THEORY AND PRACTICE OF CLASSIFICATION

SESSION 10 – INFORMATION TECHNOLOGY AND CLASSIFICATON

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Session Overview

 This session will explain to students the different ways by which ICT has affect library classification

Session Outline

The key topics to be covered in the session are as follows:

- Topic One: Application of library management software
- Topic Two: Availability of electronic resources
- Topic Three: New or emerging disciplines
- Topic Four: Electronic Classification
- Topic Five: Professional practices

Reading List

Read Chapter 31 of recommended text - Kumar, Krishan
 (2008) Theory of classification New Delhi: Vikas Publishing

Introduction

- Library Classification which is a branch under information management has also been affected in different aspects:
 - Application of library management software
 - Availability of electronic resources
 - New or emerging disciplines eg. Computer science, information science etc.
 - Electronic Classification
 - Professional practices



• Topic One:

Application of library management software

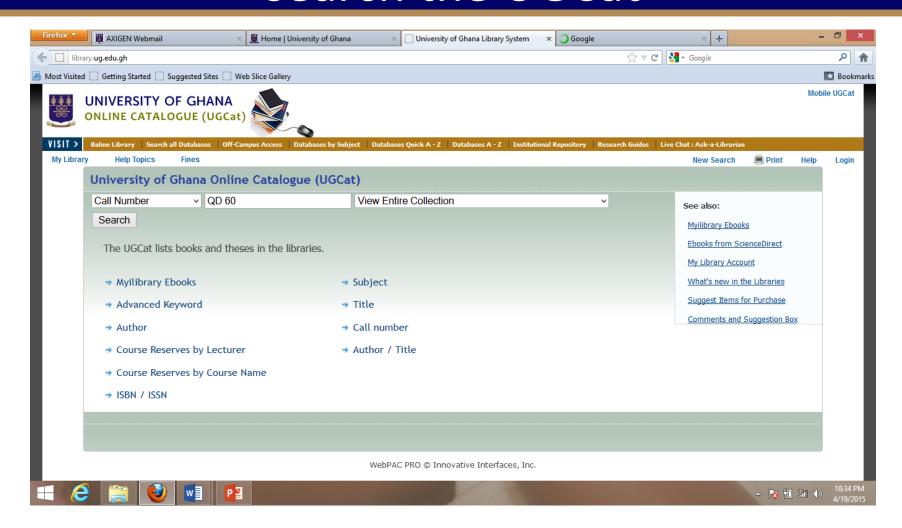
Application of library management software

 Libraries now acquire and use library management systems to organize their resources for quick access and use.

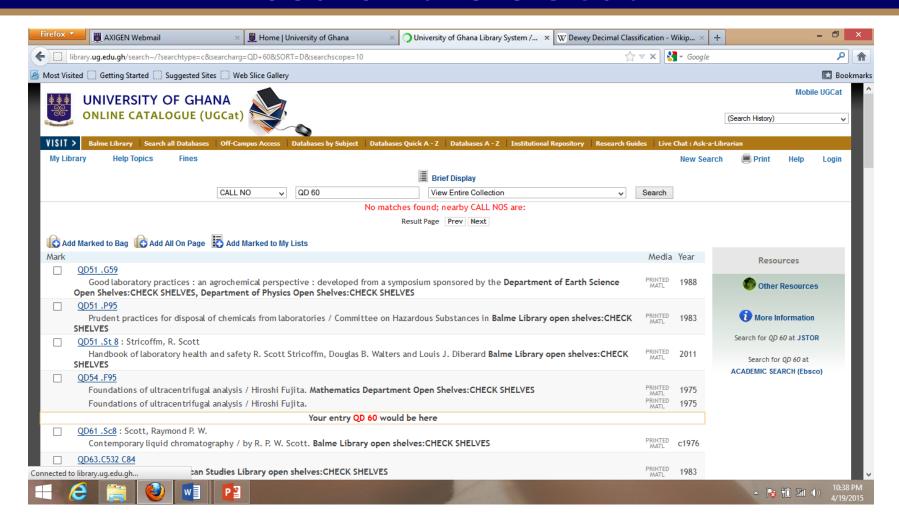
- This has led to the development of the Online Public Access Catalogues
- In online public access catalogues (OPACSs), classification serves as a direct retrieval function because class numbers can be used as access points in MARC records.



A screenshot of a class number used to search the UGCat



A screenshot of a class number used to search the UGCat





Application of library management software

 Classification is more crucial in the use of OPACs as inaccurate classification will affect the retrieval function of the system.

This is illustrated in the next slide



Application of library management software

Subject analysis



Key concepts



Group related ones (classify together like terms)



Link to related concepts (similar concepts)



Effective retrieval

• Topic Two:

Availability of electronic resources

There is a rapid growth of networked resources

 This has had a great effect on library classification as the enormous amount of information available on the Web needs to be organization for easy retrieval



 Electronic information providers are doing their best to provide solution by:

Providing subject access through classification

 And extending this subject access to other metadata records by including class numbers from existing classification schemes in metadata records for web resources.

 When subject categorization devices first became popular among Web information providers, they resembled broad classification schemes, but many were lacking the rigorous hierarchical structure and careful conceptual organization found in established schemes.

 Library portals in the beginning offered only alphabetical listing and or keyword searching

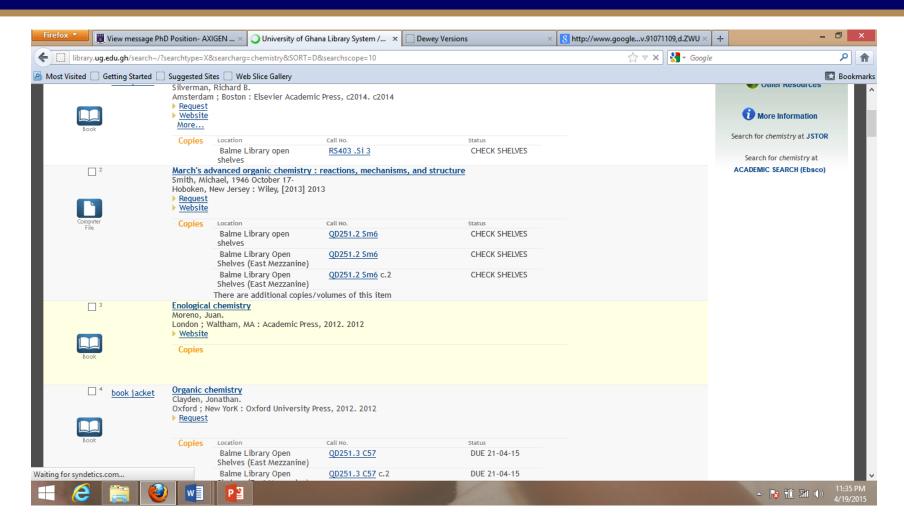
 Now libraries have adopted a directory approach based on broad subject categorization schemes when their collections of electronic resources became voluminous and unwieldy.

- Examples are:
- Internet Public Library Online Texts Collection based on the Dewey Decimal Classification (DDC) and

 CyberStacks based on the Library of Congress Classification (LCC)

 Classification helps by organizing e-resources into their different subject categories and providing direct access from the OPAC.

A screenshot showing electronic resources that have been assigned class numbers in the UGCat





 Many web designers have also turned to classification schemes as a supplementary navigational tool.

 Thus subject categorization devices that are similar to broad classification schemes have become fairly popular among web information providers.

 Subject categorization defines narrower domains within which term searching can be carried out more efficiently and enables the retrieval of more relevant results.

 Combination of subject categorization with term searching has proven to be an effective and efficient approach in resource discovery and data mining.



 In this regard, classification or subject categorizing schemes function as information filters, used to efficiently exclude large segments of a database from consideration of a search query

New or emerging disciplines

 One major feature of a good classification as we identified is that; it must be flexible and expansive.

• Thus; it must be constructed so that any new subject may be inserted without dislocating the general sequence of classification.



• Topic Three:

New or emerging disciplines

New or emerging disciplines

 Human knowledge is ever evolving and new subjects of study are developing.

 There is also new fields of specialization in already existing disciplines

 Interdisciplinary studies are very common these days



New or emerging disciplines

- The subject field of information Technology is one such fast evolving disciplines.
- The library collects and organizes materials in all these new areas
- For them to integrate the new subjects into the already existing collection, classification schemes mast provide slots for classifying these subjects
- This therefore calls for regular revision in the schemes.

• Topic Four:

- This is in two parts;
 - Development of electronic version of schemes
 - Computers to electronically assign notations to resources

- Development of electronic version of schemes:
- IT is now applied to the development of classification schemes
- Data is fed into a computer and the processing rate is very fast.
- This helps to develop quality index to schemes

- We also now have electronic versions of schemes.
- Examples are WebDewey and Classification Web
- The two systems generate corresponding class numbers for the from the other system
- This reduces the physical space taken up by the schemes
- Regularly updated
- Easier to search



WebDewey features

- Flexible searching of the WebDewey database.
 Search functionality includes limiting by index, combined-term searches in one or multiple indexes using Boolean AND/OR/NOT operators, proximity searches, truncation, and character masking (wildcards).
- Browsable sequential indexes of DDC numbers, the Relative Index, and LCSH.

Webdewey features

- Hierarchical displays that show the position of each class number in relation to broader and narrower classes.
- Extensive use of hyperlinks for convenient access to related records and manual entries cited in notes.
- Links from LCSH listed in a record to the corresponding subject authority records.
- Displays of the ten Main Classes and the DDC tables that enable top-down navigation through the DDC.



Features of Classification Web

- It allows users to search, browse, and access all Library of Congress Classification schedules and Library of Congress Subject Headings and Name Headings on the Web.
- Construct, verify, and assign classification numbers, subject headings, and name headings to library material using the most current data.

Features of Classification Web

- Full-text schedule display of all Library of Congress classification schedules--including G class geographic cutters.
- Complete Library of Congress subject headings in familiar thesaurus-style display.
- Complete Library of Congress name headings.
- All files updated daily, providing optimal data accuracy.
- Access to data anywhere you have a World Wide Web connection.
- Correlations between LC classification numbers and LC subject headings.



Features of Classification Web

- Hypertext links within and between classes and subclasses speed access to critical data.
- Powerful search & navigation tools.
- Automatic calculation of classification table numbers.
- Permanent institutional or personal notes file.
- Ability to link to local Web OPAC for many major vendor systems.
- Preset list of institutional OPACs to which users can link.
- Display of non-Roman characters.



- Computers to electronically assign notations to resources
- WebDewey and Classification web has an inbuilt feature that allows this.
- <u>Jeong-Hyen Kim</u>, <u>Kyung-Ho Lee</u>, developed a knowledge base for an automatic classification in the library science field, by using the facet classification principles of colon classification

- Topic Five:
- Professional practices

Professional practices

- IT has affected the way classifiers and classificationists work.
- IT has created a plate form for interaction between and among the two groups.
- Example:
- The <u>Dewey blog</u> is a great source for news and views on classification issues as well as interesting and unusual DDC resources and curiosities.
- It's also a convenient way to share feedback directly to the DDC editors to help shape the future of the DDC



Professional practices

 There are also databases and OPACs where classifies can copy existing class numbers or verify one of which they are not sure.

Example is the WorldCat.

 It contains 1.8 billion electronic, digital and physical resources.



Conclusion

 In addition to the access function, the role of classification has been expanded to those of subject browsing and navigational tools for retrieval on the Web

Conclusion

- The association of Library Collections and Technical services subcommittee on Metadata and classification identified seven functions of classification in the electronic age;
 - Location
 - Browsing
 - Hierarchical movement
 - Retrieval
 - Identification
 - Limiting/portioning
 - Profiling



Further Reading

More Information on WebDewey and Classification web

 http://www.oclc.org/support/services/dewey/docu mentation/webdewey_userguide.en.html

https://www.loc.gov/cds/classweb/classwebfeatures.
 html

