) languages
=9 Artificial language

Other Examples:
The Bible in French: 22=133.1
Base number for the Bible: 22
Add Table 1c notation for French: =133.1
Poetic works of Heine in German: 821.112.2-1HEINE
Base number for literature by language: 821
Add modified Table 1c notation for German: 112.2
(a point replaces the equals sign)

Table 1d: Form

The form common auxiliaries in Table 1d of are usually by a subject notation. They can however be cited first if a decision has been made to shelve works of the same form together. Form auxiliaries are always presented in parenthesis and begin with a zero. Examples:

(0.0…)	Physical features, etc.
(01)	Bibliographies
(02)	Books in general
(03)	Reference works
(04)	Non-serial separates. Separate
(05)	Serial publications. Periodicals
(06)	Publications of societies, organizations
(07)	Documents for instruction, teaching, study, training
(08)	Collected, polygraphic works. Forms. Lists. Illustrations. Business publications.
(09)	Historical form. Legal and historical sources

Other Examples:

Dictionary of science:	5 (038)
Base number of science:	5
Add Table 1d notation for dictionary:	(038)
Life of Plants (video recording):	(086.8)581
Table 1 notation for video recordings:	(086.8)
Add number for botany:	581

This assumes that all video recordings are grouped together. Citation order could be reversed to shelve video recordings with their subject: 581(086.8).

Table 1e: Place

(1) The Place common auxiliaries in Table 1e are usually preceded by subject notation. However, they can be cited first if a decision has been made to create a shelf arrangement based on place. Place auxiliaries are always presented in parenthesis/round brackets and begin with the numbers 1-9.

1. Place and space in general. Localization and Orientation
   _____
2. Physiographic designation
   _____
3. Places of the ancient world
   _____
4. Countries and places of the modern world

4/9)

5. Europe
6. Asia

7/8) African

7. American, North and South. The American
8. North and Central American
9. South American
10. States and regions of the south Pacific and Australia. Arctic. Antarctic.

Examples:

Universities in the developing world:	378(1-773)
Base number of universities	378
Add Table 1e notation for developing world:	(1-773)
Family law in the United States:	(73)347.6
Table 1e notation for United States:	(73)
Add number for family law:	347.6

This indicates that a book on law library, for example, would have a primary arrangement under country.

Table 1f: Race, Nationality, etc.

Table 1f's common auxiliaries of race, ethnic grouping, and nationality are frequently preceded by a subject note. If a decision has been made to design a shelf arrangement based on ethnic groupings of nationalities, they can be cited first. Auxiliaries such as race, nationality, and gender are always enclosed in round brackets and preceded by an equals sign.
Table 1h: This table explains how notations from sources other than UDC might be used to specify topic matter. A letter or other symbol should be used to separate such notations from the UDC number. In the portable edition, the # (hash) is supplied for illustration. The source of the code should be acknowledged, it is suggested. For chemical compounds, this is more appropriate. The use of proper names, abbreviations, and acronyms is also addressed. Any UDC number can be supplemented with these.

Examples:

Halley's Comet:	523.6#81P
Base number for comet:	523.6
Add period comet number (Minor Planet Center):	#81P
Universities of Durham:	378.4(410)Durham
Base number for universities:	378.4
Add Table 1e notation for Britain:	(410)
Add name:	Durham

Table 1k: General Characteristics

The general characteristics common auxiliaries in Table 1k are preceded by a class number from the main schedules. There are currently two listings within this table: they are Materials and Persons.

1. The common auxiliaries of materials are always preceded by =03.

-032	Naturally occurring mineral materials
-33	Manufactured mineral-based materials
-34	Metals
-035	Materials of mainly organic origin
-036	Macromolecular materials. Rubbers and plastics
-037	Textiles. Fibres, Yarns, Fabrics. Cloth
-038	Other materials

Examples:

Cane furniture manufacturing:	684.4-035.2
Base number for furniture manufacturing:	684.4
Add Table 1k notation for cane:	-035.2

2. On the other hand, the common auxiliaries of persons are always preceded by -05.

-051	Persons as agents, doers, practitioners (studying making, serving, etc)
-052	Persons as targets, clients, users (studied, served, etc)
-053	Persons according to age or age-groups
-054	Persons according to ethnic characteristics, nationality, citizenship, etc.
-055	Persons according to sex and kinship

Examples:

Public library users:	027.5-052
Base number for public libraries:	027.5
Add Table 1k notation for persons as users, etc:	-052

4.0 CONCLUSION

The UDC was created with the intention of organizing a universal bibliography of everything published throughout history using a modified and extended version of DDC. As a result, its original function was for documentation rather than shelf organization. The Universal Decimal Classification Consortium is in charge of all editions and translations of the scheme. The scheme is available in three different versions: small edition, regular edition, and enlarged edition. UDC's primary classes are nearly identical to Dewey's. However, UDC allows for considerably more granular classification than Dewey and has a greater depth of coverage for specific topics. Many aspects of faceted classification are also incorporated into UDC, which makes significant use of synthesis to construct notations for composite subjects. This is what qualifies UDC for specialized collections.

5.0 SUMMARY

In this unit, you learned about the Universal Decimal Classification Scheme, which is one of the most widely used faceted classification schemes in libraries across the world. You've learned about the scheme's background, history, features, structure, Outline, and use, as well as the distinctions between the UDC and the DDC, and how they compare to the LCC Scheme. UDC, for example, covers all of knowledge, and its standard edition includes a complete list of subjects, similar to DDC and LCC. UDC's auxiliary tables, like DDC's, list concepts that can be applied to all or many subjects. The UDC has two sorts of synthetic devices, as you may recall: Table includes common and exceptional isolates, as well as symbols to link notations to allow for the generation of compound numbers for interrelated themes. To represent relationships between ideas in UDC, multiple facet indicators are employed. Later, we'll go through these synthetic devices in greater depth.

SELF-ASSESSMENT EXERCISE

1. List the main classes of the Universal Decimal Classification.

6.0 TUTOR-MARKED ASSIGNMENT

1. Provide a good background of the UDC
2. Describe the Coverage and main classes of the Universal Decimal Classification
3. Identify the tables of the UDC

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UNIT 2 COLON CLASSIFICATION (CC)

CONTENTS

1.0 INTRODUCTION

In this unit, we'll look at the Colon Classification, which is a multi-faceted classification system (CC). As mentioned in the preceding unit, faceted classification schemes are synthetic in nature. This is a technical term that refers to the two main actions involved in using a faceted categorization scheme: breaking down a subject into facets and synthesizing the facets to form a notation. You may recall that the famous S.R. Ranganathan is credited with developing both synthetic and faceted classification with the goal of creating a unique language and definition for categorization. The Colon Classification will be discussed in this unit as we continue our exploration of the three basic Faceted Schemes (CC). We'll go over the history of the CC, as well as its scope and application. The goal of this unit is to demonstrate the notion of faceted classification. Understanding the notion of CC is critical when assessing a subject and establishing the order in which its elements are cited in a class mark.

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- Describe the rationale for the development of the CC
- Describe the use of the Colon Classification

3.0 MAIN CONTENT

3.1 Cc as A Faceted Classification Scheme

Some classifiers find the CC challenging to use, partially because of the language style employed in the scheme's explanations and analyses, and partly because S. R. Ranganathan used a lot of sophisticated terms. In many ways, however, CC, with the exception of CC7, is better built and

easier to comprehend and use than the DDC. In any event, the goal of this section is to further explain the notion of faceted classification and what distinguishes the CC from other faceted classification schemes. The Colon Classification scheme has three variants and seven editions:

Version 1 (1933-1950): Rigidly faceted era contains CC1, CC2 and CC3.
Version 2 (1950-1963): Almost Freely-Faceted era contains CC4, CC5 and CC6.
Version 3 (1963-1987): Freely-Faceted Era comprises CC7.

The following are the editions of CC:

Editions	Year of publication
1st Edition	1933
2nd Edition	1939
3rd Edition	1950
4th Edition	1952
5th Edition	1957
6th Edition	1960
7th Edition	1987

The sixth edition of the Colon categorization system organized the entire world of knowledge into 42 main classes based on subjects, using triplets of alphabets, Arabic numbers, and symbols (Greek letters) as follows:

Z	Generalia
1.	Universe of knowledge
2.	Library Science
3.	Book Science
4.	Journalism
A	Natural Science
AZ	Mathematical Science
B	Mathematics
BZ	Physical Sciences
C	Physics
D	Engineering
E	Chemistry
F	Technology
G	Biology
H	Geology
Hx	Mining
I	Botany
J	Agriculture
K	Zoology

Kx Animal husbandry
L Medicine Illustrative
LX Pharmacognosy
M Useful Arts
Δ Spiritual experience and mysticism
MZ Humanities and social science
MZA Humanities
N Fine Arts
NX Literature and language
O Literature
P Linguistics
Q Religion
R Philosophy
S Psychology
Ó Social Science
T Education
U Geography
V History
W Political Science
X Economics
Y Sociology
Yx Social Work
Z Law

As a result, the CC can be described as a mixed notation containing Roman letters, Greek letters, and Arabic digits. Many mnemonic aspects, such as verbal mnemonics, scheduling mnemonics, systemic and seminal mnemonics, are used in colon classification. It is commonly used in Indian libraries, as well as a few other libraries in other countries. This is because most libraries regard it as a theoretical rather than a practical scheme.

3.2 Use of CC

The CC6 will be utilized in this example to show how it may be used. The schedule of the CC covers main classes of the CC and their subdivisions, as well as an index, and is published in a short volume that contains listings of common isolates. The facet formula PMEST determines the order of citations. Each facet in CC6 is introduced with a separate punctuation mark:

Personality, (Comma)
Matter; (Semicolon)
Energy; (Colon)
Space; (Point)
Time; (Apostrophe or point)

The type of facet that makes up the notation can be recognized by classifiers who are familiar with the CC. Because the same symbol (especially the same number) can mean different things in different contexts, this is extremely important. For example, in engineering, 4 symbolizes design in the energy aspect, but 4 as a number denotes a different concept in the location facet, where 4 denotes Asia and the point introduces the place facet.

More symbols were introduced in CC 7 to signify various forms of relationships inside specific facets, which adds to the complexities. As previously noted, CC7 contains numerous flaws and has grown in complexity to the point that it is extremely difficult to operate. According to Fokett (1996:323), it does not accurately reflect Ranganathan's contribution to classification theory.

It's quite uncommon to find a work classified using all five facets. However, it is typical to see two or more levels of the personality trait required, such as in the design of submarine diesel engines in the United States in the twentieth century. In the personality facet, a comma separates the two foci: diesel engine and submarine.

D5254,6466:73'N

The classifier would have to seek up concepts in the CC index to create this notation. The key classes where concepts appear, as well as which facet pertains to the concept, would be listed in the index. Consider the following scenario:

D [P].5254
D is the main class (engineering)
[P] is the personality facet
5254 is submarine

Again, under 'diesel engine' in the index, the entry is:

D [P].6466

In the main class D (engineering), diesel engine is in the personality facet.

In the geographical division index, under 'United States' is: 73;

In the time isolate index, under '20th century' is: N 1900 -99AD.

The classifier can utilize the PMEST algorithm to combine these parts and use appropriate punctuation to introduce the various facets. To begin the notation, either 'submarine' or 'diesel engine' could be used,

depending on the significance of the work and the needs of the collection.

4.0 CONCLUSION

Another Faceted and synthetic classification technique is the Colon Classification (CC). The names refer to the two main tasks that go into implementing faceted classification. S.R. Ranganathan is known for his facets and synthesis. He was able to create a new classification language and theory with them.

5.0 SUMMARY

We looked at the Colon Categorization (CC), which is another Faceted classification technique, in depth in this unit. We talked about the CC's history, coverage, and application. Classifiers who are familiar with the CC notation can determine the sort of facet that makes it up. This is critical since the same symbol or number might mean different things in other contexts.

SELF-ASSESSMENT EXERCISE

i Discuss the reasons for the development.

6.0 TUTOR-MARKED ASSIGNMENT

1. Describe the rationale for the development of the CC
2. Describe the use of the Colon Classification

7.0 REFERENCES/FURTHER READING

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UNIT 3 BIBLIOGRAPHIC CLASSIFICATION (BB)

CONTENTS

1.0 INTRODUCTION

In this unit, we shall examine another faceted classification scheme, the Bliss Classification (BC). The BC like the UDC and CC, is a specialist classification scheme. In this discussion of the third faceted scheme, focus will be on its origin, characteristics and structure.

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- Describe the background and origin of the Bliss Classification (BC)
- Describe the characteristics of the Bliss Classification

3.0 MAIN CONTENT

3.1 Origin

Another faceted approach for use in common library collections is Henry Bliss' Bibliographic Classification, which will be briefly detailed here (BC). The first edition of BC's comprehensive schedules were published in 1976. The Bliss Classification Association (http://www.sid.cam.ac.uk/bca/bcahome.htm) continues to develop the concept today. The BC was created in 1935 by a librarian named Henry Evelyn Bliss. The plan was published in four volumes in the United States between 1940 and 1953, and was mostly adopted by British libraries. Due to its complex structure, it is a good example of a facet classification method and is utilized by all types of libraries. The Bibliographic term that appears on the title shows that the scheme is all-embracing or wide and is not only applicable for the arrangement of books on the library shelves but it is also applicable to subject catalogue, union catalogues,

subject bibliographies and other special bibliographic services. The Bliss Bibliographic Classification uses mixed notation without the use of symbols. It consists of 35 main classes which consist of 9 numerals and 26 alphabetical classes.

The main classes of BC are as follows:

A- Philosophy, General Science and Mathematics
B - Physics, Engineering
C - Chemistry
D- Astronomy, Geology, Physical Geography
E - Biology, Biochemistry
F- Botany
FW - Agriculture
FY - Forestry
FZ- Animal & Industries
G- Zoology
H- Physical Anthropology, Medical Sciences
I – Psychology
J- Education
K- Social Sciences, Ethnology
KT- Geography (Human, Social and Economic)
L, M, N, O, P - History
P - Religion
Q- Applied Social Sciences
R - Political Science
S- Law
T- Economics
U- Industrial Arts
V- Fine Arts
W,X,Y- Language and Literature

Uppercase and lowercase Roman characters are used in the BC notation scheme. Common subdivisions are also denoted by Arabic numbers. It includes a schedule and an index.
The author considered that the order of the key classes was the most significant characteristic of a classification scheme. The entire primary classes are organized into four key regions in the Bliss Classification:

Philosophy
Science
History
Technologies and arts.

Facets are carefully recognized and listed suitably inside each primary class; the level of detail in place exceeds that seen in enumerative

systems. Alternative placements for several themes were offered by Bliss in order to produce the most useful listing of subjects. Economic history, for example, can be found in either general or economic history. The classifier can then pick which site would best suit the demands of their library. Bliss emphasized on short notation as well, yet class marks for complicated subjects might be quite long.

3.2 Characteristics

BC has two distinct traits that are worth mentioning. The first is that Bliss considered a suitable categorization scheme to be one that reflected educational and scientific consensus. It must be founded on how experts anticipate their knowledge to be scrutinized and structured. The importance of subordination and collocation is emphasized by Bliss in the second paragraph. Collocation refers to the gathering together of subjects that have a strong link. In this sense, subordination entails much more than just listing subjects from general to specialized. The consequence is that, while many concepts or topics are important, some can be classified as more specialist due to the extent to which they rely on the results of others (Mills & Broughton, 1977). Subjects or themes that are this dependent are anticipated to follow the subjects on which they are dependent. The listing of BC's key classes is extremely impressive. Subordination in the BC, on the other hand, fails in social science. Physics, for example, is built on mathematics, so it must come after it in the list of main classes. Similarly, astronomy is reliant on concepts developed in physics and chemistry. Though the notion of subordination is sound, it is difficult to implement in a linear expression of disciplines or subjects.

BC is quite a familiar scheme as it is used to classify the collections at the University of London’s State House Library.

Examples:

Human anatomy and physiology:	HD
Visual perception:	ICL
Richard Feynman, biography:	B4 FEY

The above example demonstrates how BC can achieve brevity of notation.

4.0 CONCLUSION

Philosophy, science, history, and technology and arts are the four key categories that comprise BC's main classes. Facets are recognized and listed inside key classes with care. While BC's creator insisted on short

notation, the class grades for complex subjects were extremely long. We also encountered two BC features worth mentioning in this unit. Bliss argued that a decent classification scheme should reflect educational and scientific consensus for several reasons. It should also be based on how experts intend to organize their knowledge.

5.0 SUMMARY

In this unit, we examined yet another faceted classification scheme, the Bliss Classification (BC). The focus of this discussion of the third faceted scheme is on the origin, characteristics and structure of the CC. Among the strengths of the BC as discussed, is that it can achieve brevity of notation.

SELF-ASSESSMENT EXERCISE

1. Discuss briefly the origin of Bliss Classification.

6.0 TUTOR-MARKED ASSIGNMENT

1. Describe the background and origin of the Bliss Classification (BC)
2. Describe the characteristics of the Bliss Classification
3. State the main classes of the BC

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MODULE 6 CONTEMPORARY ISSUES IN CLASSIFICATION

Module 6 is the last module in this course. It consists of three units and covers current trends in library classification, online cataloguing & classification and OCLC, and basic skills required in Knowledge organisation

Unit 1 Current Trends in Library Classification
Unit 2 Online Cataloguing & Classification and OCLC
Unit 3 Basic Competencies Required in Knowledge Organisation

UNIT 1 CURRENT TRENDS IN LIBRARY CLASSIFICATION

CONTENTS

1.0 INTRODUCTION

There has been a rapid transformation of library classification process around the world. The new trend in classification is characterized by innovations in classification. In this unit, we shall discuss the current trends in library classification. Some of the current trends include Computerized Catalogue, Classification and organization of Electronic and web Resources, and the Machine Readable Catalogue

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- identify the current trends in library classification.

- describe the Computerized Catalogue
- discuss the Classification and organization of Electronic and web Resources
- describe the Machine Readable Catalogue

3.0 MAIN CONTENT

3.1 Overview of Current Trends in Library Classification

Organisation of resources in Libraries can now be done online, beginning with the use of online catalogues of book publishers. When selecting a journal, the subject librarian will first circulate it to the members of the academic staff for their input. If the journal is accepted, the librarian then does a content analysis of the journal, whose finding he/she presents to the library selection committee for approval. There is a five-step process for collecting electronic (or "digital") materials:

- Gathering of information contents
- Evaluation of information contents
- Organization of information contents
- Construction of digital collections
- Maintenance of digital collections

ECD in digital libraries requires careful planning. Information held in electronic format listing the content of a dis-crete collection may be the starting point. Developing an electronic catalogue of all library materials is another essential consideration. Networking the catalogue so that users, not only in the library, but also from elsewhere can access it is another step. Such libraries also strive to offer full electronic texts of journals and books on CD or online. Digitization of locally produced information and establishment of institutional repositories, which will help to provide access to the scholarly material produced by members of the university community, should be considered very important. Above all, the concept of ECD in university libraries is aimed at providing the condition where academic staff and students can interact electronically with the library's, and ultimately the world's, scholarly content without actually visiting the library.

3.2 Computerized Catalogue

The computerize catalogue is presently in three forms;

(I). Machine Readable Catalogue (MARC):

This was developed by the Library of Congress in conjunction with the British library. In this catalogue, entries are entered into a file at any

point and can be transmitted to a central data file form which other libraries can obtain or access such entries on line by means of telecommunications links.

(ii). Online Public Access Catalogue (OPAC):

This is the most modern and most efficient form of a catalogue (Aina, 2004). It enables users to search and access very specific entries of a library. Bibliographic records of all documents in a library collection are stored in the computer memory disk. The OPAC catalogue makes it possible for library catalogue to be accessed from various points and at any time. To use it one needs a computer with a large memory and Internet access.

(iii). CD-ROM Catalogue:

The computerized catalogue can also be on a compact disc (CD-ROM). This is a large storage medium, as the entire catalogue of a library can be in just one compact disc, accessible through the computer. It is therefore, computerized and online like the MARC and OPAC catalogues, but, unlike them, the CD-ROM catalogue is not flexible and not easily updated. To be able to use it, one needs a computer with CD-ROM drive.

Advantages of the Computerized Catalogue

1. Compact – it takes up less space and has a very high storage capacity.
2. Flexibility – entries of documents can be entered into a file at any point in time and withdrawn easily.
3. Easy to update – Entries can also be easily modified, updated or changed.
4. Durability – Entries can last for as long as they are needed.
5. Easy to reproduce – It is easy to reproduce, to be transferred to another system, to be transmitted to a central data file from other units can access the collection or even to be printed out as a book list.
6. Millions of users can use the catalogue at the same time even from the comfort of their homes.
7. Easy to reformat or rearrange – The catalogue can be alphabetized or classified. It can be arranged by subject, by author, title, years of publication etc as desired.
8. Inter-lending – Through the central data file, entries can be accessed by other libraries on request. This enhances cooperative cataloguing and inter-library lending.

9. Controls book circulation – circulation or location of books such as reserve, loan, binding, recataloguing etc can be determined via the computerized catalogue.

Disadvantages of the Computerised Catalogue

1. Not economical – It is expensive to computerize the catalogue in terms of finance, personnel and maintenance.
2. It is prone to error because of its complex nature.
3. Not easy to use by clients – users need to be computer proficient to be able to use it.
4. Most users don't have access to computers and so will be denied access to the catalogue.
5. Not portable – The computer systems in the library are not stand-alone and so cannot be transferred out of their location.

3.1.3 Classification and organization of Electronic and web Resources

Classifiers often use traditional schemes such as the DDC, LC or use classification or data definition services developed locally. For instance, ICPSR has created its own data definition (Fagan, 2003). Librarians also organize items in web guides or printed bibliographies and integrating documents from outside sources into indexes and catalogues. Good cataloguing and classification of information reduces the barriers between social science information and users.

The application of computers to handling of bibliographic data is important in a number of aspects. The computerization of manual catalogues and library housekeeping operation has already led to improvements in the type of library services offered, especially in university and public libraries; This will facilitate the ability to integrate the processing of documents and information held within the library with outside sources. It will to a large extent, reduce the barriers between users and information and documents and thus lay credence to the fact that "the library is only one of the many potential sources of material for study and practice. These sources should be integrated effectively by social science librarians.

3.4 Machine Readable Catalogue (MARC)

MARC is a bye-product of the National Union of Catalogue. The Library of Congress puts into Computer Magnetic tapes, a record of all its accessions. It is prepared in Washington and in London where a similar thing is done for the British Library. Subscribing libraries receive tapes containing mahcien readable cataloguing data for current

English language monographs. Specific applications of the format to books, serials and maps have been developed and published and a format for manuscripts is being received.

Since it is catalogue of magnetic tape, it could be run into computer. The University of Ibadan, we are told, had been looking into ways of exploiting this. A library in Nigeria could sort out all the entries relating to Nigeria, according to author, title, subject. The capabilities of the computer are progidious – it could be manipulated to produce catalogue of various types.

There is an ultra-fiche reduction of MARC. It's name is Books in English and it is on post-card size. It represents the accessions of L.C. and the National Library of Great Britain. It could be sent by airmail and received by any library. There are six issues a year and the cumulation gives one the complete accessions of the two libraries.

4.0 CONCLUSION

Classification of resources in Libraries can now be done online. One of the essential considerations for this trend is development of an electronic catalogue of all library materials. Networking the catalogue so that users, not only in the library, but also from elsewhere can access it is an important step forward. The computerize catalogue is presently in three forms: Machine Readable Catalogue (MARC), Online Public Access Catalogue (OPAC), and CD-ROM Catalogue

5.0 SUMMARY

In this unit, we discussed the current trends in library classification. Some of the current trends as discussed include Computerized Catalogue, Classification and organization of Electronic and web Resources, and the Machine Readable Catalogue. You may recall that some of the *Advantages of the Computerized Catalogue include:* Compact, Flexibility, Easy to update, Durability, Easy to reproduce, multiple usability, Easy to reformat or rearrange, and Inter-lending.

SELF-ASSESSMENT EXERCISE

1. List and discuss the three types of computerised catalogue.

6.0 TUTOR-MARKED ASSIGNMENT

1. Identify the current trends in library classification.
2. Describe the advantages and disadvantages of the Computerized Catalogue

3. Discuss the Classification and organization of Electronic and web Resources
4. Describe the Machine Readable Catalogue

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UNIT 2 ONLINE CATALOGUING & CLASSIFICATION AND OCLC

CONTENTS

1.0 INTRODUCTION

One of the contemporary issues in classification is the **Online Classification.** In this unit, we shall discuss this trend focusing on skills required, steps for use [convention], steps for library of congress database new interface, steps for oclc database, limitation and strategies to enhance online cataloguing. The unit also covers discussion of Online Computer Library Center (OCLC).

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- Discuss the application of the Online Classification.
- discuss the skills required
- identify the steps for application of Online Classification using [convention] method
- identify the steps for application of Online Classification using Library of Congress database new interface
- identify the steps for application of Online Classification using OCLC database
- state the limitations and strategies for enhancing online Classification
- describe the Online Computer Library Center (OCLC).

3.0 MAIN CONTENT

3.1 Online Cataloguing & Classification

Libraries are adapting to the massively increasing of information resources. They need to be processed for users to have access to the resources.

Cataloguing is the practice of organizing collection of bibliography item to facilitate their identification, location, access and use.

What is online cataloguing?: It involves the identifying existing Meta data and taking advantage of existing descriptions and access points using Online Cataloging database.

Tools for Online Catalogue and Classification: -Computer connected to internet e.g. desktop, laptop, tablet, ipad and iphone.

- Cataloguing work sheet - entering sheet were cataloguers enter their work from preliminary to last.
- Pencil and eraser.
- Cutter Sanborn [for library of Congress].

3.1.1 Skills required

1. You must have a convention or original cataloguing skills.
2. Basic internet navigation skills.
3. Data mining skills.
4. Knowledgeable in browsers and search engines e.g. Mozilla fire fox, Google chrome.
5. Should be able to surf the web to navigate and obtain data.

Database for this course:

These databases are more stable and proven.

1. Library of congress online catalogue.

3.1.2 Steps for use [convention]

1. User must know the URL [Catalog.Loc.gov.].
2. Google library of congress online catalog.
3. Click on basic search.
4. Choose any search option you prefer [ISBN preferable].
5. Type in your chosen search option in dialog box and click enter.
6. Click on full details of materials.

7. Copy out the information about the materials before you.
8. Cross. Check the derived information.
9. Use Nigeria cutter to do cuttering [cutter].
10. Click on new search.

3.1.3 Steps for library of congress database new interface

1. Type in the URL [Catalog.Loc.gov.]
2. Click on browse.
3. Choose your search option [ISBN first].
4. Type in your chosen search option in the dialog box and click enter.
5. Click on display result for details of the materials.
6. Cross-check.
7. Cutter[if library of congress]
8. Click on browse.

3.1.4 Steps for OCLC database

a. Type in url:connexion . OCLC.org.
b. Type in authorization id and password.
c. Click on basic search[ISBN, title phrase & subject].
d. Choose from any of the3 search option[ISBN first].
e. Click on enter for result of search to display
f. Copy of research result.
g. Cutter.
h. Click on basic search to start a new book.

Advantages of online cataloguing

1. Enhances the speed information materials are catalogued and get to users.
2. Standardizes the cataloguing process.
3. It reduces phobia librarians have for cataloguing.
4. It helps librarians understand the process of cataloguing thereby increasing their knowledge of cataloguing.
5. Increases work output of cataloguers.
6. Makes the cataloguing process dynamic, mobile, flex and not tied to cataloguing rooms alone.

Disadvantages of online cataloguing

1. It makes librarians forget conventional cataloguing skills over a period of time.
2. Make cataloguers lazy and lead to procrastination of work.

3. Discourages the acquisition of most publications by African because it may not be in the online catalogue base.

3.1.5 Limitation and Strategies to enhance online cataloguing

The Limitations: These include

1. Not all materials source/search are in online Cat. Database.
2. Unstable power supply.
3. Poor internet access.
4. Poor internet navigation skills.
5. Lack/poor computer skills.

Strategies to enhance online cataloguing

Among the major strategies for enhancing online cataloguing include that:

1. Librarians should be trained and retrained regularly on the use of online cataloguing database.
2. For librarians to reap full benefit of online cataloguing, the library should ensure steady power supply.
3. There should be stable internet access.
4. Library should strive to subscribe to online cataloguing database. required subscription such as OCLC.

3.2 Online Computer Library Center (OCLC)

OCLC, known formerly as the Online Computer Library Center, based in US is a not-for-profit based organization established to promote cooperation among libraries globally. Its services are used by over 54,000 libraries in about 109 countries mainly to locate, acquire, catalog, lend and preserve library materials in both print and electronic formats. Its focus is computer library service and research organization and is dedicated to the public purposes of furthering access to the world's information and reducing information costs.

OCLC was actually established in Ohio in 1967 by a small group of libraries whose leaders believed that they could find practical solutions to some of the most challenging issues in librarianship by working together. It all began as a way to automate the traditional library card catalog but turned out to become a collaborative revolution that involved thousands of libraries around the world. Subsequently, OCLC and its member libraries jointly produced and maintained WorldCat—the OCLC Online Union Catalog—which now contains over 67 million bibliographic records and more than 1 billion library holdings. Cooperation among OCLC and member libraries also helped to solve

the practical problem of automated cataloging. It also resulted to services that help libraries build e-content collections and provide online access to special library collections such as maps, newspapers, photographs and local histories. Working together, OCLC and member libraries also created the largest interlibrary loan system in the world. Today, OCLC partnerships in Europe has made it possible to exchange more than 9.5 million information resources annually to information consumers and scholars around the world.

In addition to the many services offered, OCLC funds library research programs, library advocacy efforts, scholarships, market research and professional development opportunities. Among other services provided by OCLC include the OCLC Classify which is used in providing user interface and a machine service for assigning subjects and classification numbers to information materials. It makes use of database which can be searchable through any of the many standard numbers associated with books and monographs, journals, magazines, sound recordings and video recordings. Such numbers include: ISBN, ISSN, and UPC (Universal Product Code), OCLC record number, title and/or author and FAST headings.

4.0 CONCLUSION

Application of online classification is one of the contemporary trends in classification aimed at easing the classification of library information resources. However, despite its advantages, it also has its challenges. Classifiers should be conscious of these challenges as they embark on online classification

5.0 SUMMARY

In this unit, we discussed the practice of online classification. The unit also discussed skills required, steps for use [convention], steps for library of congress database new interface, steps for OCLC database, limitation and strategies for enhancing online cataloguing. The unit also covered discussion of Online Computer Library Center (OCLC) which is a US- based not-for-profit organization established in Ohio in 1967 to promote cooperation among libraries globally.

SELF-ASSESSMENT EXERCISE

1. List and discuss the limitations online Classification.

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss the application of the Online Classification.
2. Discuss the skills required for Online Classification.
3. Identify the steps for application of Online Classification using convention method
4. Identify the steps involved in application of Online Classification using
   Library of Congress database new interface
5. Identify the steps for application of Online Classification using OCLC
   database
6. State the limitations and strategies for enhancing online Classification
7. Describe the Online Computer Library Center (OCLC).

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UNIT 3 BASIC COMPETENCIES REQUIRED IN KNOWLEDGE ORGANISATION

CONTENTS

1.0 INTRODUCTION

In this last unit of this course, we shall discuss Basic skills and competencies of knowledge organisation librarians, including Professional Competencies and Personal Competencies. Also covered in this unit are Basic skills and competencies of users of knowledge organisation tools. This last unit is designed to prepare classifiers and make them and library users to be conscious of the basic skills required for efficient classification and effective use of information resources.

2.0 OBJECTIVES

At the end of this unit, you will be able to:

- discuss Basic Professional Competencies required by knowledge organisation librarians
- discuss Basic Personal Competencies required by knowledge organisation librarians
- identify Basic skills and competencies of users of knowledge organisation tools.

3.0 MAIN CONTENT

3.1 Basic skills and competencies of knowledge organisation librarian

In order to fulfill their key roles in knowledge organisation, librarians require two main types of competencies, professional and personal competencies. Special librarians require the under listed competencies.

3.1.1 Professional Competencies

Professional competencies relate to the librarians' knowledge in the areas of information resource, information access, technology, management and research and the ability to use these areas of knowledge as a basis for providing library and information resources.

1. Expert Knowledge of the content of information resources, the ability to critically evaluate and filter them: Librarians should be able to as well as be able to control the oversupply of information by selecting what information resources (print and electronic) are relevant and usable for the clientele. They should be able to use strategic thinking to perform information selection and analysis that meets specific individual needs or organizational goals.

2. Specialized subject knowledge appropriate to the business of the organization or client: Librarians in addition to their postgraduate degrees should frequently take additional course related to their host organizations area of business. This explains why some library schools like the Department of Library and Information Science, UNN offers courses in subject areas like Political Science, Economics, Plant Science, etc, in addition to the courses in LIS. This is to encourage the development of in-depth subject specialization.

3. Competence to provide excellent instructions and support for library and information service users: Ability to carry out information literacy training, keep up to date with the latest training and instructional techniques and provide online reference and online assistance to information seekers.

4. Skill in Use of appropriate information technology to acquire, organize and disseminate information: This involves automation and digitization of library services, creating online catalogue of the library, online cataloguing, online reference service, etc.

3.1.2 Personal Competencies

These represent a set of skills, attitudes and values that enables librarians to work efficiently; be good communicators; focus on continuing learning throughout their carrier; demonstrate the value-added nature of their contribution; and survive in the new world of work..

1. Technology Friendly: They are expected to embrace technology – based knowledge and skills to solve a variety of information problems. They should have the competence to expand the library collections beyond traditional media such as books and journals.

2. Competencies to look for partnerships, collaboration, mentorship, and alliance: Should seek alliance with information professionals to optimize complementary knowledge and skills as well as form – partnerships or collaboration with other librarians or information professionals for the sake of personal self development.

3. Effective Communications skills: Ability to present ideas clearly and enthusiastically and write clear and understandable texts.

4. Work well with others in team: Should be a good team player, learn about the wisdom of team and seek out opportunities for team participation. Take on responsibility in team both inside and outside the library and constantly look for ways to enhance personal performance and that of others through formal and informal learning opportunities.

5. Recognize the value of professional networking, association and solidarity: They should be active in professional associations and use these opportunities to share knowledge and skills, to benchmark against other information services providers and form partnerships and alliances. They should recognize the need for a forum where information professionals can communicate with one voice on important information policy issues. such as copyrights and the global information infrastructure.

3.2 Basic skills and competencies of users of knowledge organisation tools

In order to fulfill their complementary roles in knowledge cycle, users of knowledge organisation tools require the following competencies:

1. Knowledge of the types of information resources, the ability to critically evaluate and filter them: They should be able to use various types of information by selecting what information resources (print and electronic) are relevant and usable to them.

2. Competence to understand appreciate instructions and support from knowledge organisers: Ability to undertake information literacy training, keep up to date with the latest training and instructional schedules and receive online reference and online assistance to information seekers.

3. Skill in Use of appropriate information technology to access information: This involves automation and digitization of library services, using online catalogue, online reference service etc, of the library.

4. Technology Friendly: They are expected to embrace technology – based knowledge and skills to solve a variety of information problems. They should have the competence to use the library collections in all formats and media, including those beyond traditional media such as books and journals in electronic and online formats.
5. Effective Communications skills: Ability to present requests and queries clearly and unambiguously.

4.0 CONCLUSION

Competencies are very important for efficient and effective performance of librarians, and especially, in order to fulfill their key roles in knowledge organization. Librarians require two main types of competencies, professional and personal competencies. Professional competencies relate to the librarians' knowledge in the areas of information resource, information access, technology, management and research and the ability to use these areas of knowledge as a basis for providing library and information resources. Personal Competencies represent a set of skills, attitudes and values that enables librarians to work efficiently

5.0 SUMMARY

In this last unit of this course, we discussed basic skills and competencies of knowledge organisation librarians, including professional competencies and personal competencies. also covered in this unit are basic skills and competencies of users of knowledge organisation tools. you may recall that some of the professional competencies include: expert knowledge of the content of information

resources, specialized subject knowledge appropriate to the business of the organization or client, competence to provide excellent instructions and support for library and information service users; and skill in use of appropriate information technology to acquire, organize and disseminate information.

SELF-ASSESSMENT EXERCISE

1. What are the Professional Competencies needed by librarians who organize knowledge?

6.0 TUTOR-MARKED ASSIGNMENT

1. Discuss Basic Professional Competencies required by knowledge Organisation librarians
2. Discuss Basic Personal Competencies required by knowledge organisation Librarians
3. What are the basic skills and competencies required by users of knowledge Organisation tools?

7.0 REFERENCES/FURTHER READING

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