University of Mosul

Faculty of Arts

Department of Information and Knowledge Technologies

Course Title: Objective Processing of Information

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To address the objectivity of information vessels

Thematic processing of information resources is fundamental to information retrieval, at varying levels of depth. The first level is concerned with describing the form alone—which is insufficient to facilitate access to information—because such description was not initially intended for that purpose, but rather to enumerate and inventory the books contained in a library. This resulted in a set of tools used in research, such as indexes of titles and authors. Then, after a study conducted on a group of beneficiaries, it was found that the majority of researchers are heading towards searching for the scientific material itself, regardless of the authors or titles, and even the book itself has become acquired according to the subject. Therefore, another type or a deeper level of processing was required through describing the subject of the book and the emergence of another index called the subject index - an index concerned with collecting all the books in a library that deal with the same subject from different angles in a certain place - to facilitate the process of collecting information for researchers. Thus, I have two methods for the subject processing of information containers, which are: classification and subject indexing. It is basically linked to large documents, as Ranganathan said, while small documents have a different method of processing because they serve a distinct category or segment - this category is looking for specific information: and this information cannot be limited by subject headings or classification numbers due to their accuracy, so it requires a deeper level of processing through the processes of indexing and extraction. They are two new methods. They are concerned with describing the content of the document to help researchers decide whether or not to refer to that source, or providing information that spares researchers the need to refer to the original documents.

All the methods of processing the subject of documents are closely related to each other, as they are all concerned with the subject content of the document, but they differ from each other in the way of expressing the content, especially since the subject indexing uses descriptors, the headings are topics, and classification uses symbols (and both the subject indexing and classification describe the topic only).

Indexing and abstracting differ in their degree of depth (they are concerned with analyzing the content) - they are two methods that are deeper than thematic indexing and classification.

No matter how different the objective treatment methods are, they go through three stages:

1. Comprehension: Familiarity with the details of the document.

2. Selection: Selecting the information and units that the potential beneficiary is looking for.

3. Translation: Translating those concepts and ideas into information retrieval languages.

Definition of classification in libraries

Classification in libraries refers to the process of arranging books on library shelves in a way that allows library patrons to find them quickly and easily. This is done by collecting books and other library materials, such as periodicals, audio recordings, moving images, mapping materials, manuscripts, computer files, etc., and then coding and organizing them, whether on shelves, or in book indexes and content guides. Books are classified in a systematic and logical manner that benefits the researcher, as each book is given a

A book with a special call number according to the library's book classification system based on its subjects, starting with the most comprehensive subjects, then arranging the specific subjects that fall under each general category.

The importance of classification in libraries

The process of classifying libraries is very important in the following ways:

1. Saving librarians the time and effort they spend locating books for the purpose of arranging or replacing them.
2. Helping library users access the knowledge corner they are interested in.
3. Facilitating access to the status of the library's knowledge corners, so that they can be developed to keep pace with updates or cancelled if no longer needed.
4. Identify the points of attraction that attract readers and researchers within each corner of the library, and the corners that do not attract library patrons, in order to address this.
5. Monitoring inventory and the library's ongoing need for books.
6. Components of Library Classification The library classification process is referred to as a method of translating book topics into a communication language consisting of a set of numbers and symbols to arrange them in a logical and organized manner that facilitates finding books.

The basic components of a library classification system include:

1. Coding: Since using subject headings by their linguistic names, whether general or specific, is not practical or convenient for the researcher, they are translated into an artificial language consisting of a set of symbols and numbers, with each category representing a specific topic. For example, books on English literature are coded with symbols that differ from other categories.
2. Organization models: Knowledge is presented in several forms, including books, guides, dictionaries, encyclopedias, and others. Each form of knowledge is given a symbol or organization model that suits it, and based on this, it is distinguished from other forms within the library to facilitate locating it. For example, books take a model through which they can be distinguished from encyclopedias or other forms.
3. Generalities: This section within the library contains a collection of books covering general topics on a large number of subjects that are difficult to limit to a specific category, such as encyclopedias, references, and collected writings by the same author. Index: This is one of the most important components of the library classification scheme, especially for library staff, as it facilitates interaction with sections that have been completely arranged within the library, as it is designed after the classification process is completed.

4. Recall Number: This is a unique number given to each book individually, which allows the book to be easily found and returned to its correct place without having to search through hundreds of books randomly.

Classification in libraries:

Classification is a fundamental pillar of library and information science, contributing significantly to organizing knowledge resources and facilitating access to them. Classification goes beyond simply arranging books on shelves; it extends to organizing the knowledge itself within a logical system that facilitates understanding and retrieval. In this lecture, we will discuss the definition of classification, its objectives, types, the most important classification systems used, and how to apply it in libraries.

First: The concept of classification in libraries

Classification is the process of organizing information resources according to their subject matter into groups or sections based on similar or shared characteristics. Each item is assigned a classification number that reflects its main subject, making it easier for users and staff to find it.

The classification includes two main aspects:

1. Intellectual (analytical) classification: This is determining the topic or topics that the material covers.
2. Numerical or symbolic classification: This is converting this intellectual analysis into a symbol or number according to a specific classification system.

Second: The importance of classification in libraries

The importance of classification lies in the following:

Facilitating access to information resources.

Arrange sources in a logical and uniform manner.

Reducing the time and effort spent searching for information.

Support subject indexing and retrieval improvement.

Showing relationships between different topics.

Third: Classification systems in libraries

There are several classification systems used around the world, the most famous of which are:

1. Dewey Decimal Classification (DDC):

It was established by Melville Dewey in 1786.

It divides knowledge into ten main sections (000–000).

Uses decimals to detail topics.

One of the most widely used systems in public and school libraries.

2. Library of Congress Classification (LCC):

It was published by the Library of Congress.

Uses alphanumeric codes.

Suitable for large and academic libraries.

It includes 21 main categories that start with English letters such as (A – Z).

3. Brown classification or Colon classification:

Created by Xiao Ali Cutter and developed by Ranganathan.

It is based on the idea of "faces".

More complex, but accurate and flexible.

4. Universal Decimal Classification (UDC)

A more elaborate branch of Dewey.

Common in European and scientific libraries.

Fourth: How to apply classification in libraries

1. Source content analysis:

Read the article or view its index and summary.

Determine its main topic.

2. Choose the appropriate classification number:

Through the tables of the system used.

It is preferable to use auxiliary tables to detail the topic.

3. Writing the classification number on the material:

Placed on index card and book.

Used to arrange books on a shelf.

4. Review and ensure accuracy:

Ensure the number matches the subject index.

Modify the number if the contents of the new edition change.

Fifth: Challenges in classification

- Multiple topics in one subject.
- The emergence of new topics that are not yet included in the tables.
- Difference in the authors' understanding of the subject.
- Difficulty classifying digital materials or multimedia.

Despite these challenges, the classification process remains a vital tool for organizing knowledge and presenting it to beneficiaries in an effective and systematic manner.

Ultimately, we emphasize that classification is not just numbers and symbols. It is a science and an art that requires knowledge of various subjects and skill in analysis and organization. It is one of the foundations that ensures a library's success in fulfilling its educational and cultural mission. Therefore, the skills of those working in this field must be developed, and changes in classification systems must be kept pace with the needs of the digital age.