

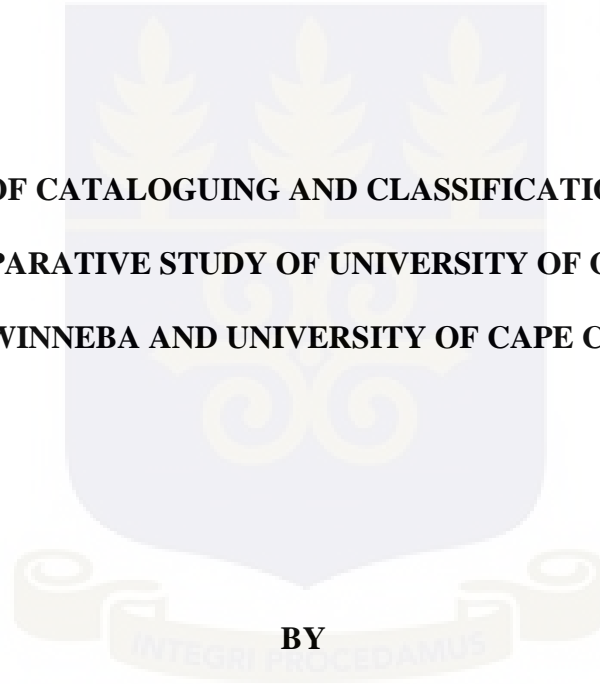
UNIVERSITY OF GHANA

COLLEGE OF EDUCATION

SCHOOL OF COMMUNICATION AND INFORMATION STUDIES

DEPARTMENT OF INFORMATION STUDIES

**THE PRACTICE OF CATALOGUING AND CLASSIFICATION IN ACADEMIC
LIBRARIES: A COMPARATIVE STUDY OF UNIVERSITY OF GHANA, UNIVERSITY
OF EDUCATION, WINNEBA AND UNIVERSITY OF CAPE COAST LIBRARIES.**



BY

EUGENE BAAH YEBOAH

JULY, 2018

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EUGENE BAAH YEBOAH

THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF **MPHIL**
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JULY, 2018

DECLARATION

I, Eugene Baah Yeboah, do herewith affirm that this thesis is my own original work, supervised by Prof. A. A. Alemna and Dr. E. Adjei, and has not been submitted either in whole or in part for any research purposes anywhere. In the instances where references are made to the works of other researchers, acknowledgements are duly given. I am therefore wholly responsible for any errors and omissions contained in this work.

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Ultimately and above all, I acknowledge the presence and impact of the Most High in this and I accept wholeheartedly that I am at his mercy!!!

DEDICATION

This work is dedicated to the memory of my late dad, Mr. Patrick Alfred Yeboah who passed away too soon to reap the benefits of his labour and to my mum, Mrs. Evelyn Kumiwaa Yeboah and my siblings Derek, Benedict and Lynda. Thank you for your prayers, support, encouragement and interest in my well being and know that all I ever want is to make you proud to call me one of your own.

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LIST OF ABBREVIATIONS

AACR2	Anglo American Cataloguing Rules Second Edition
ARL	Association of Research Libraries
BL	Balme Library
BLCD	Balme Library Cataloguing Department
CARLIGH	Consortium of Academic and Research Libraries In Ghana
FABR	Functional Requirements for Bibliographic Records
ICT	Information and Communication Technology
IFLA	International Federation of Library Associations and Institutions
ILMS	Integrated Library Management Systems
ILS	Integrated Library Systems
ISBD	International Standard Bibliographic Description
ISBN	International Standard Book Number
ISSN	International Standard Serial Number
JSC	Joint Steering Committee
LCSH	Library of Congress Subject Headings
MARC	Machine Readable Catalogue

OCLC	Online Computer Library Center
OL	Osagyefo Library
OLCS	Osagyefo Library Cataloguing Section
OPAC	Online Public Access Catalogue
RDA	Resource Description and Access
RUSA	Reference and User Services Association
SABINET	South African Bibliographic Network
SJL	Sam Jonah Library
SJLCS	Sam Jonah Library Cataloguing Section
UCC	University of Cape Coast
UCCLibOPAC	University of Cape Coast Library Online Public Access Catalogue
UEW	University of Education, Winneba
UG	University of Ghana
UGCat	University of Ghana Catalogue

ABSTRACT

The ever growing collection of information resources that has come to be associated with academic libraries has made the organization of these collections in academic libraries a crucial need. The prevalence of the practice of cataloguing and classification in academic libraries has been ascribed to the need to fulfill this fundamental need. This study sets out to investigate the practice of cataloguing and classification as it pertains in three academic libraries in Ghana with the objectives of identifying the role of this practice, assessing the level of investment in the practice as well as reveal the nature of the practice. This comparative case study, guided by the Knowledge Management Process Model, engaged thirty-one respondents involved in the practice at both the policy and operational levels through a semi structured interview, as well as an examination of policy documents and websites hosting the respective online catalogues.

The study revealed among others that a predominantly online cataloguing practice is prevalent but with a relatively low investment in the practice. It was also apparent from the study that personnel of the cataloguing outfits were thoroughly aware of the role they played in the value chain of the academic library. It was again revealed that the myriad of challenges faced by the practice in the cases under review had financial connotations.

The study recommends among others, an upward adjustment in the financial allocation to this important practice with the view to mitigating the challenges faced by the practice. Again, it is proffered that the Consortium of Academic and Research Libraries In Ghana bring these individual practices together to form a national practice while spearheading the drive towards the adoption of Resource Description and Access as a cataloguing standard.

CHAPTER ONE

INTRODUCTION

1.1 Background to the study

An academic library, in the opinion of Entsua-Mensah (2015), is a library attached to a higher education institution and mandated to serve the curricular needs of students, faculty members and staff of the parent institution (College or University). The primary objective of the academic library is to aid the teaching, learning and research activities of the institution. It develops its collection of resources based on the programmes offered in the institution. Academic libraries in Ghana are made up of University libraries, College libraries and Polytechnic libraries. Among the services provided by academic libraries are reference services, lending services, inter library lending and document delivery services, electronic support services, reprographic services and user education (Entsua-Mensah, 2015). All these services are geared towards aiding the user find the information required for their academic work.

Andaleeb and Simmonds (1998) opine that academic libraries are the largest and most comprehensive of all the types of libraries and as such tend to require relatively higher financial outlays coupled with the engagement of more human resources than the remaining kinds of libraries. Owing to their core mandate of serving the curricular needs of higher education institutions, the collections of academic libraries tend to be very extensive in terms of varieties and quantities so as to enable the library provide relevant and adequate publications on all subjects and courses taught in the institution.

To this end, organizing the vast collection of academic libraries does not become only a want but rather an acute need. There is the need to organize the collection of the library to not only give

access to the collection but also facilitate the retrieval of same to the users who require them (Rowley & Farrow, 2000).

Gorman (1998) (cited in Cabonero and Dolendo, 2013) identified technical services as tasks carried out in libraries with the primary concern of processing library materials in order to facilitate access to them. These services while not known to users and clients are usually integral to the overall service provided by the library. Montoya (1999) opines that the impact of technical services in academic libraries has been felt more in recent times with the advent of Information Communication Technology serving as both a threat and an incentive to their core mandate of facilitating access to information resources. Gorman (2004) opines that the practice of cataloguing and classification is constituted by all activities geared at logically congregating bibliographic data of information resources and collocating these resources into retrievable and usable records and is the one practice that permits the library to pursue its central missions of service and free and open access to all recorded knowledge and information. The practice includes but not limited to descriptive cataloguing, subject cataloguing, classification and authority control.

Academic libraries and other types of libraries that seek to organize their information resources do so mainly with the practice of Cataloguing and Classification (Rowley & Farrow, 2000). Cataloguing and Classification are the two main tools for organizing knowledge and information resources in librarianship. Much as the practice of cataloguing and classification can be carried out in every type of library irrespective of size, it goes without saying that it is a crucial practice in academic libraries as a result of the magnitude of the collection and operations in these libraries. The total absence of a Cataloguing and Classification unit in an academic library in Ghana is therefore unthinkable.

1.1.1 Brief Background of Sam Jonah Library, University of Cape Coast

The University of Cape Coast, formerly the University College of Cape Coast, was established in 1962. It was founded to basically train teachers for the second cycle schools and teacher training colleges in the country. The college was also mandated to provide opportunities for Ghanaians aspiring for tertiary education as well as help churn out the trained and competent workforce that was needed to drive the Ghanaian economy.

The University of Cape Coast like every accredited tertiary institution is mandated to have an academic library. The University of Cape Coast library, recently named 'The Sam Jonah Library', is one of the largest academic libraries in Ghana. The collection is housed in a magnificent five-storey library complex situated right in the centre of the university campus. The library has the capacity for holding seven hundred and fifty thousand (750000) volumes of books excluding pamphlets and journals. It is also equipped to seat more than two thousand (2000) users at a time. It is the most frequently used facility in the University with approximately one thousand (1000) visits per day. It is a hybrid library with approximately over two hundred and sixty thousand (260000) hard copies and a substantial number of e-books and databases to be accessed via the internet. The University of Cape Coast Library system comprises College Libraries, Departmental Libraries and Hall libraries of the University (University of Cape Coast Library Guide, 2012).

The Cataloguing Section of the Sam Jonah Library is the outfit responsible for cataloguing and classification in the library. It is staffed with a mixture of professional librarians and para-professional librarians.

1.1.2 Brief Background of Balme Library, University of Ghana

The University of Ghana (UG), Legon, is the oldest and largest of all Ghanaian tertiary institutions. Founded in 1948 as the University College of the Gold Coast, it was originally an affiliate college of the University of London. It gained full university status in 1961, and now has nearly 40,000 full time students. Its original emphasis on the liberal arts, social sciences, basic science, agriculture, and medicine, has been expanded to provide more technology-based and vocational courses as well as postgraduate training (University of Ghana, 2014).

Established in 1948, the Balme Library is the main library of the University of Ghana. In addition to the Balme Library, there are other libraries in the various Schools, Institutes, 7 Departments, Halls of Residence and the Accra City Campus, altogether forming the University of Ghana Library System. The Library provides excellent facilities and products which include the 24-Hour reading room, Research Commons (RC), Knowledge Commons (KC), Ghana-Korea Information Access Centre, printing and binding services, reprographic services and a networked environment with computers. The collection of the library, which consists of both electronic and print resources, provides essential background reading for the courses taught. The Library is dynamic and continues to adapt to changing technologies and patron information needs (University of Ghana, 2014).

The Balme Library's Cataloguing section is mandated with all tasks concerning the cataloguing and classification of the collection of the library.

1.1.3 Brief history of Osagyefo Library, University of Education, Winneba.

The University of Education, Winneba (UEW) was established in September, 1992 as a University College under PNDC Law 322. On 14th May, 2004 the University of Education Act, Act 672 was enacted to upgrade the status of the University College of Education of Winneba to the status of a full University.

The University College of Education of Winneba brought together seven diploma awarding colleges located in different towns under one umbrella institution. These Colleges were The Advanced Teacher Training College, The Specialist Training College and The National Academy of Music, all located at Winneba; The School of Ghana Languages, Ajumako; The College of Special Education, Akwapim-Mampong; The Advanced Technical Training College, Kumasi; and The St. Andrews Agricultural Training College, Mampong-Ashanti.

The three sites in Winneba now referred to as the Winneba campus is the seat of the Vice-Chancellor with satellite campuses at Kumasi, Mampong and Ajumako.

The University of Education, Winneba Libraries include Osagyefo Library (the main campus library), College of Technology Education Library-Kumasi Campus (Which stock mainly materials on technical and vocational education), College of Agriculture Education Library - Mampong Campus (stocks materials on agric and environmental studies education), College of Languages Education Library - Ajumako Campus (stocks materials on language education), and 5 specialized branch and departmental libraries. The collection of the libraries includes books, journals and compact disks in electronic and hard copy forms (University of Education, Winneba, 2017).

Within the Osagyefo Library is the Cataloguing and Acquisition section which is tasked with the acquisition, cataloguing and classification of information resources in the library.

1.2 Statement Of The Problem

The identification of the practice of cataloguing and consequently classification as a crucial activity in the operations of academic libraries is pervasive in library and information science literature (Reid, 2003; Taylor & Joudrey, 2008; Cabonero & Dolendo, 2013; Unegbu & Unuoha, 2013).

Sadly, this practice (Cataloguing and Classification) is one not too popular with users of the library, Para-professional staff and Professional staff of libraries. The erroneous impression of cataloguing and classification as nothing other than an old fashion routine among some Para-professionals and Professionals of the library has not helped the fortune of this crucial activity. Reid (2003) laid this issue to bare more plainly when he posited that the problem with cataloguing and classification is with its perception by non-professionals and ill-informed professionals. Most Professionals and Para-professionals though accept assignment to the cataloguing and classification section without objection; they may not choose the practice when offered a choice between the various activities and operations in academic libraries and would most probably choose cataloguing and classification as their last resort. This state of affairs according to Reid (2003) is as a result of the repetitive, routine and monotonous nature of the cataloguing work.

This lack of interest in cataloguing and classification contributed in large part to the consequent dearth in literature in cataloguing and classification research. Tanui (1997) opines that

cataloguing and classification research has lost its appeal and prevalence in Library Schools with many students and lecturers mistakenly thinking little of cataloguing and classification other than a washed-up necessary evil. Unegbu and Unuoha (2013) in referencing Spillane (1999) are blunt in their assertion when they pointed out a developing pattern in Library Schools where courses devoted to Cataloguing and Classification are being supplanted with courses with the words 'information' and 'organization' in them. Ocholla and Ocholla (2011) attribute the paucity of cataloguing and classification research to the shortage of qualified cataloguing lecturers and circumstances that preclude the total use and appreciation of technology in cataloguing and classification education.

This same dwindling interest in cataloguing research has been attributed to the 'Library (L)' and 'Information (I)' confrontation. Miller et al (2006) attribute the devaluation of cataloguing and classification and the consequent lack of research into the same area to the recent phenomenon that has seen more Library Schools joining the iSchool group.

Dadzie (2008) cited in Folashade (2014) agreed to the foregoing by asserting that the theory and practice of Classification happens to be one of the courses approved to be dropped by finalists in their training to be librarians. Nnadozie (2015) attributes the lack of interest in cataloguing and classification research to graduating students of library and information science perception of cataloguing and classification as difficult and their inferable below par performance in the course.

Folashade (2014) observes a surge in cataloguing and classification research in these contemporary times and attributes the surge to the advent and introduction of Information and Communication Technology in library operations. This surge in the quantum of research done on

cataloguing and classification was witnessed mainly in the United States of America and Europe which had hitherto more than held their own in the contribution towards cataloguing and classification research. In the context of the African continent, cataloguing and classification research saw very little interest until the advent of Information and Communication Technology and the subsequent library automation drive that followed (Folashade, 2014).

A review of current and relevant literature on the subject of cataloguing and classification in the context of the African continent leaves one in no doubt about the considerable effort of Nigerians towards filling the research gap existing in the area of cataloguing and classification.

The same cannot however be said in the Ghanaian context. Cataloguing and classification research before the advent of Information and Communication Technology was between non-existent and very little. This is evidenced by the existence of very little research on pre-ICT enhanced cataloguing. The library automation drive that followed the Information and Communication Technology revolution and evident in most public academic libraries in Ghana has not been able to change the fortunes of cataloguing and classification research for the better. Barring some notable research works on cataloguing and classification by Kisiedu, (1980); Alemna and Antwi (1984); Bello and Thompson, (2003); and Ahenkorah-Marfo and Borteye, (2010), research into the area has been largely neglected especially in these contemporary times. The research gap has been especially pronounced as a result of the lack of interest of graduate students to research into the area mainly because of its perceived technicality and difficulty. This is manifested by the paltry quantity of thesis, dissertations and long essays available on the area (Mutula & Tsvakai, 2002).

This study therefore sought to help fill the obvious gap identified in cataloguing and classification research in Ghana by inquiring into the evolution, practice, roles and challenges of cataloguing and classification as pertaining in some public academic libraries in Ghana.

1.3 Purpose Of The Study

The purpose of the study was to comparatively investigate the practice of Cataloguing and Classification as it pertains in three publicly funded academic libraries specifically University of Ghana, University of Education, Winneba and University of Cape Coast libraries.

1.4 Objectives Of The Study

Specifically, the study sought to:

- To comparatively investigate the roles and functionalities of Cataloguing and Classification in academic libraries in Ghana.
- To find out the nature of Cataloguing and Classification in relation to each other in these libraries.
- To find out the level of investment in Cataloguing and Classification periodically in these libraries.
- To unearth the challenges militating against the practice of Cataloguing and Classification in academic libraries in Ghana.
- To make some recommendations on how the practice of Cataloguing and Classification can be improved in academic libraries.

1.5 Research Questions

The study was guided by the following research questions.

- What role does Cataloguing and Classification play in the operations of academic libraries in Ghana?
- What is the nature of Cataloguing and Classification in these academic libraries?
- What is the level of investment in Cataloguing and Classification over time in these academic libraries?
- What are the factors hindering an elite Cataloguing and Classification practice in academic libraries in Ghana?
- What recommendations can be suggested to improve the practice of Cataloguing and Classification in academic libraries in Ghana?

1.6 Scope/Limitation Of The Study

Cataloguing and Classification is practiced in every academic library in Ghana be it public or private. A study into the practice of Cataloguing and Classification ideally should cover every academic library, both public and private for a conclusive and comprehensive study outcome but for limitations imposed by time and financial resources, the study was limited to three publicly funded academic libraries specifically Balme Library of University of Ghana, Osagyefo Library of University of Education, Winneba and Sam Jonah Library of University of Cape Coast.. Considering the number of public and private academic libraries in Ghana and the number studied in this research work, generalization must be done carefully especially taking into account the fact that the qualitative approach guided the research.

1.7 Conceptual Framework

Punch (2005) defines conceptual framework as a representation, either graphically or in narrative form, of the main concepts or variables, and their presumed relationship with each other.

In all organizations and establishments that deal with the acquisition and dissemination of knowledge and information, the management of such knowledge and information becomes crucial. Thus, the process through which knowledge and information needs are identified through to when they are shared with the person requiring same tends to be of importance to such organizations. For the purpose of this study a slightly modified version of Choo's (1998) process model on Information Management by Bouthillier and Shearer (2002) was adopted to anchor the study with the objective of bringing to light the position Cataloguing and Classification occupies in the value chain of the librarianship profession. Choo (1998) presents his model as a cycle in five basic steps comprising identification of information needs, information acquisition, information organization and storage, information distribution and information use. Bouthillier and Shearer's model replicates Choo's (1998) Information Management model by replacing the concept of information with the knowledge concept. The Knowledge Management process model is similarly cyclical and begins with the identification of knowledge needs, discovery of existing knowledge, acquisition of knowledge, storage and organization of knowledge, the sharing of knowledge and finally to the use and application of knowledge by users and clients (Bouthillier & Shearer, 2002).

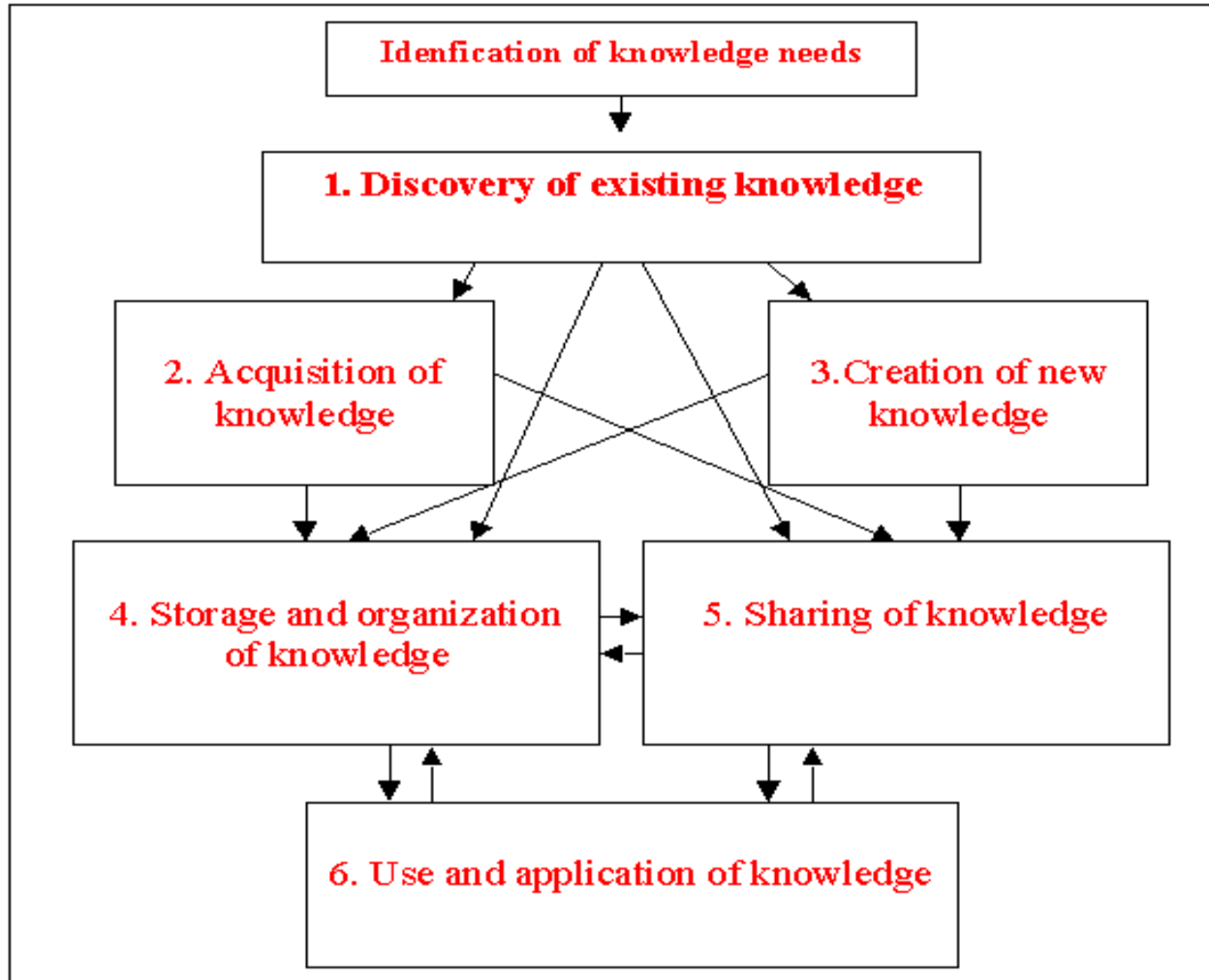


Fig. 1.8 Knowledge Management Processes (Bouthillier & Shearer, 2002)

Libraries as knowledge and information repositories and disseminators through their collection development and management practices identify the knowledge and information needs of their users through a number of avenues. This is followed by the discovery of information resources capable of fulfilling the identified knowledge and information needs. Acquisition of these information resources logically follows the discovery of these information resources.

The continuous collection development of libraries to satisfy the demands of clients necessitated the need to manage the collection. In managing the knowledge and information resources of the library, Cataloguing and Classification are the two main tools engaged (Rowley & Farrow,

2000). They are used in storing and organizing the knowledge and information contained in the information resources. These tools also play a huge role in sharing the knowledge and information for the use and application of clients by displaying them on various interfaces enabled more conveniently recently by the Information and Communication Technology revolution.

1.8 Significance Of The Study

It is a universally accepted fact that Cataloguing and Classification is arguably the most crucial bedrock of the librarianship profession. This fact, coupled with the sizeable portion of academic libraries' budget expended on cataloguing and classification, warrants and gives credence to any study that purports to inquire into the practice of this crucial activity in academic libraries.

The study will bring out the relevant and crucial issues pertaining to cataloguing and classification in the Ghanaian perspective by revealing the similarities and differences in the practice of Cataloguing and Classification in Ghanaian academic libraries and the possible reasons for any divergences recorded.

Since public academic libraries are without any doubt relatively more resourced at least in financial terms than their private counterparts, a study of this nature chronicling the practice of Cataloguing and Classification in these public academic libraries would serve as a guide and a reference point to private academic libraries, college libraries and technical university libraries in the practice of this activity in their outfits.

A study of this nature with its potential to identify the commonalities in the cataloguing and classification practices of academic libraries in Ghana could serve as a foundation stone for the

enactment of a common cataloguing and classification practice for all academic libraries in Ghana.

The study will finally contribute immensely to the body of knowledge in the area of Cataloguing and Classification, more importantly in the context of the Ghanaian case where a dearth in cataloguing and classification literature is very evidently manifested by the inadequate literature on the subject.

1.9 Organization of the study

This study is made up of six chapters:

Chapter one covers the introduction which comprised the background to the study, problem statement, purpose of study, research objectives and questions, scope of the study, theoretical framework , significance of the study and the organization of study.

Chapter two reviews the relevant and related literature of the study.

Chapter three describes the research methodology. It includes the research design, the population, sample and sampling procedure, the research instrument, the administration of instrument, methods of data analysis and ethical consideration.

Chapter four is a presentation of the data collected and its analysis.

Chapter five discusses the major findings of the study

Chapter Six provides a summary of the findings, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

In investigating a crucial issue at the heart of Librarianship like that of the practice of Cataloguing and Classification in Ghana, it is imperative that one discusses key concepts that will help place the work in proper perspective. This chapter aims to discuss some topical and key issues and concepts which have crucial ramifications on the practice of cataloguing and classification from the global, African and Ghanaian perspectives.

2.1 Evolution and historical perspectives of Cataloguing and Classification

The evolution, history and development of cataloguing and classification can be said to be as old as the library profession itself. The Babylonians who are on record to have been the first people to have found libraries were said to have had their information engraved on clay tablets. The first library catalogue ever discovered was in a library in Edfu in Northern Egypt. This pioneer catalogue was inscribed on the walls of the library itself and was basically a list of the books in the library (Mutula & Tsvakai, 2002). Reid (2003) similarly mentions Callimachus, a Greek, who is said to have collated a list of Greek literature held in the library at Alexandria in and about the years leading to 240 BC as one the earliest cataloguers known. Norris (1939) in chronicling the history of cataloguing state that, the form of cataloguing done in these early years were done with the ultimate goal of itemizing the clay tablets available in these libraries. Much as the cataloguing done in these forgotten decades did not have anything close to the

requirements needed for cataloguing today, Norris (1939) is of the opinion that historical studies found consistent evidence to the fact that compilers were groping towards a system.

Norris (1939) in his meticulous attempt to trace the history of cataloguing, states that the need to add the locations of the listed or inventoried items to the catalogue did not gain prominence until the 14th century. The 16th century is remarkable in the evolution and historical development of cataloguing mainly as a result of the major breakthroughs recorded in this century. Bakewell (1972) states that the catalogues in existence in the early years of the 16th century and the years leading to the century were mainly lists of documents or whatever medium deemed appropriate rather than bibliographic mechanisms and as such required no rules, codes or standards. By the end of the 16th century however, three significant attempts were made towards codifying and standardizing the cataloguing practice. The first of such rules and standards was Conrad Gesner's attempt in 1548 to codify methods of cataloguing. He suggested a primary catalogue designed with due regard to the order in which the information carriers were positioned on shelves with an index alphabetically arranged serving as a key. Another attempt was the 1560 cataloguing methods of Florians Treflerus, a monk who is credited with authoring one of the early texts on the economy of the library. Andrew Maunsell's cataloguing methods of 1595 wrapped the century up.

These rules and codes were personal in nature and as such did not enjoy widespread usage by librarians at the time but were the foundation stones of the more acceptable cataloguing codes that followed in the ensuing centuries.

In the African context, Mutula and Tsvakai (2002) opine that the concept of librarianship and all the activities therein are borrowed ideas which were introduced to Africa by missionaries and

colonialists from the western world. Mutula and Tsvakai (2002) citing Quigg (1968) stated that cataloguing in Africa commenced with the alphabetical listing of the titles of publications in school writing books. The expansion of libraries that followed necessitated the need to record more details of the publications than just the titles. The cataloguing that was done in school writing books was then replaced by full fledged book catalogues which were made accessible in the library. Revising these book catalogues however proved problematic and as such there was a movement towards the adoption and use of card catalogues. Card cataloguing stabilized the cataloguing landscape in Africa, and this is evidenced by the presence of card catalogues in all forms of libraries on the African continent. Card cataloguing as such was the preferred form of cataloguing until the advent of Information and Communication Technology brought into play the Online Public Access Catalogue.

In relation to cataloguing, the evolution and history of classification started at a later date. Satija and Martinez-Avila (2015) place the evolution of classification in libraries in the late 1800s and early 1900s and posits that classification was needed to organize, store and locate books that were coming up as a result of the print revolution. Norris (1939) is of the opinion that library classification until its universal acceptance in the early 1900s was being done on arbitrary basis like the colour of the cover page of the books, names of the donors or the size of the publication themselves. These bases were not only arbitrary but also difficult to defend hence the barrage of criticisms against the use of these items as basis for classification. The suggestion of the subject as a basis of classification was embraced as a more acceptable, defensible and reasonable basis and as such adopted (Norris, 1939).

In a bid to bring order to the different books and resources of libraries, classification systems or schemes have been engaged as the main tools to bring such desired order. In the history of

library classification, various schemes have been designed for use in the library profession with varying levels of successes. General classification schemes which cover all fields of knowledge have been in existence since the 19th century and include the Dewey Decimal Classification Scheme (1876) by Melvil Dewey, Expansive Classification Scheme (1892) by Charles Ammi Cutter, Library of Congress Classification Scheme (1904), Universal Decimal Classification Scheme (1905) by the International Federation for Information and Documentation, Subject Classification Scheme (1906-1939) by James Duff Brown, Colon Classification Scheme (1933-1987) by S. R. Ranganathan and Bibliographic Classification Scheme (1940-1953) by Evelyn Bliss to mention the major schemes (Satija & Martinez-Avila, 2015).

As times passed, the features of these classification schemes have evolved and adapted to suit these contemporary times. Standardization has been achieved by some schemes whilst others have gone extinct. Currently the major general classification schemes in use across libraries are the Library of Congress Classification Scheme, Dewey Decimal Classification Scheme and Universal Decimal Classification Scheme (Satija & Martinez-Avila, 2015).

2.2 Historical development of Cataloguing codes

In the quest of Librarians and Information Professionals to achieve bibliographic control, a key ingredient for success in this important mission is the promulgation of a universally accepted Cataloguing Code. Cataloguing codes are sets of standards or axioms aimed at instructing cataloguers in the preparation of entries for library catalogues so as to ensure uniformity and consistency in treatment (Harrod's Librarians Glossary of Terms and Reference Book). Several

attempts have been made over the past decades and centuries towards promulgating a single, effective and comprehensive cataloguing code, albeit with varying degrees of success.

Denton (2007) identifies Sir Anthony Panizzi (1797-1879), an Italian migrant to England as the first person to make an effort to codify a set of cataloguing rules for librarians when in 1837 he began a conscious endeavor to write a cataloguing code for the British Museum where he had been made the Keeper of Printed Books in 1836. To this end, Panizzi drew up what is now known as the 91 Rules for the Compilation of the Catalogue. The Rules delineated how to list names of authors and their corresponding publication titles and how to deal with pseudonymous works. In 1839, the Trustees of the British Museum accredited Panizzi's rules and they were duly published in 1841. According to Norris (1939), the conviction at the time of the publication of the 91 Rules was that all cataloguing controversies were about to be brought to a conclusive end once and for all. Much as the Panizzi's 91 Rules did ensure more quality in terms of the description of books, its inability to ensure the creation of a catalogue for the whole collection set it back and attracted criticism from critics.

The next effort towards the design and creation of a cataloguing code is credited to Charles Ammi Cutter (1837-1903), a leading Librarian of his time and one of the forebears of the American Library Association and the creator of the Expansive Classification Scheme. Cutter designed his cataloguing code "Rules for a Printed Dictionary Catalogue" in 1876. The code set out the principles and tenets of cataloguing and a statement on the purpose and object of the library catalogue. It drew massively on earlier codes especially that of Sir Anthony Panizzi. The code was slightly revised in 1889 by himself and post-orbit in 1904 to the Rules for a Dictionary Catalogue (Denton, 2007).

Denton (2007) identifies the year 1908 as crucial for cataloguing. The year witnessed the publishing of a common set of cataloguing rules by the American Library Association and the United Kingdom Library Association. They could not however agree on everything and as such different editions were published for the American and British cataloguing work respectively. This apparent failure however marked the genesis of the universally acclaimed Anglo-American Cataloguing Rules that has served the librarianship profession and cataloguing in particular so well. The cooperation also ushered in the era of standardization and internationalization.

Seymour Lubetzky (1898-2003), a Belarusian who migrated to Los Angeles in 1927 is regarded as one of the foremost cataloguers of the twentieth century. He was a professor with the University of California, Los Angeles (UCLA) and a librarian with the Library of Congress. Seymour Lubetzky dedicated his professional career to the simplification of cataloguing rules and codes and worked hard towards that objective. He is credited as playing a crucial role in the conception of the 1949 'Rules for Descriptive Cataloguing in the Library of Congress' which was affirmed by the American Library Association. In an effort to simplify the overly complicated American Library Association Cataloguing Rules for Author and Title Entries which came out in 1949, Lubetzky undertook a systematic understanding of the works of earlier cataloguing visionaries like Panizzi, Jewett and Cutter. In 1953, Lubetzky came out with his Cataloguing Rules and Principles (Denton (2007)).

The product of Lubetzky's effort was instrumental to the phrasing and provisions of the Statement of Principles passed at the International Conference on Cataloguing Principles commonly known as the Paris Principles in 1961. The Paris Principles, which was a standard with 12 principles, had 53 countries and 12 international organizations as participants and sought to build common principles which could form the foundation for the enactment of various

national cataloguing codes. The Paris Principles and the ideas it espoused formed the basis for the release of the second collaborative effort from the Americans and the British, the Anglo-American cataloguing Rules in 1967. Like in 1908, there were disagreements between the Americans and the British on major issues and as such there were two editions.

In 1978 however, a consensus was reached between the Americans and the British and this culminated into the creation and promulgation of a single Anglo-American Cataloguing Rules. The need for a single code was also strengthened by the coming into play of the Machine Readable Catalogue (MARC) format and the International Federation of Library Institutions and Associations' (IFLA) International Standard Bibliographic Description (ISBD) framework in 1968 and 1971 respectively. It must be said however, that this consensus was reached through the intervention of the Joint Steering Committee for the Revision of AACR (JSC) which had its members drawn from the Canadian Library Association, American Library Association, British Library, Library of Congress and the Library Association of the United Kingdom (Denton, 2007; Ehlert, 2010).

The Second Edition of the Anglo-American Cataloguing Rules underwent revisions in the years 1982, 1983, 1985, 1988, 1998 and finally in 2002. Ehlert (2010) points out that a 1997 international conference held to discuss the principles and prospective development of AACR held in Toronto, Canada, brought to the forefront some issues and shortcomings of the AACR2. These issues were mainly grounded in the fact that the AACR2 was not equipped to prescribe the required treatment for the formats in which information resources at the time found themselves mainly as a result of the ICT revolution. As Anhalt and Stewart (2012) put it, although the AACR through revisions over the years, had the capacity to accommodate the description of information resources in other media, it remained predominantly a print-oriented standard with a

few rules for other media that clearly seemed to be an afterthought. The Joint Steering Committee for the revision of AACR which had at the time laid plans for the revision of the AACR2 to AACR3 had to abandon such plans for a new direction. Thus, a new cataloguing code with the potential of taking advantage of the technological landscape and capable of overcoming the shortcomings of the AACR2 was mooted and designed and named Resource Description and Access (RDA) in 2010.

The latest cataloguing standard (RDA) which is mainly based on Functional Requirements for Bibliographic Records (FRBR) was designed primarily to describe among others information resources in electronic formats (Denton, 2007; Ehlert, 2010).

Anhalt and Stewart (2012) citing the Joint Steering Committee and the Committee of Principals affirm clearly that the mission and goal of RDA is to be the latest and updated code or standard for the cataloguing and description of information resources and the granting of access to them. According to them Resource Description and Access (RDA) was built on the foundations of the Anglo-American Cataloguing Rules even though it was primarily conceptualized for the technological world and the description of information resources in all contents and media.

Dobreski (2013) contends that RDA is better suited to the current prevailing technological environment, has a better accommodating capacity for the different types of resources available currently and has the potential of bringing the library community in alignment with other metadata communities especially commercial search engines. Dobreski (2013) in espousing the merits of RDA asserts that clear language for patrons, clear depiction of relationships between items and the well defined structured data that allows easy manipulation by computer systems

has enabled OPACs containing information resources described on the basis of this standard to be user friendly and flexible.

The RDA standard since its release in the year 2010 has been considered seriously for adoption especially by libraries in the advanced countries. Libraries in the developing world are however considering the migration cautiously with the immediate concern on building the required capacity for the eventual migration. The initial financial outlays required for the migration and the similarities in the structure between the RDA and AACR2 are partly informing the decision to continue the use of the AACR2 in these libraries (Sanchez, 2011; Ahonsi, 2014; Parent, 2014; Lisius, 2015).

2.3 Symbiotic relationship between cataloguing and classification

In the organization of knowledge and information in academic libraries, cataloguing and classification plays a vital role (Rowley & Farrow, 2000). Cataloguing, which is the art of describing or recording bibliographic details of information resources according to accepted standards, is a major library procedure aimed at ensuring that the information resources of the library and the knowledge and information contained therein are organized in the most helpful and relevant manner. To complete this knowledge organization process usually requires library classification to be carried out to compliment the cataloguing activity. These two activities (cataloguing and classification) go together and are deemed to be two sides of the same coin (Rowley & Farrow, 2000). Their relevance is such that the absence of one activity renders the entire organization of knowledge process incomplete.

In the words of Rowley and Farrow (2000) “when you catalogue a book, you classify it to complete the process”. Sales (2005) identifies classification as an important activity in the main cataloguing process of libraries. In her opinion, classification is the final and most crucial activity that concludes the cataloguing process after descriptive and subject cataloguing have been carried out.

2.4 Role of Cataloguing and Classification in libraries

The practice of cataloguing and classification has long been viewed as an isolated and secluded activity of the library’s operation. An image is often etched in the memory of library users about library cataloguers in which they are housed in a sequestered part of the library, seated behind computers, surrounded with books and seemingly uninterested in whatever is going on in the outside world except what they are working on (Garcha & Buttlar, 1999).

The role cataloguing and classification play in the day to day activities and ultimately the operations of an academic library is immense. This is after all an activity that has been part of libraries from their earliest forms up till now. Admittedly, cataloguing as was practiced by Callimachus, the first cataloguer known (Reid, 2003), in Alexandria, Egypt in and around 240 BC would be quite different from the cataloguing and classification practiced in academic libraries and other kinds of libraries in the year AD 2017.

The point is, cataloguing has been around for over seventeen centuries and is showing no signs of relinquishing its relevance in libraries and academic libraries especially (Reid, 2003). Like every other activity or operation seeking to survive and remain relevant in the grand scheme of things, it has admittedly undergone changes, not least being the movement from card cataloguing to computer and online cataloguing (Mohr & Schuneman, 1997). Any activity that can exist in an

institution for such a period can be regarded as an essential activity in the operation of such an institution (Tanui, 1997).

The role of cataloguing and classification in academic libraries is pervasive in librarianship literature. Howard (2007) opines that the practice of cataloguing and classification plays a critical part in developing the collection of the library. The library through its cataloguing and classification practice is able to know the materials it has in its collection and correspondingly the information resources it does not have in its holdings. The library catalogue, which is the end product of the cataloguing process, lists the information resources owned by the library and aids users in the retrieval of these documents. Mercun and Zumer (2008) assert that modern Integrated Library Systems have features and capabilities of retaining in memory unsuccessful queries by users of Online Public Access Catalogues. Thus a material requested by a user but not found in the library catalogue, can be recorded by the collection development librarian as a potential material to be acquired for the collection of the library. A collaborative effort between the collection development librarian, the cataloguing department and the reference section would enable the collection development librarian to know the kind of publications enquired from the reference section and the library catalogue and required by users for their research pursuits. This can serve as a genuine source for developing the collection of the library (Howard, 2007).

Cataloguing and classification also aids bibliographic control in an academic library. The Harrod's Librarians Glossary of Terms and Reference Book (6th ed.) defines the term bibliographic control as "the creation, development, organization, management and exploitation of records prepared firstly: to describe items held in libraries or on databases and secondly: to facilitate user access to such items". The manual on bibliographic control compiled by IFLA's International Office for Universal Bibliographic Control similarly defined bibliographic control

as “the development and maintenance of a system of adequate recording of all forms of materials published and non published, printed, and audio visual or otherwise which add to the sum of human knowledge and information”. Bibliographic control is a relatively new concept stemming from the desire of information professionals to have control over all publications originating from all countries the world over in every format imaginable. These publications can then be trailed, systematized and arranged so that they can be easily accessed and retrieved. The main objective of bibliographic control is to organize the totality of recorded or published information so that they can be easily identified and accessed. In basic terms bibliographic control can be described as comprising the activities paramount in organizing the bibliographic universe and arranging those using established standards so that they can be identified and retrieved. These activities include descriptive cataloguing, subject cataloguing and classification. Descriptive cataloguing are the activities carried out to describe the materials in the collection of the library in terms of their characteristics and other noticeable and relevant features (Entsua-Mensah, 2015). Subject cataloguing are the activities performed to provide an overview of the most important subjects which a document deals with (Reid, 2003). Classification is basically arranging the collection of the library based on their subject areas (Entsua-Mensah, 2015).

These three activities which form an integral part of the cataloguing and classification practice enable the academic library to organize its collection and arrange them in the most helpful manner to its users and thereby improve accessibility.

The organized nature of the collection of the library enables items in the holdings to form part of the bibliographic universe. This is as a result of the standard codes used in descriptive cataloguing, subject cataloguing and classification of the collection. Standard codes for descriptive cataloguing includes the Anglo-American Cataloguing Rules and the Resource

Description and Access whilst the Library of Congress Subject Headings (LCSH), the Sears List of Subject Headings and the Medical Subject Headings are some of the resources used for subject classification. Classification of the collection of the library is done on the basis of provisions of standard schemes like the Dewey Decimal Classification Scheme, the Universal Decimal Classification Scheme and the Library of Congress Classification Scheme (Entsua-Mensah, 2015).

Steele (2009) trumpets the role cataloguing plays in facilitating resource sharing among academic libraries. Libraries, especially academic libraries have moved on from cataloguing and making accessible to its users, materials from its own local collection. There is now a movement towards making available to library users, materials in the local collection as well as materials in the holdings of other libraries both inside the country and outside the country (Song, 2000). Most library catalogues of academic libraries are members of union catalogues, be it local or international and this enables the users of the library to have access to the collection of the local library as well as the collection of other members of the union catalogue.

The emergence of the need for cooperation among libraries has enabled the potential of library catalogues to be exploited further. Cannell and Guy (2001) duly observed that “the emergence of library cooperatives in the 1970’s stimulated the evolution of cooperative cataloguing systems and resource sharing, which in turn began the evolution of what would currently be termed a centralized union catalogue”. A union catalogue is a combined catalogue that contains the cataloguing records found on individual library catalogues of a group of libraries. As Hider (2004) puts it, union catalogues have always been a very useful tool for interlibrary loans and document delivery, thereby making its contribution to resource sharing significant. Unfortunately, Ghana currently is without a national union catalogue even though most academic

libraries in Ghana do have local union catalogues whereby the collections of satellite libraries can be accessed through the catalogue of the main library.

Posner (2012) believes the appropriate use of established standards ensures that the catalogues of libraries are able to communicate locally, regionally, nationally and even across borders. Thus, the library's own collection which is its portion of the bibliographic universe becomes available and shareable to users irrespective of geographic boundaries.

This resource sharing between academic libraries aids users in their search for relevant information as it widens their source of information. Most academic libraries extend Inter Library Loan and Document Delivery services to their clientele and as such a user who requires a material located in another library can get access to such a material through the library he is patronizing.

Reid (2003) asserts that another role that cataloguing plays in an academic library is that it adds value to a collection. She begs the question: "if you don't know what you've got, how can you exploit your resources properly?" This is to say a library ought to know the kind of publications it has in its possession, their subject matter and consequently the kind of knowledge and information needs they satisfy. Cataloguing the publications owned by a library enables the library to have an idea of the information resources it possesses in its collection and the kind of queries they can help answer.

According to Reid (2003), if a library invests a percentage of its budget on the acquisition of new information resources and users have no idea of the existence of such resources because they have not been catalogued and consequently cannot be located in the library catalogue, then the investment can be deemed to have been a waste. The information resources acquired by

academic libraries are meant to be used by library users, but they will not be used if the patrons of the library do not know about their existence, availability and location. The Online Computer Library Center (OCLC) is also in agreement with this point of view with its consent to the adage that “if a user cannot find it, the item is not really there”. They further state that if your holdings aren’t properly catalogued, they are missing from the OPAC and they are all but invisible to your users and that implies a diminished return on the investment made in the library collection. This is a scenario that the practice of cataloguing and classification seek to prevent.

Omekwu (2008) professes that most academic libraries on the African continent spend a sizable portion of their library budget on the acquisition of new books information resources. These expenditures translate into significant figures and as such constitute a drain on the library’s already strained financial position. For academic libraries on the African continent to make the best out of this relatively costly investment, there must be a comprehensive cataloguing system that seeks to provide a simple yet detailed bibliographic record for the holdings of the library and at the same time provide bibliographic access to the users of the library (Omekwu, 2008). Most academic libraries have this objective in mind and are trying to achieve them albeit with varying degrees of successes.

Bopp and Smith (2011) predicate that the practice of cataloguing and classification aids bibliographic instruction in academic libraries. Bopp and Smith (2011) dates the origin of bibliographic instruction at around the mid- 1970’s and describes it as “the educational activities designed to teach learners how to locate and use information”. They went further to juxtapose bibliographic instruction to library instruction and concluded that bibliographic instruction permeates the tangible physical frontiers of the information centre and further off the boundary of the specific institution. Library users are usually in a race against time to locate relevant

materials quickly and as such require instructions on how to locate and access the materials needed quickly. Cataloguing plays a crucial part in providing such instructions to the users of the library. The main duty of cataloguing which is to grant bibliographic access to the information resources in the information centre, makes the cataloguing section the ideal facilitators of these instructional orientations (Xu, 1995).

The catalogue grants admission to the information resources available in the library through the use of access points like the authors, title of publication, subject headings, call number and the International Standard Book Number (ISBN). Cataloguing and its practitioners, cataloguers are ideally placed to instruct users on how to retrieve information from the library catalogue since they are the ones responsible for its creation, management and revision.

Cataloguing also plays a role in the reference service offered by an academic library. The Reference and User Services Association (RUSA) defines reference services or transaction as “information consultations in which library staff recommend, interpret, evaluate and/or use information resources to help others meet particular information needs”.

The Association of Research Libraries (ARL) describes a “reference transaction as an information contact that involves the knowledge, use, recommendation or instruction in the use of one or more information sources by a member of library staff”.

Bopp and Smith (2011) argue that a library might have a comprehensive collection, many object guides, a fully functioning library catalogue, a rich diversity of electronic resources, tidy washrooms coupled with a great signage but without the services of the reference librarian, such a library cannot function effectively.

The functions of cataloguing and the reference section are intertwined and as such the two can be said to be interdependent. Indeed the cataloguing and classification section of an academic library is tasked primarily to describe and classify the holdings of the library whereas the reference section of the library is concerned with the retrieval and transfer of information needed by library users. Xu (1995) observes that “cataloguers like to work with books whereas reference librarians like to work with people”. The two units over the years have been isolated geographically and professionally as a result of this split but the interdependency in their work should integrate them rather than isolate them. Miller (as cited in Xu, 1995), opines that the cataloguing and classification section and the reference department have been called the ‘Siamese twins’ of the librarianship profession. This can be said to be the consequence of the inseparable nature of the work of these two units. For a reference section to discharge its duty professionally, it needs the library catalogue which is created, managed and revised by the cataloguing section. There is therefore a close collaboration between the two sections in activities like library orientations, bibliographic instructions, information literacy etc in academic libraries.

Cataloguing also plays a role in authority control and collocation in academic libraries (Taylor & Tillet, 2004). Collocation enables users in search of information on a particular topic to have access to such information as well as information on all other items related to the desired topical item. This collocation is enabled by the concept of authority control. Authority control is described as a series of action aimed at arranging and organizing the components of library catalogues and bibliographical information through the use of a singular and distinctive term for each topic. Thus authority control ensures that one authorized name or subject is used as

main entry or subject heading and all variant ones are then related to it by the use of see reference and see also reference (Taylor & Tillet, 2004).

Cataloguing enables the linking of related works through the use of multiple subject headings so that users can retrieve not only information on specific topics but also all other works that may seem to be related to the topic desired. Cataloguers use the techniques of ‘see reference’ and ‘see also reference’ to bring related works together. See reference directs users from terms or names that are not used to terms and names that are used. See also reference is a reference that directs the user from one term or name to other related terms or names (Taylor & Tillet, 2004).

Authority control is a relevant concept in library cataloguing but often ignored, misconstrued or underappreciated. Taylor and Tillet (2004) assert that “authority control facilitates access to a library’s holdings by means of organization, standardization, accuracy and consistency”. They argue that the concept is important for the efficient and faultless browsing and use of library catalogues. This culminates in a broader information base for library users and can redirect a user searching for a material under a wrong term or name to an appropriate term or name.

2.4.1 Cataloguing For Access Points

Rowley and Farrow (2000) identify another role cataloguing and classification play in academic libraries as the determination of access points. Access points are bibliographic details of information resources that can be used to retrieve the cataloguing records of these information resources from the OPAC or any information retrieval system. Library catalogues can be said to be the end products of the cataloguing process in an academic library and are also a form of information retrieval systems. The library catalogue as an information retrieval system as such requires an input in order to produce an output or result. These inputs are the access points.

Rowley and Farrow (2000) defined access points as “codes, terms or the like through which an entry in a bibliographic record may be found”. Reid (2003) described access points as “technical terms for the words in the catalogue record which enable users of the catalogue to find the items they are interested in”. Essentially, access points are gateways that can be used to trace a material in a catalogue or database. It is however not every bibliographic detail of a document that can serve as an access point. The generally accepted access points in academic libraries common to the Online Public Access Catalogues in these libraries comprises among others the names of authors.

The name of the author is arguably the most reliable of all the access points (Iwe, 2005). Here the name of the author whose publication is sought is entered into the system. The library catalogue produces a result in a form of a list of all publications authored by the said author. In times past, the library catalogues of academic libraries in Ghana produced results based on only the publications it has in its holdings but with the advent of library cooperation and the subsequent merging of individual catalogues into union catalogues, a library user gets not only documents from the local catalogue but also from other members of the union catalogue (Ahenkorah-Marfo & Borteye, 2010). The library user then peruses the list of results produced by the catalogue and selects the particular publication he/she requires. A click on the title of the publication produces the call number of the publication. Iwe (2005) further asserts that while the name of the author might be the primary access point engaged by the user, the title of the publication remains imperative in the searching process. This is because the library most likely owns more than one publication authored by the author in question and so the title enables the user to make the right selection from the different publications of the author.

The book or publication title goes head-to-head with the author's name in terms of reliability as an access point and they end up being used together (Sloan, 1992). A user who wants to use the title of a publication as an access point will enter the title in the library catalogue. The library catalogue produces its outcome by listing and displaying the documents in the library with any form of semblance to the title entered in the system. The user then peruses the list which is likely to contain entries of publications which are similar in terms of title but authored by different authors. The author's name can be added to narrow down the search results and aid the selection process (Sloan, 1992).

The subject of a book or publication is the field of study or the subject content of the publication. Every information resource or publication as such has a subject heading assigned to it and that represents the subject content of the material. The subject is not used as an access point as regularly as the name of author and the title of publication is but can be advantageous when the user has no author or title in mind but can be said to be 'phishing' (Rowley & Farrow, 2000). A library user can start the search for information on an unfamiliar concept by entering it in the catalogue as a subject. This enables the user to acquire relevant publications that can assist the user in his research pursuits (Prichard, 1981).

Rowley and Farrow (2000) contend that the call number is an access point and can be used to access information resources from the library's catalogue if the user has it in mind. The call number is a number or letters or a combination of these indicating the specific subject and location of a work in a library. It is usually made up of two numbers: the classification or class number and the author or title cutter number. The classification number is a number ascribed to an information resource as a by virtue of the place the intellectual content of the resource occupies in the selected classification scheme. The author or title cutter number is derived from a

combination of the surname of the author or the title of the publication and a Cutter book. The author or title cutter number aids librarians in the shelving of their books on shelves alphabetically (Entsua-Mensah, 2015).

2.5 Library catalogues as a major by-product of cataloguing

Cataloguing has variously been defined by different authors.

Tanui (1992) defines cataloguing practically as the compilation of a list of documents in a library according to a set of standards so as to inform a library user of a material's availability and its document identifier if the material is available.

Reid (2003) also interprets cataloguing as “the art and science of describing a document or object in the smallest possible number of words”.

Gorman (2004) gives perhaps the most contemporary definition of cataloguing. He defines it “as the logical assembling of bibliographic data into retrievable and usable records and is the one activity that enables the library to pursue its central missions of service and free and open access to all recorded knowledge and information”.

These efforts of different authors at defining cataloguing brings to the fore the universal acceptance of cataloguing as an essential tool for the organizing of knowledge. Its basic purpose is to describe bibliographically all information resources in the collection of the library. This description of information resources is usually done based on generally accepted cataloguing codes and standards like the Anglo-American Cataloguing Rules (AACR) and the relatively new Resource Description and Access (RDA). These cataloguing codes and standards are sets of standards aimed at aiding and directing library cataloguers in the preparation of entries for

library catalogues. This ensures uniformity in the cataloguing work the world over and ensures that catalogued materials can be shared and used irrespective of differences in geographical locations.

The immediate and most quantifiable end result of the process of cataloguing is the creation of a library catalogue (Rowley & Farrow, 2000).

Taylor and Tillet (2004) identified bibliographies, library catalogues, indexes, finding aids and registers as some of the tools relevant for information seeking and retrieval in academic libraries. Aina (2004) agrees with Taylor and Tillet (2004) and positioned the library catalogue as the most important information retrieval tool to every library. He defines a library catalogue as “a list of all the items in a collection usually arranged by author, title or subject and is an index to the collection of the library”.

Rowley and Farrow (2000) similarly define a library catalogue as “a list of documents in a library with the entries representing the documents arranged in some systematic order”.

Thus the library catalogue provides a comprehensive list of the materials or information resources (print, electronic, micro formats, videos and audio-visuals) in the collection and where they can be found and their document identifiers like accession numbers, classification numbers and call numbers.

Librarians view cataloguing as having the objective of providing a service to the patrons of the library. This service is provided primarily by the library catalogue acting as a surrogate or indirect service provider in that the service is provided by the catalogue system to the patron and not by a person specifically. To this effect, Bade (2008) describes the library catalogue as an “indirect communication” between the cataloguer and the user.

Kani-Zabihi, Ghinea and Chen (2008) posited that the library catalogue as a result of the crucial role it plays in academic libraries must be managed well so as to represent the collection of the library as closely as possible. In the view of authors like Mulla and Chandrashekara (2009); Starck and Zadeh (2013) and Msagati (2016), the promotion of the library catalogue is equally important as it is the surest way of ensuring that the clients and users of the library are aware of its existence.

In the discourse about library catalogues and their functionalities in libraries, no author has provided a better perspective than that proffered by Chales Ammi Cutter in 1904. Cutter documented the functions of a library catalogue in his 1904 publication “Rules for a Printed Dictionary Catalogue”. In the opinion of Cutter, library catalogues firstly enable a library user access an information resource of which any of the author, the subject or the title is known (Rowley & Farrow, 2000)..

In Cutter’s view, the library catalogue aids the retrieval of publications in the library upon the input of certain bibliographic details of a publication. These bibliographic details collectively called access points aids the retrieval of a particular book from a collection spanning hundreds of thousands. A user with any of the access points in mind can retrieve any publication in so far as that document is in the collection of the library (Rowley & Farrow, 2000).

Secondly, library catalogues show what the library has by a specific author, on a given subject and in a given kind of literature. Cutter asserted that a library catalogue shows at a glance the number of publications owned by a library on a particular author or on a given subject. This is usually ascertained by entering either the author’s name or the subject as an access point. The library catalogue produces a result in the form of a list of publications authored by the given

author or concerning the desired subject area. The list of results would usually contain records with the remotest of resemblances with the access points and as such the user would need to narrow the search down considerably (Rowley & Farrow, 2000).

Thirdly, library catalogues assist the library user in the choice of a book as to its edition or as to its character. The library catalogue, as pointed out earlier does not include materials in print only, but also materials in other forms like electronic, micro formats, DVDs, audio-visuals, videos and many more. A library user can as a result select and retrieve from the collection the electronic version of a book instead of the print version. The catalogue also enables the user to make a selection from the different editions of a book available (Rowley & Farrow, 2000).

The essence of the library catalogue cannot be overemphasized as a result of the role it plays in information seeking in libraries especially academic libraries where the holdings run into the hundreds of thousands.

Quite apart from its relevance accruing from the fact that it is the end product of the entire cataloguing process, the essence of library catalogues can also be viewed in terms of the difficulty of information seeking in libraries without a recognized library catalogue.

To this effect, Reid (2003) opined that “a library without a catalogue is rather like a town without a sewer; you may get away with it for a while, but sooner or later something will start to smell. The bigger the town, the bigger the smell”

Foskett (as cited in Reid, 2003) puts the essence and role of the library catalogue more elegantly: “...instead of the individual store of knowledge, we have the corporate store: the library; instead of the individual memory, we have the corporate memory: library catalogue and other bibliographical tools. And just as the individual whose memory fails him cannot pass on wanted

information when it is needed, so a library whose corporate memory (library catalogue) is inadequate will fail in its purpose”.

The role and essence of library catalogues irrespective of the form, in information seeking in libraries is universally acclaimed and this is manifested by the huge amounts of investments made in the provision of library catalogues in various types of libraries (Akeroyd, 2000).

Library catalogues come in different forms although they all seek to achieve the same objective admittedly in slightly different ways. The advent of information and communication technology has altered the entire landscape of the cataloguing process and this has consequently forced the movement from manual based library catalogues to technologically oriented library catalogues.

Over the years library catalogues have evolved from various forms. Akeroyd (2000) identifies the card catalogues as one of the earliest forms of library catalogues used in libraries. Card catalogues were the product of a purely manual cataloguing process and consisted of multiple drawers containing 3x5 cards arranged alphabetically by names of authors, titles and subject entries (Rowley & Farrow, 2000). Every book in the library is represented by a card entry in the card catalogue and this card acts as a document surrogate for the physical item itself. It provides information on how to retrieve and access the physical material itself. Every card depicts the name of the author of the publication, the publication title, the call number, the physical description of the document and other important bibliographic details. The cards are filed alphabetically in drawers and stacked together to form a catalogue cabinet. The card catalogue is flexible to an extent as it allows easy modification of the catalogue. It is however susceptible to wear and tear. In Ghana, they tend to be the most popular of all catalogues and can be found in

almost every library especially academic libraries even though some of them are no longer in use as a direct consequence of the advent of technology.

The introduction of the book catalogue followed the card catalogue and sought to list the library's holdings in a book form. It is basically an extension of the card catalogue in that the entries found on catalogue card are collated, printed and bound in a book form. The book catalogue is portable and as such can be placed at different locations in the library. This enables library users to have access to the library catalogue at various locations in the library thereby preventing the trooping of library users to a central location to access the library catalogue. However the cost of its revision and its susceptibility to wear and tear and mutilation tends to discourage its use as the primary form of library catalogue in academic libraries (Rowley & Farrow, 2000).

The microform catalogue has the cataloguing records in micro images and in various formats such as microfilm, micro card, micro fiche and ultra fiche. This form of library catalogue requires the use of a micro reader to access the catalogue. The early form of micro form catalogues were created by capturing the images of catalogue cards or pages of book catalogues (Haigh, 1980). However with the advent of technology, a more recent method involves the production of microform catalogues directly from machine readable records. Microform catalogues tend to be portable and easier to duplicate, however the acquisition and maintenance of microform readers tend to challenge the use of the microform catalogue.

A sheaf catalogue is made up of sets of slips held together in specially produced loose leaf binders. The dimension of the slip varies but the more standardized size is 7 ¾ inches x 4 inches. The bibliographic details of the materials in the library are listed on these slips. The compact

nature of the sheaf catalogue makes it ideal for information centres where space is limited. The larger writing surface of the slips is quite useful as it enables the cataloguer to provide a more detailed entry on the slip (Balaam, 1993).

Akeroyd (1988) describes the CD-ROM catalogue as a variant of the online catalogue and is generated by mastering a library's database onto Compact Discs and more recently Digital Versatile Discs (DVD). A computer terminal or personal computer with a CD drive and appropriate software are required in order to use the CD-ROM catalogue. It is usually used as a back up to the online catalogue or can serve as a library's main catalogue. When the CD-ROM catalogue is networked, it enables users to access the catalogue from remote areas outside the library. The CD-ROM catalogue is easy to produce and saves space; however it has challenges with scratches to the CD and issues bordering on durability.

The library automation drive apparent in most academic libraries on the African continent is manifested clearly by the movement of these libraries from the traditional modes of cataloguing (card, book, and microform) to online cataloguing enabled by the tools afforded by the information and communication technology (Agha, 1986).

2.6 The Online Public Access Catalogue as a gauge of the efficacy of the Cataloguing practice in a library

The impact of the internet has been ubiquitously felt with the information science field benefitting immensely. The internet has enabled libraries to have online catalogues popularly known as Online Public Access Catalogues (OPAC) (Amekuedee, 2005). This type of library catalogue requires computer terminals loaded with cataloguing records prepared according to

standard cataloguing codes. These computer terminals are connected to the internet and enable library users to access the publications in the library's holdings. In this mode, individual cataloguing records or parts of a record are retrieved by means of access points. Most academic libraries in Ghana have automated their operations or at least are in the process of doing so. The shift to the online catalogue has been pervasive and rightly so as a result of the advent of technology. Online catalogues tend to give instant feedback, are quite easy to update and are not subject to the wear and tear that are associated with the card and book catalogues. The cost of its operation however prevents many academic libraries with limited budgets from benefitting from the role it plays in cataloguing in academic libraries (Emojorho, 2004; Amekuedee, 2005; Adeleke & Olarunsola, 2009; Mapulanga, 2011).

Online Public Access Catalogues (OPACs) have become popular as a result of the advantages they have over the other forms of library catalogues (Oduwale, 2005).

Fathahi (1995) gives an extensive outline of the areas the Online Public Access Catalogue (OPAC) trumps the other forms of catalogues used in libraries especially the card catalogue which is generally regarded as the most reliable of them all with the exception of the online catalogue.

Firstly, Fathahi (1995) alludes to the fact that online catalogues tend to be more beneficial than the other forms of library catalogue in the aspect of bibliographic records and Machine Readable Catalogue (MARC) formats. MARC in serving as a standard for the identification, storage and communicating of cataloguing information is more akin to the online catalogue than the other forms of the library catalogue. Unlike the card catalogue that for instance uses 3 x 5 inch cards with a rigid and less amenable form as the medium of communication; the online catalogue uses

the MARC record as its mode of communicating bibliographic information. The use of the MARC format has enabled more precision and better flexibility than is possible under the other forms of library catalogue. This also allows the records on the OPAC to be created and tailored according to the specific needs of the library without compromising the quality of the cataloguing work done or circumventing the standards guiding the process of cataloguing.

The online catalogue through its use of the MARC format also makes it relatively easier to integrate bibliographic records originating from other sources like commercial bibliographic utilities, shared cataloguing systems and OPACs of other members of a Union catalogue with minimal effort and expense.

Again, online catalogues tend to provide the foundation needed to advance a more complex but amenable system or structure than the other forms of library catalogue. Through the improvements in earlier versions of the online catalogue specifically the first generation catalogues, which were more or less an electronic version of the card catalogue, the modern versions of the OPAC provide features such as the granting of access to circulation, status and holding details and information of users.

Fathahi (1995) argues that perhaps the area where there is a vast difference between the online catalogue and the other forms of library catalogues is in the probing, retrieval and presentation of bibliographic records. While the card, book, sheaf and microform catalogues offers visible and apparent mediums with an unmistakable solid existence, computer access catalogues provides the user with a system to interact with although users usually find it difficult grasping the workings of the system initially.

Potter (2002) in articulating his support for the online catalogue opined that the Online Public Access Catalogue (OPAC) should be seen as a lens for exploring a much greater bibliographic universe than a single library could ever hope to contain.

He identifies three functions of the Online Public Access Catalogue as the library catalogue function, the authority control function and the circulation control function.

The OPAC in performing its library catalogue function effectively attempts to improve upon the functionalities of the earlier forms of the library catalogue especially the card catalogue. The library catalogue function of the OPAC goes beyond the capabilities of the card catalogue by providing features like keyword access, labeled screens, Boolean searching and interactive instruction. Notwithstanding these new features that accompanied the OPAC, the fundamental thrust of the library catalogue function is to inform users and patrons of the availability or otherwise of information resources in the library's collection. Thus the library catalogue function is restricted to the provision of bibliographic information just as can be found under the card, book, sheaf and microform catalogues. This function translates into the OPAC informing users of the availability of books and where they can be located if available. The library catalogue function thus falls short of the real need of the user who needs accessibility to information resources and not just information pertaining to their availability (Potter, 2002).

The OPAC in an attempt to satisfy the real need of users perform the circulation control function. This second function of the OPAC involves the linking of the OPAC database and the circulation system. This function enables the OPAC to provide not only bibliographic information, but also the provision of status information at the same time. The circulation control function thus eliminates the deficiencies of the library catalogue function and provides

information regarding availability as well as accessibility to the information resources in the collection of the library.

Potter (2002) in articulating the third function of OPACs alluded to an agreeable fact that bibliographic information and status information is useless if the user cannot find different books by the same author, different books on the same subject required or different books with similar titles and authored by different authors. This need necessitated the authority control function which provides a means for cross referencing variant forms of titles, author names and subjects to the correct and universally used forms.

The functions of the OPAC have afforded users of the online catalogue many advantages as set out by Potter. According to Potter (2002), Online Public Access Catalogues offer interactivity which effectively is the ability of the catalogue system to facilitate an exchange between the user and the catalogue system in a conventional mode. This feature of interactivity is what primarily sets the computer access catalogue apart from other forms of the library catalogue which do not offer such interactions to patrons. Seal et al (2000) in their exposition of interactivity as a feature of online catalogues state that computer access catalogues can be reactive and responsive to the end user in an inventive form. This is indicated by searching options, correction of operational errors, suggestion of substitute information resources capable of satisfying the search query and guiding the client in longer searches. The user as such receives help and feedback from the catalogue making consultation with staff minimal.

Another advantage of the Online Public Access Catalogue is its ability to identify user input errors and provide user assistance. Seal (2000) asserts that online catalogues can sometimes be

unforgiving on errors and that this can consequently be ascribed to computers' general weakness with dealing with errors.

In the opinion of Mathews (1991), there is a significantly higher degree of contentment with computer access catalogues among users than in the other forms of library catalogues. In his study Mathews (1991) states that over 90% of selected users for a study registered their strong preference for online catalogues over the other forms. Another 75% rated the online catalogue as better than the card, book and microform catalogues. Users ascribed their preference for the online catalogue to its continuous maturity in terms of user interface and enhancement in terms of contents and access.

Searching capability is another aspect where the online catalogue surpasses the other forms of library catalogue. The online catalogue offers patrons the ability to seek information from the online catalogue in a number of different ways not possible under the traditional forms of library catalogues. There is improved access to bibliographic information by virtue of the engagement of more access points like keywords, International Standard Book Number (ISBN), Library of Congress Control Number (LCCN) and International Standard Serial Number (ISSN).

Online catalogue also display bibliographic information and output in a better and significantly different way than the traditional forms of library catalogue do. The earlier forms of library catalogues display bibliographical records in a fixed singular display format whereas the online catalogue displays bibliographical records in diverse ways and in distinctive formats. The OPAC allows a user to peruse brief and concise bibliographic information, medium length bibliographic displays and a full bibliographic display format. These varying display formats hold varying amounts of bibliographic data (Potter, 2002).

The traditional forms of the library catalogue also falls short of the online catalogue in terms of availability and access. Whiles the Online Public Access Catalogue can be accessed on terminals both within and outside the library facility on the library's network, same cannot be said about accessing bibliographic records on card, book, sheaf and microform catalogues. The fact that OPACs are mounted on unsecured networks with no restrictions whatsoever enable users to have access to bibliographic information at anytime unlike the traditional forms of library catalogue which are usually restricted in terms of access when the library is closed or not in session (Amekuedee, 2005).

Breeding (2007) opines that the financial and logistical resources that are expended in the development and adoption of OPACs in academic libraries require management of these libraries to ensure that users derive the maximum benefit from this investment.

2.6.1 Maximizing the output of the Online Public Access Catalogue

For users to get maximum satisfaction from the Online Public Access Catalogue (OPAC) in terms of their information seeking pursuits, two broad strategies need to be considered and engaged. The first is a set of strategies and actions that seek to improve the OPAC itself in terms of its core functionalities, features and abilities. These set of strategies are centered on the OPAC facility itself. The second set of strategies and actions are centered on the users of the OPAC facility and are geared towards the training of users in the interrogation of the OPAC and the fine tuning of search strategies and techniques that are more user oriented and inclined, easy to grasp and at the same time capable of providing desired results (Breeding, 2007).

In his exposition of the first set of strategies aimed at improving the core functionalities of the OPAC, Breeding (2007) asserts that the weakness of the OPAC and the possibilities for their

improvements can be traced retrospectively for three decades. He identifies Web 2.0 movement as the primary factor for the dissatisfaction among users of the Online Public Access Catalogues. The absence of Web 2.0 features in most online catalogues placed them at a disadvantage in comparison with other web destinations users consulted for their information seeking pursuits.

Fiferek (2007) lay this situation to bare more plainly with his observation that “the online catalogue looks positively prehistoric in comparison with the exciting things that appear daily on the web”. This deficiency has resulted in the OPAC falling short of its web counterparts in terms of aesthetic appeal, practicality and user involvement.

Rowley (2007) and Markey (2007) are all of the opinion that the online catalogue could compete with other web destinations by introducing and reflecting the expectations of web-savvy users. They lay emphasis on the fact that implementing Web 2.0 trends into the Online Public Access Catalogue will be a major step towards the creating of ‘next generation catalogues’. Mercun and Zumer (2008) advise that to ensure OPACs play an important role in information seeking of users, designers of the online catalogue need to inculcate the information seeking patterns of users which has been swayed to a large extent by the web. Through this observation, the online catalogue is able to adopt and present an interface capable of enabling the satisfaction of the information seeking needs of users. Thus the core functionality of the OPAC needs a drastic improvement to the levels exhibited by the other web destinations. Mercun and Zumer(2008) identified the presentation of search passages and the perusing of results as precarious and tricky issues. Improvements in such problematic areas could take the form of an easily discoverable clear keyword search boxes and vastly improved searching possibilities.

OPACs also need to provide better help in the case of failed searches by suggesting alternative search terms and spelling modification. The ranking of the outcomes of queries by relevance and the clustering of results also enable users to scan through results more efficiently. This ultimately saves the user's time and makes them appreciate the OPAC facility more (Mercun & Zumer, 2008).

Maness (2006) and Abram (2005) in advocating for the implementation of Web 2.0 trends in the design of Online Public Access Catalogue asserted that Web 2.0 stimulates user ingenuity and participation and simultaneously aid and emphasize the concept of personalization and distinctiveness. These qualities are capable of making the online catalogue interactive, interesting and with the added advantage of gathering data that could help improve the core functionality of the OPAC. Abrams (2005) advocates the creating of user profiles through the personalization as this would enable the catalogue to keep track of saved searches and recommend materials relevant to users based on their profiles.

Wenzler (2007) is of the opinion that the most important Web 2.0 trend that needs to be implemented in the Online Public Access Catalogue (OPAC) is perhaps the involvement of users in the creation of the content of the catalogue. He admits that while it will be difficult for librarians to change from their normal operating procedures of not involving the input of library users in the designing of online catalogues, an attempt should at least be made to canvass the opinions of users so as to have an idea of what their expectations of the OPAC are. Thus while the cataloguing of information resources is a specialist function which would require effectively no user input, developers of the OPAC should make available avenues for canvassing users views in the form of user reviews, observations, tags and ratings. These techniques provide an

avenue for libraries to involve their clients and thus gather information relevant to the mission of providing an information seeking aid capable of assisting users in their search for information.

Breeding (2007) in his exposition of the second set of strategies asserted that training of users and patrons on how to interrogate the online catalogue efficiently through the use of search strategies and techniques are essential tasks towards the improvement of the Online Public Access Catalogues.

There is a general consensus among authors like Breeding, Markey and Maness that improving the core functionality of the OPAC to the very highest level without a deliberate and conscious effort to orient and educate users as to the capabilities, features and benefits of the online catalogue will most probably lead to a massive under-utilization of the OPAC.

Akeroyd (2004) opines that OPACs have been an operational information seeking aid in many academic libraries for a while and during that time have evolved from 'crude finding lists' and an electronic version of the card catalogue with often only a few access points to sophisticated retrieval systems that provide multiple access points and allows a range of search techniques and strategies like the Boolean searching, truncation, keyword searching and others.

Bhavnani et al (2008) laid credence to Akeroyd's position when they said that these search strategies and techniques enhance the process of information retrieval from online catalogues and databases. They are adamant on the position that a user cannot reasonably expect the online catalogue, no matter how functional it is, to automatically organize result hits based on categories that are meaningful to him or her. These search strategies therefore aid the user in the structuring of the search query so as to influence the kind of results the catalogue provides.

The Boolean search technique evolved from the Boolean Logic credited to the British Mathematician George Boole (1815-1864). The technique involves the application of the words AND, OR, NOT collectively known as the Boolean Operators. These operators aid in the specification of the information required by combining relevant terms in the required title and eliminating interfering and irrelevant terms. This is so to limit the number of results produced by the system and thereby saving the time a user spends in retrieving the required information from the online catalogue.

The operator AND reveals items and information containing both terms whereas the operator OR reveals information with either terms individually. The NOT operator however is used to eliminate a term from the search process altogether. The Boolean search technique can aid users in the limitation of results to only relevant and required results that will ultimately save users time and at the same time provide them with the needed information (Southern Utah University Library Guide).

The keyword searching strategy is perhaps the most conversant technique known to users or seekers of information. This is because the keyword search option has been available from the second generation Online Public Access Catalogues through to the current next generation online catalogues. This enables users to seek information on the basis of terms that has been indexed into the database of the catalogue. For such purposes, the subject headings field of online catalogues becomes very relevant as they tend to represent the entire contents of information materials in a singular term or phrase of terms. This search strategy aids users especially when they do not know specifically where to begin in the search process.

Truncation or wildcard searching technique is another feature of the next generation catalogue that has really improved its core functionality. Orienting seekers of information on how to use the truncation technique will vastly improve their ability to interrogate the OPAC efficiently. Truncation is a method that widens a search query to subsume different word endings and spellings. It involves the entering of the root of a word and attaching the symbol of truncation at the end of the word thereby ensuring that the OPAC returns results including any variation of the root word (MIT Library Guides).

The orientation and education of users of the OPAC on these search strategies and techniques will equip users with the capacity to appreciate the functionalities of the OPAC more and accept its role in information seeking in academic libraries.

Hildreth (2000) opines that the ability of the OPAC to satisfy its users in these contemporary times depends to a large extent on the model adopted and its features. Charles Hildreth acclaimed to be a Metaphysician of the Online Public Access Catalogues by the Associated Press in 1982 described the Models of OPAC as the significant milestones of the OPAC and the consequent designs, characteristics and features that accompanied them.

According to Hildreth (2000), the development of the different models of OPACs that have been in use in libraries, was informed and motivated by the convergence of two trends. One trend was the need to develop a new online system capable of mirroring the very popular card catalogue in its entirety. The second trend was the need to develop an online catalogue similar to online database searches of commercial search engines like Google.

Hildreth identified the First Generation online catalogues and the Second Generation online catalogues as the first two models of the Online Public Access Catalogue (OPAC). Mercun and

Zumer (2008) also identified the Next Generation online catalogues as the latest model of the Online Public Access Catalogue.

Hildreth (2000) asserts that first generation online catalogues came into being mainly as a result of the first trend which was necessitated by the need to create a new online catalogue system capable of emulating the card catalogue.

To this effect, Hildreth (2000) opines that the first generation online public access catalogue was an attempt to digitize the card catalogue that was predominantly in use at the time. The first generation OPACs were severely restricted in terms of access points or gateways to the catalogue. Access to the bibliographic records in such catalogues was restricted to entries through only the title and author data. The first generation OPACs allowed no access via subject, thus keyword access and controlled vocabulary were not allowed. It was impossible to refine and improve a search whilst in progress. The lack of complete records, subject access, authority-based searching with cross references and relevant searching techniques severely hampered the adoption and acceptance of the first generation OPACs and as such quite conceivably criticized as an inferior replacement for the traditional non-automated library catalogue.

The Second generation OPACs according to Hildreth (2000) emerged in the middle of the 1980s and represented a significant progress over the much maligned first generation OPACs. They are the product of the marriage of the two trends alluded to earlier. The Second generation OPACs which is the model predominantly in use mostly in academic libraries today (Mercun & Zumer, 2008) are very powerful computer based interactive retrieval systems that provide a vastly improved access to cataloguing records which represents the information resources in the

collection of a library. It has replaced the first generation OPACs which were deemed inadequate.

The Second generation OPACs are more accepted as a result of the advantages they have over the first OPAC model. Unlike the first generation OPACs that allowed only the title and author data as access points, the second generation OPACs offered more access points including subject, keywords, International Standard Book Number, Call numbers and Series Statements in addition to the author and title data. This offered users of the Second generation OPACs more gateways to the online catalogue. The Second generation OPACs also allowed remote access which enabled users to consult the OPAC from locations near and far from the library facility itself.

The Second generation OPACs also provided significantly better search results. This is as a result of the possibilities for the use of search strategies and techniques like the Boolean search and truncation techniques.

Another benefit of the Second generation OPACs is their ability to provide access to the resources of other libraries in the same Union catalogue through shared databases or system-to-system linkages (Hildreth, 2000).

The proliferation of commercial providers of information and the enhancement of the web through the introduction of web 2.0 trends enabled users of the library to experience a different sort of information seeking. The user interactivity available on the web based sources drew the attention of users to the inadequacies and weaknesses of the OPAC and consequently informed the user's decision to move towards web based information sources (Breeding, 2007; Markey, 2007).

Mercun and Zumer (2008) are of the opinion that while second generation OPACs may not have become obsolete and irrelevant, the trooping of users to web based information sources has derailed the role OPACs play in information seeking in academic libraries especially. This has made second generation OPACs inadequate if not totally irrelevant and necessitated the need for an OPAC that encompasses web 2.0 trends and does a whole lot more than just providing bibliographic records of available materials and their location.

Mercun and Zumer (2008) assert that these issues have brought into play the next generation Online Public Access Catalogues. The Next generation OPACs encompass all features of the Second generation OPACs in addition to the web 2.0 trends thereby offering a range of interactive features to users.

Another distinct feature of next generation OPACs is the attempt to rectify the weakness of the OPAC in providing only bibliographic information about available information resources. The next generation OPAC model rectifies this deficiency by linking the catalogue records with accession and circulation records thereby ensuring that the user does not only get information about the availability and location of the information resource but also the status of the material itself. Wenzler (2007) is adamant that the possibilities of the next generation OPAC are endless.

In these contemporary times, the efficiency of the cataloguing and classification practice in a library is assessed and measured on wide range of basis. Palmer and Choi (2014), Mercun and Zumer (2008) and Sridhar (2004) contend that perhaps the most objective basis of gauging or assessing the cataloguing and classification practice of a library especially academic and university libraries is the Online Public Access Catalogue which shows at a glance the

application of cataloguing standards whilst showing clearly the use of crucial concepts like subject cataloguing and authority control.

2.7 Cataloguing and Classification resources, tools and aids in academic libraries

The practice of cataloguing and classification requires tools, resources and aids to assist staff engaged in the activity. Miksa (2005) in her attempt to define cataloguing and classification tools and resources refers to them as “devices or documents which are either print based or electronic, that assists in the creation of original bibliographic record or the verification of bibliographic information in existing records”. Miksa (as cited in Nampeya, 2009), state that a distinction can be made between traditional cataloguing and classification tools and electronic cataloguing and classification tools. In her opinion traditional cataloguing tools are print-based resources and aids that assist staff in the cataloguing process whereas electronic cataloguing tools are technology enabled and web-based resources that assist the cataloguing and classification procedure through the medium of information and communication technology.

Adeleke and Olarunsola (2010) opine that information and communication technology has had an immense impact on library operations notably cataloguing and classification. They ascribe the relatively easier nature of the cataloguing and classification activity in academic libraries in these modern times to the availability of cataloguing and classification tools and resources most especially those in electronic formats. They counsel however that, to ascertain the optimum benefit accruable from investing in these tools and resources, staff engaged in the practice of cataloguing and classification need to be trained and have their capacities built in the use and application of these resources. In the instruction and training of staff in the use of cataloguing

and classification tools and resources, it is ultimately beneficial for staff to be trained on both sets of tools concurrently and not in isolation as the latter tends to feed and nurture the misconception that cataloguing and classification are two very different activities rather than two sides of the same coin (Adeleke & Olarunsola, 2009).

Kim (2003) cited in Nampeya (2009) posits that cataloguers' ability to create bibliographic records and facilitate access to information resources in academic libraries depends greatly on their knowledge and expertise of the available cataloguing tools and resources within the cataloguing profession.

The cataloguing and classification tools, aids and resources engaged by cataloguers in the performance of their duties include among others Cataloguing and Classification Standards and Schemes. Practitioners of cataloguing and classification in academic libraries rely on standards and schemes like the Anglo-American Cataloguing Rules (AACR), Resource Description and Access (RDA) and the Library of Congress Classification Scheme with its accompanying Library of Congress Subject Headings (LCSH) and Schedules in performing their duties. To achieve uniformity and enable resource sharing among academic libraries, bibliographic records of these libraries are created and organized according to structured set of rules and standards. These standards and schemes prescribe how each information resource in the library is described (catalogued) and classified (Weis & Carstens, 2000).

Intner (2008) identifies bibliographic utilities and their databases as essential cataloguing and classification tools and resources for cataloguers. Bibliographic utilities are commercial entities who offer an integrated information database for information centers, repositories and libraries to catalogue, share and facilitate access to cataloguing records according to local and international

bibliographic standards. These bibliographic databases are relied upon by cataloguers in their copy and original cataloguing activities and include the Library of Congress Online Catalogue and the Online Computer Library Centre (OCLC) WorldCat.

Nampeya (2009) identifies a variety of online cataloguing and classification tools that may not be classed under standards or bibliographic utilities but are nonetheless helpful tools to the modern cataloguer. These tools include the Classification Web, the Cataloguing Calculator, the Cataloguer's Toolbox, the Concise ISBD Punctuation, the Subject Cataloguer's Electronic Resource Toolkit, the Cataloguer's Desktop and the Cataloguer's Reference Shelf. These tools which are predominantly in electronic formats assist cataloguers in their practice.

Textbooks and Manuals on Cataloguing and Classification authored by experienced and knowledgeable experts on the subject represent another form of tools and aid for the practitioners.

In Africa generally, the investment into this important resource for practice of cataloguing and classification are usually inadequate with some libraries mistakenly overestimating the meager budget allocated to the practice (Oyedule & Ola, 2008).

2.8 Contemporary issues threatening Cataloguing and Classification in academic libraries

The influence of Information and Communication Technology on the art of librarianship is pervasive in library literature. The same Information and Communication Technology revolution can also be attributed to as the main reason for the threats the profession faces from commercial search engines and other information providing entities (Arinola, Adigun, Oladeji & Adekunjo,

2012). These threats to the librarianship profession have been felt more keenly by its composite activities especially cataloguing and classification (Propas & Johnson, 1998). Cataloguing and Classification has been identified by a host of writers (Libby & Caudle, 1997; Hill, 1998; Propas & Johnson, 1998; Sweetland, 2001; Fischer, Lugg & Boose, 2004) as the most susceptible library operation to the contemporary threat of outsourcing.

Libby and Caudle (1997) place the origin of outsourcing of cataloguing and classification activities in academic libraries to 1993 after Wright State University Library's contentious call to contract out most of its cataloguing and classification activities to TechPro of OCLC. This move generated lots of debates in cataloguing circles concerning the value and quality of outsourced cataloguing and classification and their challenges. The move also sparked a host of articles describing the outsourcing projects of various libraries, academic and public, around the world with conclusions indicating different levels of successes and failures (Libby & caudle, 1997).

Outsourcing, according to Sweetland (2001) is the engagement of outside contractors or parties for the performance of activities previously carried out in-house for a consideration. Hill (1998) posits that outsourcing; ever since it was introduced in cataloguing in the early parts of the 1990s has been the most threatening issue to cataloguers in these modern times. She further points out that using the word 'outsourcing' in the cataloguing department or section of a library can be likened to sneaking up behind somebody and screaming boo!. The term makes them flinch, uncomfortable and scared.

Fisher, Lugg and Boose (2004) assert that staff involved in the practice of cataloguing and classification should never be threatened by outsourcing as it is a measure to reduce cataloguing

costs which tends to be quite high as manifested by vast cataloguing backlogs that can be observed in various cataloguing departments.

Hill (1998) in pointing out her reservations about outsourcing admonishes against the dangerous practice of outsourcing the entire range of activities in the cataloguing department. In her opinion, outsourcing the entire operations of the department kills the morale of staff, dilutes the important practice of in-house cataloguing and ultimately proves costly when the problems and challenges usually associated with outsourcing surfaces later. Libby and Caudle (1997) observe that the negative backlash to the notion of outsourcing cataloguing work usually stems from cataloguers' belief that outsourcing contributes to the adulteration of local cataloguing proficiency and expertise, erosion of shared cataloguing initiatives and a decline in the caliber of new bibliographic records. They further point out that library management and administration are usually apprehensive about the notion of outsourcing when consideration is given to the fact that the vending agencies may be involved themselves in a cost reduction strategy. There is therefore the suspicion on the part of library management and administration that these vending agencies may not hire professional cataloguers for the job and in some extreme instances impose proprietary restrictions that precludes resource sharing.

Block (1994) provided a comprehensive account of the concept of outsourcing of cataloguing work when he stated plainly that outsourcing of cataloguing work is not by definition a bad initiative considering the benefits that could accrue from it when library management engage vendors in the cataloguing of special collections, archival collections, foreign language collections and large uncatalogued backlogs. He proffers the total cost of cataloguing, the effect of outsourcing on staff and users alike, library catalogue efficacy, ease of rush processing, implications on cataloguing systems, flow of cataloguing tasks, extent and nature of backlogs,

reversal time and staff capacity appraisal as crucial factors to consider before the decision to outsource the cataloguing activity is made. The risk of the loss of staff experienced in the cataloguing and classification which could be of relevance afterwards, potential loss of bibliographic control, adaptability and past experiences and the difficulty in restoring the cataloguing departments or changing vendors form a significant part of the risk profile of libraries that decide to outsource the cataloguing activity in all its entirety (Block, 1994).

Dunkle (1996) in her staunch defense of cataloguing against outsourcing pose the big question regarding the need for outsourcing at all. In her opinion, considering the common rationale of outsourcing is to turn over activities that could be said to be “non-core” to the objectives of the outsourcing establishment, she argues that the entire ‘cataloguing-outsourcing’ controversy and struggle is unnecessary given the fact that cataloguing is a crucial and a core activity to the mission of all academic libraries. Dunkle (1996) in her discussion asserts that assumptions made about outsourcing leading to cost savings, vendors using current technology that eventually lead to increased flexibility and the vendor providing top quality services as part of their standard operating procedures are full of drawbacks and fallacies. She points out careful planning and contract negotiations as the sure way to successful outsourcing projects.

The removal of perceived problems from an academic library could be the reason for outsourcing. Library managers and administrators who are not very conversant cataloguing are more inclined to turn it over to external agencies notably when a gap exists in terms of communication among cataloguers and library management (Dunkle, 1996).

In the perspective of the African context, Ugah (2010) predicates that academic libraries on the continent find themselves in a myriad of challenging issues. These libraries while struggling with

the perennial budget cuts are expected to improve and expand their services in direct response to the introduction of new programs of study and increased enrolment. He contends that library management and administrators consequently are frequently observed embarking on cost reduction strategies. Outsourcing of some library services has been identified as an option for achieving quality service provision at minimum costs. The issue of outsourcing of aspects of the librarianship profession however is a controversial one in academic libraries in Africa because of its perceived redundancy implications for library staff (Ugah, 2010). In his opinion, outsourcing in academic libraries in Africa is discussed with focus on its socio-economic implications and not on its merits as a management practice. Ugah (2010) citing Appleby (2002) mentions traditional library functions such as collection development and cataloguing as all susceptible to outsourcing because of the loss of their 'core activity' status. Cataloguing, Catalogue card production, book cards and pockets production, binding and book repairs, reprographic services and indexing and abstracting are activities of the librarianship profession that could be outsourced according to Ugah (2010).

Unegbu and Unuoha (2013) citing Tsiang (2006) assert that the issue of outsourcing of cataloguing and classification has intensified steadily over the years and if not remedied immediately might result in threatening the imparting of knowledge regarding cataloguing and classification which is losing popularity in Library Schools.

2.9 Cataloguing and Classification policies and their functionalities

A cataloguing policy is described as an approved and adopted document written usually under a consultative process that seeks to set out the mission, objectives and procedures of a cataloguing

unit of a library. A cataloguing policy is a crucial policy document and one required ideally before any cataloguing unit takes off. Ironically, the absence of a cataloguing and classification policy in cataloguing units operating at maximum capacity is a common phenomenon (Banush & LeBlanc, 2007). As Hoerman cites in Reid (2003), cataloguing and classification policies are initiatives which are quite simply disregarded and overlooked in the scramble to get as many information resources catalogued and accessible to users in the shortest possible time.

Reid (2003) in proffering a reason for the seemingly perfunctory attitudes of cataloguing units towards the enactment of policy documents, noted that the limited time available to cataloguers to conduct their routine tasks makes any effort to deliberately come out with a policy document delineating the tasks they are already performing and the reasons for doing so, downright unattractive and daunting.

Reid (2003) opines that a formal cataloguing and classification policy serves two purposes. Firstly, a cataloguing policy formalizes the standard operating procedure of the cataloguing unit and ensures that staff are not oblivious to the accepted ways of doing things. Secondly, a cataloguing policy serves as a reference material and a credible evidence of what cataloguers spend their working life trying to achieve.

Hoerman (2002) and Reid (2003) assert that cataloguing policies are not always written down but could also be unwritten and serve as a convention. They however argue that such policies are unable to provide evidence of what cataloguers do and to serve as a reference material at a future date. In the view of Banush and LeBlanc (2007), cataloguing and classification conventions should not exist in a library with a fully functioning written cataloguing policy.

Cataloguing and classification policies, be it written or unwritten should not be considered as set in concrete and permanent. Such relevant policy documents should be reviewed periodically and altered accordingly with due regard to the current provisions of applicable cataloguing codes and standards (Reid, 2003).

Banush and LeBlanc (2007) state that the rationale for the enactment of cataloguing policies is to have a document clearly spelling out how to administer the section and its core duties of ensuring access to information resources and contributing to bibliographic control. In their opinion, cataloguing policies do not only serve as reference materials for only staff of the cataloguing and classification section but to a greater extent the external community as it shows at a glance the entire cataloguing and classification practice of a library.

Banush and Leblanc (2007) assert that most cataloguing policies outlive their usefulness and this can lead to a situation where the cataloguing and classification unit is guided by policy documents with provisions no longer applicable or tenable. The authors counsel that such policies should state clearly, the dates for ratification by management of the library and the date for the review of the policy document.

Reid (2003) contends that the process of original cataloguing and copy cataloguing, procedures for the maintenance of the library catalogue as well as the appropriate location codes in use in the library should form an integral part of the policy document. Hider (2014) concurred with this position with his assertion that leaving seemingly trivial issues bordering on cataloguing and classification practice out of the cataloguing policy document is tantamount to leaving these issues to the discretion of cataloguers. This, he predicates defeats the purpose of the policy document. To forestall this, Hider (2014) recommends that duties of cataloguers, conditions for

recataloguing and reclassification and partnerships with bibliographic utilities and other libraries are some of the seemingly trivial issues that must be represented clearly in the policy document for a cataloguing unit.

2.10 Original cataloguing versus Copy Cataloguing

Bello and Mansor (2012) identify cataloguing as the fundamental basis of the theory of knowledge whereby information is systematized and organized whilst the structure and mode of handling them are identified and specified. Cataloguing is a specialist task that gives rise to controlling the bibliographic universe, managing information and developing resource location tools that assist users in their search for information resources (Bello & Mansor, 2012).

The practice of cataloguing before the advent of Information and Communication Technology was largely original cataloguing. El-Sherbini (2001) asserts that popular concepts in the field of cataloguing and classification like descriptive cataloguing, subject cataloguing, authority control and classification are extremely relevant and indeed were established primarily for the practice of original cataloguing.

Bello and Mansor (2012) expound original cataloguing as the practice whereby a cataloguer describes an information resource in terms of its bibliographic characteristics according to an accepted standard from scratch. Schultz (1995) defines original cataloguing as “creating a bibliographic record without reference to other bibliographic or cataloguing records for the same material under consideration or different editions of the item”.

For an information resource to be originally catalogued, it must exhibit or show the presence of certain features. Schultz (1995) predicates that firstly, there must be the absence of an existing record for the edition under consideration. Secondly, the cataloguing must be done to meet national and international standards so as to create a 'master record' from which duplication can be done through copy cataloguing. Thirdly, the bibliographic record must be one that can be upgraded, enhanced and edited with proper authorization.

Original cataloguing provides an opportunity for academic libraries and for that matter all types of libraries to contribute to the bibliographic universe. As Fuller (2006), Orbih and Aina (2014) put it; the drive towards a comprehensive bibliographic control has been empowered as a result of the opportunity original cataloguing affords libraries of varying financial and logistical resources to contribute their quota to the bibliographic universe through the cataloguing of local and indigenous information resources.

Orbih and Aina (2014) predicate that whilst original cataloguing is relevant and allows for on-site and immediate application of the cataloguing rules and standards, it is beset by a myriad of problems and challenges. In their opinion, original cataloguing is time consuming and ends up taking too much time of the few professional librarians available. As Abdussalam and Saliu (2014) similarly contend, original cataloguing and classification of library resources is a tedious, pain-staking and time consuming exercise and is the single attributable factor responsible for the backlogs of unprocessed information resources reminiscent of most cataloguing sections of libraries especially academic libraries.

Adegbore (2010) contends that the perception of cataloguing as difficult and its consequent disinterest to staff of libraries stems from the complex, technical, meticulous and systematic

nature of the original cataloguing work. Adegboire's argument becomes easily agreeable when one considers the relatively easier nature of copy cataloguing and its relative appeal to library staff.

The practice of original cataloguing in libraries can be traced back to the pre-ICT ages to these contemporary times. In these times of increased publications all over the world, original cataloguing becomes extremely pertinent not least in the cataloguing of information resources for the first and only time (Fuller, 2006).

Bello and Mansor (2012) identify the practice of copy cataloguing as a major benefit of the introduction of ICT in the practice of cataloguing and classification. Copy cataloguing is the end product of the concept of resource sharing among libraries and the need for libraries to reduce costs by duplicating cataloguing records of existing information resources instead of creating these bibliographic records from scratch.

Copy cataloguing or derived cataloguing as it is sometimes referred to is the process of describing information resources by using already existing bibliographic or cataloguing records attained from a myriad of sources and adapting these records to conform to local cataloguing standards (Orbih & Aina 2014).

Schultz (1995) similarly defines copy cataloguing as the preparation of a bibliographic record by using and amending an already existing cataloguing record owned by another library or information centre.

Orbih and Aina (2014) opine that copy cataloguing translates into clear savings in terms of cataloguing costs and time. They argue that whilst derived cataloguing still requires some work in adapting the bibliographic record, it simplifies the cataloguing process to a very large extent.

Copy or derived cataloguing by virtue of its relative simplicity in comparison to original cataloguing is generally not considered as professional cataloguing work. El-Sherbini (2001) and Orbih and Aina (2014) predicate that with the exception of cases where copy cataloguing reaches a certain level of complexity such as one requiring a change from one standard to another or the correction of a misapplied rule, this practice (copy cataloguing) is assigned to Para-professional staff in the cataloguing and classification section. As McCutcheon (2012) posits, copy cataloguing is usually done by Para-professional staff who are usually employees with high school and advanced subject degrees but lack a professional or graduate degree in librarianship or information science.

Arinola...et al (2012) in discussing the introduction and usage of ICT in cataloguing and classification justifies the relevance of copy cataloguing through the effort of designers and developers of Integrated Library Management Systems (ILMS) to provide features capable of supporting not only original cataloguing but also copy cataloguing comprehensively.

Orbih and Aina (2014) recommends that a comprehensive cataloguing and classification practice requires academic libraries and all forms of libraries to compliment original cataloguing with copy cataloguing and not regard them in isolation.

2.11 The impact of ICT in Cataloguing and Classification

The ubiquitous nature of the impact of Information and Communication Technology is one that is unquestionable. Information communication technology (ICT) refers to “technology that transmits, stores, creates, displays, shares, or exchanges information by electronic means” (Ungern-Sternberg & Lindquist, 1995; Ejedafiru, 2010). Krubu and Osawaru (2010) state that

the impact of ICT has been felt in every sphere of life and positively so when cost-benefit analysis is carried out. The advent of ICT is regarded as the single factor responsible for the change in the landscape of the librarianship profession as it heralded a change in its operations and activities (Ani, Esin & Edem, 2005; Haliso, 2011).

Amekudee (2005) asserts that making the change to accept the introduction of ICT in the operations of the library was not as plain sailing as was probably expected. In his opinion, the normal resistance to change that confronts a new initiative was surmounted eventually through education. In the opinion of Adeleke and Olarunsola (2010), academic libraries mainly as a result of their relatively better financial backbone opened up to the idea of inculcating ICT in their operations. In their opinion, the library automation drive that followed this decision by academic libraries has revolutionized the librarianship profession as practiced in academic libraries with all the constituent operations carried out with the aid of ICT tools and resources. User services, reference work, Interlibrary loans and document delivery services, cataloguing and classification, audio-visual services and collection development and management are some of the operations and activities of academic libraries that have witnessed considerable improvement with the introduction of ICT (Krubu & Osawaru, 2010).

Omekwu (2007) posits that the practice of Cataloguing and Classification in particular, as pertains in academic libraries has been impacted immensely by the ICT revolution in both positive and negative terms. He opines that while ICT and its accompanying tools and resources have changed the face of the cataloguing activity and made the practice relatively easier, they are also responsible to a large extent for the challenges cataloguing and classification face from the very competitive commercial search engines,

Arinola, Adigun, Oladeji and Adekunjo (2012) ascribe the turning point in cataloguing and classification practice to the introduction of ICT to the activity. In their opinion, the introduction of ICT has brought about changes as to how cataloguing is done and by whom it is done. Para-Professionals, who hitherto had nothing to do with the practice of cataloguing and classification can now perform these activities, albeit the less complicated duties, with some level of training. This has enabled the professionally trained cataloguers to focus on the more technical and complicated issues inherent in cataloguing and bibliographic services (Mason, 2004; Arinola...et al, 2012).

Information and Communication Technology is regarded as the primary driver for the movement of academic libraries from the use of manual forms of library catalogues (card, book, and sheaf) to the online catalogue commonly referred to as the Online Public Access Catalogue (OPAC) (Hildreth, 2000; Mercun & Zumer, 2008; Madhusudhan & Aggarwal, 2011). Palmer and Choi (2014) opine that one of the parameters for evaluating the efficacy of an academic library's cataloguing and classification practice is the functionality of its OPAC. Adeleke and Olarunsola (2007) are of the opinion that even though online cataloguing and classification is expensive especially in the African continent, the benefits accruing to an academic library for investing in such a venture is usually worth the expense. Online cataloguing which begets the OPAC trumps manual cataloguing taking into cognizance the varied benefits it has over its predecessor. The provision of multiple access points, faster search facilities, wider coverage of information and the provision of current information are some of the benefits that accrue from online cataloguing (Madhusudhan & Aggarwal, 2011).

Eze (2012) posits that library cataloguers in contemporary times are able to provide better bibliographical services as a direct consequence of the impact of ICT in library cataloguing and

activities. She observes that one of the major obstacles to manual cataloguing happened to be space for capturing every pertinent bibliographic detail of an information resource. Online cataloguing enabled by the ICT revolution is not however limited by the space obstacle and as such the latter is able to provide more and better access points to aid the retrieval of information resources.

Eze (2012) again identifies the impact of ICT as the reason for the changed and expanded roles of library cataloguers in academic libraries. In her discussion citing Crosby (2011), she makes reference to the fact that the information resources library cataloguers describe have grown from being predominantly print collections to include videos, audio-visuals, CD-ROMS and other ICT enabled formats. This, in her opinion has aided academic libraries in their bid to provide varied information resources to their users. She again attributes the provision of CD-ROM catalogues and OPACs in academic libraries to the introduction of ICT in library cataloguing and classification.

Adeleke and Olarunsola (2010) tout the proliferation of cataloguing and classification tools as a beneficial consequence of the impact of ICT on cataloguing. They ascribe the relatively easier nature of the cataloguing process to the readily available cataloguing and classification tools on the internet. In their opinion, seeking assistance in describing an information resource should be the least of the problems facing a cataloguer when he/she has access to web OPACs of bibliographic utilities like the Online Computer Library Centre (OCLC) and the Library of Congress as well as cataloguing and classification tools and resources like the classification web and the cataloguing calculator.

Resource sharing among academic libraries is deemed to have improved exponentially with the introduction of ICT in library operations (Ani, Esin & Edem, 2005; Omekwu, 2007; Eze, 2012). The essence of resource sharing among academic libraries is aptly summarized by Song (2000) when he asserted that no single academic library can hope to conclusively satisfy the needs of its users from the resources in their collections and concludes that one of the most contemporary measures of a library's worth is measuring the library's ability to provide its users with access to universal information rather than information resources in their collection. Arinola...et al (2012); Parent (2014); Maurer and Panchyshyn (2014) posits that resource sharing of cataloguing records and activities is a notable and recent change in the practice of cataloguing and classification in academic libraries. They argue that sharing cataloguing records does not only reduce cataloguing costs to the barest minimum, but also eliminates duplication of efforts to a very large extent whilst ensuring the proliferation of standardized bibliographic records.

Eze (2012) averred that copy cataloguing and cooperative cataloguing are concepts that have come to the forefront of the librarianship profession specifically in the area of cataloguing and classification, as a direct consequence of the introduction of ICT. She contends that with ICT facilitating the age long concept of resource sharing, it makes little economic and bibliographic sense to spend time and resources to describe and classify information resources from the scratch when the bibliographic records of such information resources have been determined by another cataloguer and is available for sharing. Beall and Kafadar (2002) and Yusuf (2009) contend that the role and impact of ICT on cataloguing and classification cannot be overemphasized when consideration is given to the fact that the adoption and use of copy cataloguing by academic libraries played a major role in eliminating the backlogs of yet to be catalogued materials which

became synonymous with most Cataloguing Sections in academic libraries due to the slow nature of the original cataloguing process.

Omeluzor and Oyovwe-Tinuoye (2016) opine that academic libraries on the African continent have in these contemporary times made efforts to narrow the apparent gap between themselves and their contemporaries in the advanced world by automating their operations. This library automation drive, an offshoot of the ICT revolution, has enabled academic libraries to provide their users with the required information in the required formats in a timely manner. Omeluzor and Oyovwe-Tinuoye (2010) citing Ayiah and Kumah (2011) assert that manual traditional processes and structures are proving inadequate and not responsive enough in the technology-driven environment academic libraries find themselves today. The library automation drive that followed the introduction of ICT to librarianship ushered in the application and use of Integrated Library Management Systems (ILMS) in university libraries in Africa (Egunjobi & Awoyemi, 2012). These systems, also referred to as Integrated Library Systems (ILS) in some quarters, are softwares used by libraries in carrying out their reference, circulation, acquisitions, serials control, budgetary, cataloguing and classification activities (Rai & Kumar, 2009; Madhusudhan & Singh, 2015; Omeluzor & Oyovwe-Tinuoye, 2016).

Abdussalam and Saliu (2014) predicates that these Integrated Library Management Systems are either open source or proprietary with each type proffering different set of challenges to academic libraries. Koha, Libsys, NextGenLib, Virtua, Sierra, Alexandria, VTLS, I-portal, Troodan, AFW and NettLib are a few of the open source and proprietary softwares available to academic libraries in Ghana and the African continent (Madhusudhan & Singh, 2015; Omeluzor & Oyovwe-Tinuoye, 2016). Kari and Baro (2014) state that while the use of Integrated Library Systems has credible benefits, the initiative is beset by a myriad of issues such as unreliable

power supply, insufficient trained librarians to provide assistance to such initiatives, absence of maintenance and service contracts, mediocre ICT frameworks and infrastructures, inadequate financial backing and low ICT capabilities among staff. The high turnover of Integrated Library Management Systems reminiscent of academic libraries on the African continent is considered by many writers on the subject as a major blot on the library automation initiative. Kari and Baro (2014) citing Onohwakpor and Anre (2007) identify the lack of credible and current comparative studies on ILMS and the inability of academic libraries in carrying out a thorough system needs assessment as reasons for the high turnover recorded in the use of Integrated Library Systems.

Integrated Library Management Systems play a vital role in modern online cataloguing. Egunjobi and Awoyemi (2012) opine that most ILS separates the software functions into discrete programs called modules. The cataloguing modules of ILMS provide the framework for online cataloguing and are largely responsible for the web OPACs that academic libraries are providing currently. Abdussalam and Saliu (2014) posit that the Z39.50 gateway feature provided by majority of these ILMS made the concept of copy cataloguing easy to grasp by library cataloguers and Para-Professionals alike. These ILMS provide access to the bibliographic databases of elite academic and public libraries in the developed world and bibliographic utilities, notably the Library of Congress Online Catalogue and the OCLC WorldCat. Hvass (2008) states that library cataloguers engaged in original cataloguing find ILMS extremely helpful as they inculcate Machine Readable Catalogue (MARC) format.

2.12 The ethics of Cataloguing and Classification

All professions are guided by one code of conduct or practice or the other. These standards exist to provide guidance to the practitioners of the profession in their day to day activities and to serve as a reference guide for these professionals when they find themselves in situations where a single course of action is not clear cut (Fallis, 2006).

Usherwood (1981) places the evolution of professional ethics in librarianship originally in the years leading up to 1938 and acknowledges the Americans as the pioneers of this concept. Ferguson and Weckert (1998) opine that the professional librarian's responsibilities transcends the mere custody of information materials to the provision of access to these resources and ensuring that they are used within the confines of applicable laws. To this end, librarians today have a whole lot to do with plagiarism, copyright and other intellectual property rights than they did decades ago (Ferguson & Weckert, 1998).

Bair (2005) predicates that while the existence of professional codes of ethics in the librarianship profession have played a crucial role in the guidance of the practitioners; they are limited as a result of their generalized nature. The lumping of all areas of the librarianship profession under broad statements in these codes lead to the absence of specific statements capable of providing guidance to ethical challenges faced by cataloguers. This point of view is shared by Bierbaum (1994) assertion that there are circumstances fundamental to technical services that raises ethical concerns that need to be addressed with a more tailored and definite guidance than that offered by the notional codes of ethics.

Buchanan (2004) asserts that, professionals as experts in their chosen fields have an overwhelming edge over other lay persons and as such have the potential of either positively or

negatively impacting the actions of the general public. She identifies cataloguers as experts in the information profession who have the capacity to adversely affect the activities of their increasingly large and varied clientele if they dispense with the need to act responsibly, fairly and appropriately. The absence of a specific ethical standard to guide cataloguers places them at a risk of failing at their core mandate.

Bair (2005) asserts that cataloguers have the power to help or harm as a result of the encoding of information they carry out. Taylor (2000) opines that encoding of information by cataloguers is achieved by describing the information resource, analyzing the subject content, classifying the information resource based on the subject, controlling the vocabulary and sharing the resource. The authors both concur that at any of the stages identified, the cataloguer runs the risk of perpetrating harm either wittingly or unwittingly if adequate support and guidance is not provided.

Bair (2005) and Ferris (2008) describe in detail, the descriptive and normative aspects of what cataloguers do and how crucial a definite guiding code of ethics might benefit these professionals.

Bair (2005) opines that the concept of ethics in cataloguing and classification is a relatively new concept with limited literature. She attributes the clamoring for such a standard in these recent times to the failure of existing standards to provide comprehensive guidance to cataloguers.

2.13 Conclusion and Summary

Bakewell (1972) provides a comprehensive history of cataloguing and classification in libraries and noted that the practice is as old as the profession itself. While early cataloguing practice can be said to have been largely arbitrary, early indications pointed to a clear movement towards a common set of cataloguing rules. The contributions of Panizzi, Jewett, Cutter and Lubetzky are known prominently for their considerable attempts towards the development of a common set of cataloguing rules and standards.

The practice of cataloguing and classification in libraries becomes extremely imperative when one takes into account the role it plays in bibliographic control, collection development, resource sharing and library cooperation.

The creation of a library catalogue is the most significant product of the cataloguing and classification process. The OPAC, which is the most current of all the forms of the library catalogue, also remains the most objective yardstick for measuring the efficacy of the cataloguing and classification practice of an academic library. Mercun and Zumer (2008), Breeding (2007) and Fathahi (1995) provide extensive commentary on how OPACs can be improved in academic libraries.

The practice of cataloguing and classification requires tools and resources commonly referred to as cataloguing and classification tools and aids to facilitate the execution of the various tasks under the practice. Adeleke and Olarunsola (2010) and Miksa (2005) contend that the proliferation of these tools and aids are largely responsible for the relatively easier nature of the cataloguing and classification work.

The practice of cataloguing and classification despite its relevance in the operations of academic libraries face various challenges not least from the issue of outsourcing of the practice to outside agencies. Hill (1998), Libby and Caudle (1997) and Dunkle (1996) point out the dangers of the initiative and point out its potential to kill staff morale and dilute the crucial practice of in-house cataloguing.

Banush and Leblanc (2007) and Reid (2003) identify a cataloguing and classification policy as significant element of the cataloguing and classification practice of every academic library as it provides guidance and serves as a reference material for staff simultaneously.

Finally Bair (2005) and Bierbaum (1994) advocate for the enactment of specific codes of ethics for the practice of cataloguing and classification to guide cataloguers and argues against the use of the more generalized codes of ethics promulgated by library associations.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the techniques, means, tools and methods adopted to educe the required data and information for the study. Kothari (2004) defines research methodology as the systematic way applied to solve a research problem. This chapter therefore describes the research design, the determination of the population, the selection of an appropriate sample, the adoption of a research instrument, the method of data analysis and presentation and finally an account of how ethical standards regarding the conduct of research were adhered to. Overall, the study was conducted under the tenets of the Qualitative School of Thought where the researcher builds a complex, holistic picture, analyzes words, presents comprehensive views of respondents and conducts the study in a natural setting (Creswell, 1998).

3.2 Research Design

“The research design is the overall plan for obtaining answers to the questions being studied and handling some of the difficulties encountered during the research process” (Creswell, 2009).

The study primarily adopted the multiple case study approach under the Qualitative School of thought as its research design. Case studies, in the opinion of Neuman (2014), intensively investigate one or a small set of cases, focusing on the details of each case and the context. The case study method according to Creswell (2013) “delves into a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in depth data collection involving multiple sources of information and reports a case description and case

themes”. Case studies endeavor to provide a comprehensive account of the characteristics and attributes of a specific phenomenon (Hamel, Dufour & Fortin, 1993; Sarantakos, 2005). Not only are case studies flexible, they also have the potential to introduce new and unexpected results during the course of the study, and lead the research into taking new directions and breaking new grounds. Case studies are also known to produce more pragmatic responses than a wholly statistical survey (Stake, 1995; Flyvbjerg, 2001; Creswell, 2009).

Case studies by their nature could be single or multiple-case designs. Single case studies are often engaged to validate or contradict a theory or to represent or inquire into a rare or extreme phenomenon that was hitherto inaccessible (Yin, 2003). The application and use of single case studies however needs to be done carefully to avoid misrepresentations. As Hamel...et al (1993) caution, single case studies unless carefully selected may fail to represent the object of the study while a dependence on a single case renders a study incapable of providing a generalizable conclusion (Hamel et al, 1993; Tellis, 1997)

Gustafsson (2017) opines that when a study is comprised of more than a single case, then a multiple case study is warranted. Multiple case studies enable the replication of the same methodology across the different cases which are complete studies on their own, so as to enable the determination and discussion of emerging patterns. The application of the case study methodology for this study was informed by the need to enquire into the practice of cataloguing and classification as it pertains in three cases.

Case studies however are bedeviled with some inherent difficulties. Chief among these difficulties is construct validity which is the degree to which a measurement correlates to the concepts under study. Construct validity tends to be uncertain and problematic in multiple case

studies ((Giddens, 1981; Flyvbjerg, 2001). The use of various sources of evidence, the setting up of a chain of evidence and giving key informants and respondents the opportunity of reviewing their opinions and inputs in a preliminary case study report form part of the ways of mitigating the problems associated with construct validity in multiple case studies (Yin, 2003).

This research work therefore used the comparative case study approach to investigate the practice of cataloguing and classification as it happens in its real life setting in three public academic libraries, thus enabling the highlighting and analysis of similarities and differences between the cases.

3.3 Selection of Cases

The study using a comparative case study approach to garner and analyze data investigated the practice of Cataloguing and Classification as it is done in its real life setting in three public academic libraries with the view to ascertaining the role cataloguing and classification play in academic libraries and the factors militating against the practice. The Balme Library of the University of Ghana was purposively selected for being the first academic library to be established, whilst the Osagyefo Library of the University of Education, Winneba was purposively selected for its multi-campus nature. The Sam Jonah Library – University of Cape Coast was randomly selected from a sampling frame of publicly funded University libraries that conduct their cataloguing and classification activities in-house.

3.4 Selection of subjects

3.4.1 Population

The population of a study according to Connaway and Powell (2010) is the total of all cases that conform to a predetermined criteria or set of criteria. The population of a study has similarly been defined by Neuman (2014) as the larger unit exhibiting identical features from which a sample can be drawn.

With regards to this study, the population included all key individuals involved with the Cataloguing and Classification activity at both the policy and operational levels in the three selected academic libraries. To this end, the population for this study comprised the University Librarians, the Digital Librarians, the Head Cataloguers, the Deputy Head Cataloguers, Senior Members assigned to the Cataloguing and Classification section or department and Staff of the Cataloguing and Classification sections or departments of the three cases.

Table 3.4.1: Population of the prospective respondents at the 3 study sites

RESPONDENTS / INSTITUTION	BALME LIBRARY UG	SAM JONAH LIBRARY UCC	OSAGYEFO LIBRARY UEW
Librarians	1	1	1
Digital Librarians	1	1	1
Head Cataloguers	1	1	1
Deputy Head Cataloguers	1	1	1
Senior Members assigned to the Cataloguing and Classification Section	0	1	0
Staff of the Cataloguing and Classification Section	10	15	7

Source: Field data 2017

From Table 3.4.1 above, the population of the study comprised 3 Librarians, 3 Digital Librarians, 3 Head Cataloguers, and 3 Deputy Head Cataloguers from the three respective libraries. Additionally 1 Senior Member specifically working in the Cataloguing and Classification section was added. This brought the population at this stage to 13. Of equal importance are the staff who are engaged in Cataloguing and Classification at the operational level. Currently, Balme Library employs 10 staff members, Sam Jonah Library engages 15 staff whilst Osagyefo Library occupies 7 staff. To this end, the population for the study aggregated to 45.

3.4.2 Sample Size

A sample is a subset of the population that is selected for a particular study. Saunders and Thornhill (2009) are of the opinion that the sample size has an effect on how the sample accurately represents the population. They conclude that the larger the sample is, the more likely that the generalizations are accurate reflections of the population.

For the purposes of this study, the sample included all respondents involved in the practice of Cataloguing and Classification at the policy level. To this end a census of all Librarians, Digital Librarians, Head Cataloguers, Deputy Head Cataloguers and Senior Members assigned to Cataloguing and Classification across the three cases totaling 13 in all was carried out to form part of the sample. It must be noted however that in some of the study areas, some respondents did not exist. For example, only the Sam Jonah Library had a Senior Member working full time at the Cataloguing and Classification Section.

To complete the sample for the study, six (6) staff members of the Cataloguing and Classification section of the three selected academic libraries were sampled by a purposive

sampling technique to complete the sample for the study. This brought the sample size of the study to a total of 31 persons as represented in table 3.4.2 below.

Table 3.4.2: Sample for the study

RESPONDENTS/ INSTITUTION	BALME LIBRARY UG	SAM JONAH LIBRARY UCC	OSAGYEFO LIBRARY UEW	TOTAL
Librarians	1	1	1	3
Digital Librarians	1	1	1	3
Head Cataloguers	1	1	1	3
Deputy Head Cataloguers	1	1	1	3
Senior Members assigned to the Cataloguing Section	0	1	0	1
Staff of the Cataloguing and Classification Section	6	6	6	18
TOTAL	10	11	10	31

Source: Field data 2017

3.4.3 Sampling Technique

The study employed the Purposive sampling technique to select key individuals involved in the Cataloguing and classification activity in each study setting. A Census of all individuals who are involved in Cataloguing and Classification at the policy level was done as a result of their expert knowledge whilst a purposive sampling of the staff involved in Cataloguing and Classification was done to identify and seek the views and opinions of the most experienced down the continuum to the least experienced. This was to ensure that the perspectives and opinions of all the relevant stakeholders are collated and brought to bear on the study.

Purposive sampling is ideal for qualitative research as a result of its ability to enable the identification and selection of individuals or groups of people or cases that are insightful and

well versed in the practice or phenomenon under investigation (Creswell & Plano, 2011; Palinkas et al, 2015).

3.5 Instrumentation

Instrumentation refers to the means or tools through which a researcher attempts to quantify variables or items of interest through the data collection process (Hsu & Sandford, 2010). A qualitative study like this required the researcher to consider multiple sources for data collection if the objectives of the study were to be met conclusively. Thus this researcher used a combination of interviews of respondents, analysis of the respective cataloguing policy documents and analysis of the websites hosting the Online Public Access Catalogues of the selected cases.

The interview, specifically in the semi structured form was used as the primary data collection instrument for the study and engaged in eliciting primary data and information from respondents. This type of interview while enabling uniformity, also allows the uniqueness of every respondent and the specific information they provide to be exploited fully (Neuman, 2014). This type of interview also allows for the accommodation of significant issues that come to light at any point in time during the interview process. This form of interview also allowed each respondent to be treated as uniquely as possible. Although, semi-structured interviews tend to be criticized for being time intensive and prone to biases, the visual cues and gestures it elicits enriches the data collection process (Yin, 2003).

A semi-structured interview guide was used to guide the entire interview process. Considering the different cases under study and the different respondents under each case, data was elicited by guiding the interviews of similar respondents, irrespective of the case they found themselves

with the same interview guide. However, different respondents in the same case were interviewed with different interview guides. To this end, the interview guide used for the Head Cataloguer of Balme Library was the same used for the Head Cataloguer of Sam Jonah Library but two different interview guides were used for the Librarian of Balme Library and the Head Cataloguer of Balme Library.

On the whole, the interview was semi-structured to accommodate thematic areas of nature of cataloguing and classification, roles and functionalities of cataloguing and classification, level of investment in cataloguing and classification, management and promotion of library catalogues, cataloguing and classification benchmarks and challenges in cataloguing and classification.

These thematic areas were determined with due regard to the objectives of the study. Under the nature of cataloguing and classification theme, the interview guide sought to find out the form of cataloguing and classification that was practiced in these libraries, the extent of use of ICT and its resources in this practice, the level of financial and logistical investment and the availability, efficacy and comprehensiveness of a cataloguing and classification policy. This theme overall revealed at a quick glance the form of cataloguing and classification practiced in the individual cases.

Under the role and function theme, the semi-structured interview guide sought to unearth at first hand, the specific roles practitioners of cataloguing and classification played in the value chain of the academic library.

The management and promotion of the library catalogue theme was developed to reveal how the library catalogue, which is the end product of the entire cataloguing and classification practice, was managed and promoted to users. The semi interview guide sought to elicit responses as to

where the responsibilities for these management and promotion initiatives lied and the practices and techniques engaged.

The semi-structured interview also sought to solicit responses from respondents regarding the best practices they measured their work output against through the cataloguing and classification benchmark theme.

The challenges in cataloguing and classification theme was meant to reveal the myriad of issues militating against the practice of cataloguing and classification at both the policy and operational levels.

3.5.1 Data Collection

Prior to the interview, the researcher paid a familiarization visit to the various institutions under study to determine how best the interview sessions could be conducted taking into account logistical and time resources. This visit was also aimed at ensuring that the number of unanticipated issues capable of cropping up during the interview process was reduced to their barest minimum. A convenient date was then scheduled with the prospective respondents for the interview. It was the researcher's preference to conduct all interviews via the personal (face-to-face) medium for the obvious advantages it provides however, in instances when personal interview was not possible or practical, telephone and email interviews were used as alternates.

Interviews were recorded and transcribed. The transcripts of the interviews were then sent to the respondents to ensure that their content and context had been adequately represented. This did not only provide an avenue for corrections and additions if needed, but also enabled increased construct validity (Yin, 2003).

An extensive analysis of the cataloguing policy document of each institution was carried out before the interview process to help bring context and also to aid the researcher in observing any consistency between the provisions of the policy document and the actual cataloguing and classification practiced in these libraries. This mode of data collection was meant to contribute to the study a snapshot of the entire cataloguing and classification practice in each of the three libraries.

Again, an observation, use and analysis of the websites hosting the Online Public Access Catalogues (OPAC) was carried out with special focus on the MARC formats of the catalogued information resources and the cataloguing codes and standards adopted. This approach to data collection was aimed at assuring the researcher of the ability of the end-product of the entire cataloguing and classification practice to satisfy the queries of users of the libraries.

3.6 Presentation of Data Analysis

The researcher is in agreement with Neuman (2014) that qualitative research is original and informative and has the propensity to churn out large volumes of empirical data. Qualitative data are usually subjective and in different contexts and as such needs to be revised to reflect the major thematic areas describing the phenomenon under study. The data emanating from the data collection phase was categorized firstly into the source from which they came, that is Interviews, Cataloguing and Classification Policies and Online Public Access Catalogue interface or websites. The data from the transcribed interviews, available cataloguing and classification policies and observation and use of the OPAC interfaces was then analyzed by content analysis according to the respective themes (nature of cataloguing and classification, roles and functionalities of cataloguing and classification, level of investment in cataloguing and classification, management and promotion of library catalogues, cataloguing and classification

benchmarks and challenges in cataloguing and classification) to bring out the emerging patterns. It is these patterns from each individual library that formed the case report for such cases. Case reports of each library precede a comparative or cross-case report of the three libraries.

3.6.1 Interview Data

The transcribed interviews were perused and coded based on the respective themes which formed the basis of the sections in the interview.

A content analysis of the entire transcribed interviews was then carried out with the aid of the Nvivo software for Qualitative analysis. The Nvivo software was engaged to ensure that the analysis and the consequent findings and conclusions are free from bias which is sometimes reminiscent of the manual process of analysis. The Nvivo Software was populated with the aforementioned themes (nature of cataloguing and classification, roles and functionalities of cataloguing and classification, level of investment in cataloguing and classification, management and promotion of library catalogues, cataloguing and classification benchmarks and challenges in cataloguing and classification) serving as nodes.

3.6.2 Cataloguing and Classification Policy Documents

A content analysis of the cataloguing and classification policies of the various cases was undertaken. This was undertaken by subjecting the major themes and objectives of the policy documents in juxtaposition with the objectives of the study and the themes set out by the study. The goal of this analysis was to position the practice of cataloguing and classification within the broad cataloguing and classification policy framework for consistencies or abeyances. It is based on this that a conclusion could be drawn as to whether the practice of cataloguing and classification was following the blueprint for its establishment, and as to whether the success or

otherwise of the practice can be inferred to the soundness or otherwise of the policy document. Data from the available policy documents was recorded manually by extracting the major provisions of the document that answered questions regarding the themes carved out from the objectives of the study.

3.6.3 Online Public Access Catalogue Interface or Websites

The websites hosting the Online Public Access Catalogue were observed, browsed, studied and analyzed based on the design of the interface, the cataloguing codes and standards adopted and the contents. The user interface is the way or means by which information is transferred between the user and the computer system and vice versa (Scneiderman, 1998). Well designed user interface enable users to interact with the library catalogue (OPAC) easily and provides all relevant information required for the retrieval of information resources.

A comprehensive case report and a cross case report was written based on the analysis and results of the interviews, policy documents and website interface. The reports were written covering the following areas:

- A description of the nature of cataloguing and classification, providing a chronicle of the cataloguing practice and the investments made in the practice.
- A discussion of the roles and functions of the practice of cataloguing and classification in these academic libraries and their academic institutions in general.
- A discussion of the management and promotional processes and techniques and the stakeholder groups involved.
- A discussion of the cataloguing and classification best practices serving as a blueprint for the cataloguing practice in Ghanaian academic libraries

- An identification and discussion of the challenges and issues hindering the practice of cataloguing and classification.

A comparative or cross case analysis was carried out to compare and contrast the relevant themes from the individual case perspectives in order to draw the obvious and apparent conclusions.

3.7 Pre-Testing

The instrument was pre-tested at the Cape Coast Technical University. There was a mock interview of some officials and staff of the Cape Coast Technical University Library Cataloguing Section. This was aimed at subjecting the research instrument to a rigorous scrutiny. The reliability and validity of the instrument and the practical time periods for the interviews are were some of the feedbacks derived from this exercise.

3.8 Ethical Considerations

The utmost intention of this study is to contribute to knowledge by adding to cataloguing and classification research. To this end, the researcher is in agreement with Fraenkel and Wallen (2000) that “all subjects of a study should be assured that any data collected from or about them would be held in confidence”. This study adhered strictly to the principle of confidentiality in research work by holding the views and opinions of respondents in confidence and in anonymity.

To this end, a clearance letter was sought from the Department of Information Studies, University of Ghana introducing the researcher and his motives for approaching prospective respondents.

Most importantly, every intellectual work consulted in the conduct of this research work was duly acknowledged in the spirit of academic honesty, copyright and fair use.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

Data regarding the practice of cataloguing and classification in the three identified study areas have been analyzed and presented in this chapter. The data was gathered from interviews of key stakeholders and practitioners, content analysis of cataloguing and classification policy documents and observation and use of the websites hosting the OPACs of these academic libraries. The analysis of the collected data was then discussed under broad themes carved from the objectives of the study. The chapter after making a case for each individual study area sets the platform for discussing the similarities and differences in the three study sites by presenting a cross-case analysis based on the themes set out.

4.1 Case Report of Sam Jonah Library, University of Cape Coast

The Cataloguing Section of the Sam Jonah Library (SJL) is regarded as an indispensable division in the value chain of the library's operations (SJL 3, SJL 1, SJL 6). The section is the de facto head of cataloguing and classification in the entire University of Cape Coast Library System and is staffed with a combination of professional and Para-professional staff with varied experiences (SJL 1, SJL 2, SJL 4).

4.1.1 Nature of Cataloguing and Classification

The library began its library automation project which heralded the transition from the traditional or manual cataloguing system to the online cataloguing system in the early 2000s specifically in 2002. The library automation initiative at the Sam Jonah Library faced initial challenges leading

to a 'stop-start' cycle for a few years until stability was achieved in 2008 (SJL 6, SJL 5, SJL 1). The cataloguing and classification practice of Sam Jonah Library is a predominantly online practice with the few remaining manual aspects still being complimented by the online system (SJL 6, SJL 1). The library presently uses KOHA, an open source software as its Integrated Library Management System after deciding against the continued use of the BiblioFile Cataloguing software which was purposely for cataloguing and classification only (SJL 9).

Increased work output, quicker and easier nature of the cataloguing work, decreased propensity for errors in cataloguing and classification, reduced disagreements in the determination of call numbers, easy generation of classification numbers are some of the benefits the library has accrued as a result of the transition (SJL 1, SJL 2, SJL 3, SJL 4, SJL 8).

In recent years, the practice of the library has been to train newly transferred staff to the cataloguing section extensively in copy cataloguing and preliminary cataloguing which forms the basis for original cataloguing. This is in stark contrast to the earlier practice where staff learnt on the job (SJL 6, SJL 4, SJL 5). "Training and building the capacity of staff in cataloguing and classification is a priority for library management and this has informed management's decision to train staff of the cataloguing and classification section at least twice every year and even less when there is an acute need" (SJL 1).

The Sam Jonah Library Cataloguing Section (SJLCS) is currently operating without a formally written Cataloguing and Classification Policy document though one is currently at the draft stage (SJL1, SJL 3). In place of this policy document are conventions that are followed by staff of the section regarding library specific cataloguing practices and decision-making. "The absence of a written and formal Cataloguing and Classification Policy document has really limited the work

to a very large extent. This is a document supposed to guide staff, both old and new in decisions regarding cataloguing outside the provisions of standards and codes” (SJL 1).

As SJL 1, SJL 3, SJL 6, SJL 8 put it, the absence of this document has led to a situation where important decisions like when a material is placed at the reference section and when it is placed on the open shelves and in what quantities (in the instances when the material is in multiple copies), are left to the discretion of staff. The difficulties associated with the absence of the policy document are mitigated by staff consulting the Head Cataloguer and senior colleagues before such decisions are made. This course of action however prolongs the cataloguing process especially in the absence of the Head Cataloguer (SJL 8, SJL 1).

“Documenting these applicable conventions into actual written policy documents will not only serve as reference materials for cataloguers but also serve as training manuals for the training of new staff while ensuring the continuity of the cataloguing process” (SJL 1).

Cataloguing at the Sam Jonah Library is predominantly copy cataloguing, which is the first option for cataloguers. This form of cataloguing is carried out by professional and Para professional staff alike and forms the major job description of majority of the staff of the SJLCS. “It is pointless and makes little economic sense to spend time and exert effort to describe information resources, when our bibliographic partners have these cataloguing records available and most importantly, are willing to share” (SJL 5). There is a concerted effort by management to provide the required tools, aids and resources for the cataloguing and classification work even though more is needed (SJL 2, SJL 4).

The absence of a cataloguing or bibliographic record from any of the databases or catalogues of Sam Jonah Library’s bibliographic partners occasion the use of the original cataloguing process.

This kind of cataloguing is regarded as more complex and relatively difficult in comparison to the copy cataloguing process and as such is carried out by only professional staff with the required experience and supervised by the Head Cataloguer. “Original cataloguing is highly professional work which needs to be carried out by professional librarians who are detail oriented” (SJL 6). This kind of cataloguing is required for indigenous Ghanaian publications, some Indian publications and other materials not found in the Library of Congress database and OCLC WorldCat (SJL 9). Much as the SJLCS has available, the required tools and resources needed for the original cataloguing work such as the Library of Congress Subject Headings and Schedules, “accessibility to these resources is restricted and unavailable to staff in the absence of the Head Cataloguer as a result of them being kept under lock” (SJL 1).

Outsourcing of parts or the whole of the cataloguing and classification work is not a popular practice at the Sam Jonah Library Cataloguing Section currently even though it has been adopted before in times past. As SJL 6 puts it, “outsourcing of original cataloguing has been done before when original cataloguing of some materials was outsourced to a cataloguer from the University of Development Studies in the late 1990s, but the results were not too obvious and impactful”. The overall feeling among staff and key stakeholders of the SJLCS is that outsourcing of parts or the whole of the cataloguing work tends to limit the development and capacity of staff in the cataloguing and classification work (SJL 3, SJL 6, SJL 8, SJL 2). Staff however are not oblivious to the benefits of outsourcing but maintain that the initiative if ever adopted must be managed carefully. They identify the peculiarity of some circumstances like the recently acquired Arabic collection of the library coupled with the lack of cataloguers proficient in the Arabic language as challenges that could be solved by outsourcing (SJL 1, SJL 2, SJL 4). As SJL 8 puts it, “there are

not enough local organizations capable of carrying out the cataloguing work if the decision to outsource is approved”.

The Sam Jonah Library is still using the provisions of the Anglo-American Rules Second Edition (AACR2) for its cataloguing work even though a new standard, Resource Description and Access (RDA) is in vogue. “The migration from the use of the provisions of AACR2 to the provisions of RDA should be done carefully by ensuring that requirements and capacities are built and put in place in anticipation of this migration. There are plans to move to RDA, but the change will occur when the library is fully prepared” (SJL 8). An observation however has been made by staff to the effect that through copy cataloguing, they are being exposed to cataloguing or bibliographic records created on basis of the provisions of RDA for materials published after 2010. “Through copy cataloguing, I am observing a few differences in the cataloguing records as a result of the different standards and this is proving an important learning curve for me” (SJL 1).

In carrying out the cataloguing and classification work in a predominantly online system, there is a close and cordial relationship between the SJLCS and the Digital Library (SJL 1, SJL 2, SJL 4, SJL 5, SJL7, SJL 8). The latter is a dedicated section of the library mandated to provide Information Technology support for the operations of the library. The staff of the cataloguing section are generally pleased with the support provided by the IT staff. As one staff of the Digital Library puts it, “there is a close working collaboration between the IT Support unit and the Cataloguing section. The possession of basic knowledge in cataloguing and classification among some staff of the IT section enable us to provide a better support service to the cataloguing practice” (SJL 7). The absence of specialist programmer in the ICT section however limits the section’s capacity to provide instantaneous resolutions to challenges that emerge regarding the core functionality of the Integrated Library Management System used (SJL 9).

4.1.2 Role and Functions of Cataloguing and Classification

“Cataloguing and classification is the major component of the information organization stage of the information management process” (SJL 3). Cataloguing and classification can be regarded as the “life support”, “nerve centre” and the “heartbeat” of the library (SJL 2, SJL 1, SJL 4).

The place cataloguing and classification occupies in the value chain of the library’s operations is not only strategic but crucial. Excerpts from some respondents are as follows.

“Cataloguing and Classification brings orderliness into the collection of the library through the detailed description and categorization of information resources” (SJL 5).

“Cataloguing and classification facilitates access to the information resources contained in the collection of the library” (SJL 4).

“Cataloguing and Classification boosts enrolment in academic institutions through the advertisement of the collection of the institution via the online catalogue thereby serving as marketing avenue for the parent institution” (SJL 3).

“The practice of cataloguing is the sole determinant of access points, which are in turn used to retrieve information resources from the library’s collection” (SJL 2).

The relevance and essence of cataloguing and classification in the value chain of academic libraries is manifested more clearly when the operations of the academic library is discussed in the absence of cataloguing and classification. The following are some views of respondents.

“In the absence of the cataloguing and classification section, the operations of the library will be chaotic in its entirety” (SJL 3).

“In the total absence of the cataloguing and classification section, the library ceases to be a library and becomes a perhaps a store room for books for the simple reason that accessing the information resources will be extremely difficult” (SJL 6).

“In the absence of the cataloguing and classification section, the library’s operations would come to a standstill and make information retrieval nearly impossible as cataloguing and classification is the heartbeat of the library” (SJL 4).

Cataloguing and Classification is highly crucial in academic libraries and has a huge influence on the other operations of the academic library.

“Cataloguing and Classification provides the platform for reference and other activities of the library to function effectively” (SJL 4).

“The influence cataloguing and classification has over reference work especially, is crucial bearing in mind the fact that reference work is carried out chiefly with the library catalogue as the main resource. The determination of subject headings as a major job description of cataloguers makes them excellent reference librarians” (SJL 6).

4.1.3 Level of Investment in Cataloguing and Classification

The level of investment or financial infusion into the SJLCS is inadequate. This is manifested by the lengthy time it takes to replace broken down computer infrastructure and the most current cataloguing and classification tools and resources as well as the prevailing sub-par working conditions (SJL 1, SJL 2). As a key stakeholder puts it “the level of investment in the Cataloguing and Classification section is at an all time low... there is the annual ritual of

budgeting for the section for the upcoming year by determining the required tools, aids, resources and needs of the section which do not come to fruition majority of the time” (SJL 6).

4.1.4 Management and Promotion of the Library Catalogue

The library catalogue is the most obvious and recognizable end product of the entire cataloguing and classification process. The advent of Information and Communication Technology which heralded the library automation drive in libraries introduced the use of Integrated Library Management Systems as a direct consequence. The Sam Jonah Library presently uses the computer access form of library catalogues commonly known as the Online Public Access Catalogue (OPAC) as its dominant library catalogue (SJL 3).

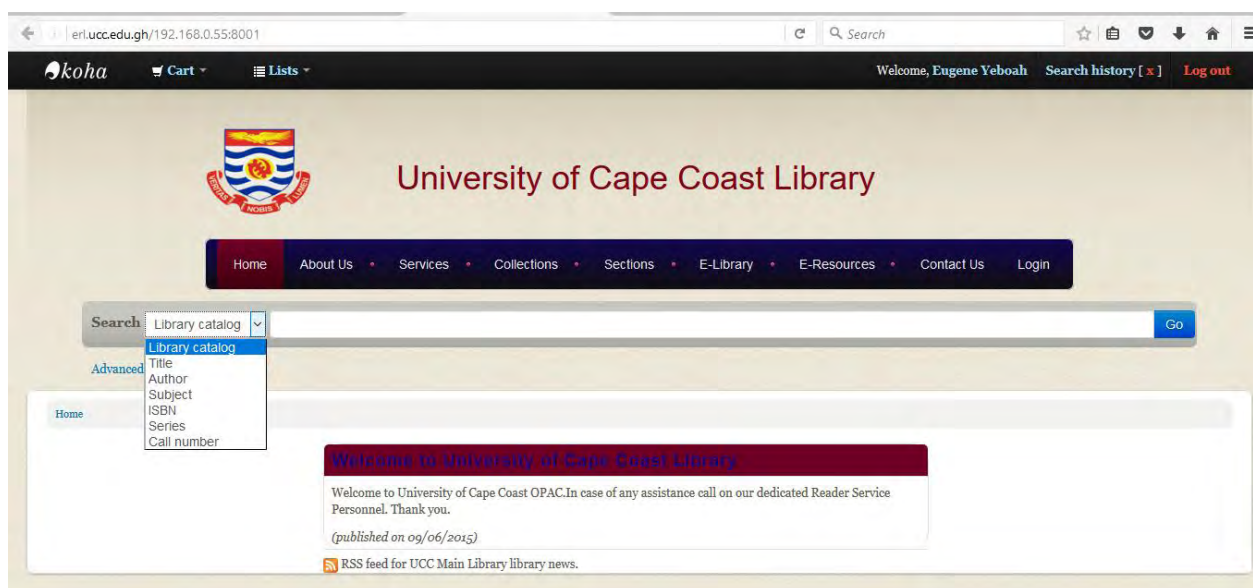


Figure 4.1: University of Cape Coast Library Catalogue (Source: University of Cape Coast, 2018).

The management of the library catalogue (OPAC) at the Sam Jonah Library is the responsibility of the Head Cataloguer with support from the Systems Administrator. The library uses an OPAC

provided by the KOHA Integrated Library Management System (SJL 4, SJL 7). The OPAC of the Sam Jonah Library, named the University of Cape Coast Library OPAC (UCCLibOPAC) is a local union catalogue and a web OPAC accessible on the internet at www.erl.ucc.edu.gh:8001 and alternatively via the Sam Jonah Library and University of Cape Coast websites.

The UCCLibOPAC is supported by the cataloguing module of KOHA, an open source Integrated Library System with a Structured Query Language database. Support for this ILMS comes from collaborations with other users on open source communities or platforms as well as experts outside the library who are contracted to provide services for a fee (SJL 7, SJL 9).

The UCCLibOPAC is a local Union Catalogue comprised of many catalogues of Schools, Colleges, Departments and Hall libraries. These include notably; School of Business Library, School of Agriculture Library, College of Education Library, Institute of Educational Planning & Administration Library, Sociology and Anthropology Library, Atlantic Hall Library, Valco Hall Library among others.

The UCCLibOPAC provides a range of access points to aid the retrieval of information resources including the title, name of the author, subject, series statement, call number, International Standard Book Number and International Standard Serial Number. The OPAC provides a basic search system for the use of a single access point and an advanced search system for the combination of multiple access points.

The information resources in the catalogue have been catalogued on the basis of the Anglo-American Cataloguing Rules Second Edition with a comprehensive Machine Readable Catalogue (MARC) and International Standard Bibliographic Description (ISBD) view accompanying each item. The holdings of each information resource clearly depict the status of

the material, the current location of the item and the item format. The OPAC provides personalized accounts for each user permitting the suggestion of information resources to be acquired whilst retaining in memory a complete search and reading history for each client.

“For every system, the administrative pass must be controlled, whereas the user interface is left unrestricted and unhindered” (SJL 3). Controlling the administrative pass is meant to ensure that only authorized persons are populating the library catalogue. Managing the OPAC at Sam Jonah Library entails the Head Cataloguer delegating to staff, the carrying out of library catalogue management procedures such as re-cataloguing, reclassification, relocation and editing (SJL 1, SJL 2, SJL4, SJL 6, SJL 9).

Statistics and observation of the use of the OPAC at Sam Jonah Library however indicates a clear case of underutilization and low patronage by users and clients (SJL 3, SJL 2, SJL 5). “The insufficient number of bibliographic records in the new catalogue and the general frustrations accompanying the running of two OPACs (old and new) simultaneously account in part to the low patronage of the OPAC (SJL 3).

There are however deliberate and conscious efforts to promote the use of the OPAC among users of the library. User education through freshman and general orientations and the Information Literacy Skills course run by staff of the library has been the major promotion technique adopted by the library (SJL 1, SJL 2, SJL 3, SJL 4, SJL 8).

“The library would have to move beyond the traditional user education as a promotion technique to more contemporary measures such as publicity through Leaflets, Campus Broadcasting Services, Open days and other public forums as well as Social Media platforms” (SJL 3).

The involvement of users through their engagement in the search process is another way of promoting the use of the OPAC among users (SJL 6, SJL 3).

The web nature of the UCCLibOPAC has enabled prospective readers and users to be drawn to the library while involving them in the collection development drive of the library through suggestion avenues. These coupled with the marketability and enhanced visibilities of the parent institution are some of the benefits the library has accrued as a result of the web OPAC initiative (SJL 7, SJL 9).

4.1.5 Cataloguing and Classification Benchmarks

The Sam Jonah Library Cataloguing Section (SJLCS) benchmarks its cataloguing work against recognized cataloguing practices the world over so as to achieve standardization. “As a member of the Online Computer Library Centre’s WorldCat through the South African Bibliographic Network (SABINET), the Sam Jonah Library’s cataloguing and bibliographic records are created to meet the standard required for the WorldCat” (SJL 1).

“The Sam Jonah Library cataloguing and classification practice is modeled against both local and international practices by replicating the best practices of other libraries and bibliographic utilities in terms of cataloguing of peculiar works and lettering activities” (SJL 3).

“As much as possible, members of the Consortium of Academic and Research Libraries In Ghana (CARLIGH) especially the University of Ghana’s Balme Library serve as a blueprint for the cataloguing practice of Sam Jonah Library” (SJL 4).

The Sam Jonah Library, as a convention places a premium on the practice of the Library of Congress as regards cataloguing and classification. In the process of copy cataloguing, the

bibliographic records of the Library of Congress are the major targets of cataloguing staff before cataloguing records originating from the Online Computer Library Centre (OCLC) are considered. This initiative is informed by the library's decision to ultimately benchmark against the Library of Congress cataloguing practice (SJL 2, SJL5, SJL9, SJL 8, SJL 12).

4.1.6 Challenges Militating Against the Practice of Cataloguing and Classification

The practice of cataloguing and classification in Sam Jonah Library is beset by a myriad of challenges. These limitations are deemed by staff of the cataloguing and classification section as responsible for the inefficiencies recorded in the cataloguing practice and ultimately the inability of the practice to be considered an elite practice in the country.

The major challenge faced by staff of the Sam Jonah Library Cataloguing Section is perhaps internet connectivity and its related issues (SJL 9, SJL 8, SJL4, SJL 2, SJL 1).

“Considering the fact that we are operating a predominantly online cataloguing system, the unreliable internet connectivity prevailing in the library presents a challenge in the cataloguing and classification work. In instances where internet stability is achieved, the slow nature of the bandwidth makes the cataloguing work extremely frustrating and unattractive”(SJL 1).

Another challenge militating against the cataloguing and classification practice of Sam Jonah Library is the provision of the required cataloguing and classification tools and resources as and when needed (SJL 6, SJL 3, SJL 2, SJL 8). “Though library management cannot be accused of having been derelict in their duty to provide the resources and tools required for the cataloguing work, there is the feeling among staff that the time it takes for these resources to be provided is just too long and unacceptable”(SJL 6). The accessibility to the provided cataloguing resources

like the Library of Congress Schedules and Subject Headings also presents a challenge to staff in their work as the restriction on their access makes their work difficult and their will to learn on the job nearly impossible (SJL 2, SJL 6, SJL 4).

Then again, the working conditions prevailing at the SJLCS is one considered to be a challenge by staff of the section in their daily cataloguing and classification work. “For a section touted to be the heart of the library, the conditions prevailing currently are far from ideal. The heat in the office can sometimes be overbearing and the absence of an air cooling system only exacerbates the situation. The simple truth is that my work output would be so much higher if the conditions currently prevailing were a bit better” (SJL 6).

Ultimately, the SJLCS is beset by the challenge of financial infusion. “All our challenges, be they internet connectivity issues, staffing issues, working conditions for staff or tools and resources needed for the cataloguing work have financial connotations inherent in them” (SJL 1). “The chunk of the library’s budget is consumed by the acquisition of new information resources and the ever increasing bill for this equally important investment dwindles the budget for other operations of the library like cataloguing” (SJL 3).

4.2 Case Report of Osagyefo Library, University of Education, Winneba.

The Cataloguing and Classification Section of Osagyefo Library (OL) plays a crucial role in the operations of the library. As the Cataloguing section of an academic library serving as the Main or Head library of a multi-campus University, the section and its roles could not be more onerous (OL 1). The section serves as the Head of cataloguing and classification services in the University and supervises the entire cataloguing work carried out in the other campuses of the

University (OL 8, OL 11). The Osagyefo Library Cataloguing Section (OLCS) is staffed with a combination of professional and Para-professional staff with the Head Cataloguer heading the section (OL 4).

4.2.1 Nature of Cataloguing and Classification

The Osagyefo Library Cataloguing Section currently uses an online cataloguing system for its cataloguing and classification work. “The section carries all its cataloguing work via an online cataloguing system. Even though some tasks are carried out manually, that is original cataloguing; the entire process is facilitated by the online system” (OL 1). The Library transitioned from the traditional or manual form of cataloguing to the online cataloguing system fully in 2013. The OLCS currently uses the cataloguing module of the Virtua Integrated Library Management System (ILMS) for its cataloguing work. The migration from the use of the BibioFile Cataloguing Software to the Virtua ILMS was enabled through the support of the Carnegie Corporation (OL 1, OL 5, OL 7).

“The elimination of pressure on the library catalogue which used to be at a central location and its consequent mutilation, the relative easier nature of cataloguing, ease of effecting changes and corrections and the improved work outputs are some of the advantages associated with the transition to the online form of cataloguing” (OL 2).

“The benefits accruing to the library as a result of the transition has not only been felt by the practitioners of the cataloguing activity but also the end users of the library who can now interact with a system capable of providing feedbacks” (OL 3).

The OLCS like every cataloguing practice is guided by universally accepted cataloguing standards. Quite apart from these standards the OLCS abides by some tenets which inform

decisions with local ramifications (OL 1, OL 2). There is however no formally written cataloguing and classification policy to formalize these unwritten tenets into operational documents.

“The absence of a formal cataloguing and classification policy document has limited the cataloguing work to an extent as cataloguers have lacked the sort of guidance and reference a policy document offers” (OL 1).

The challenges emanating from the absence of the Cataloguing and classification policy document is however mitigated by consulting senior colleagues and other libraries although this prolongs the cataloguing process and increase the turnover period (OL 5).

Though there is no such policy under consideration currently, staff are aware of its relevance and potential. “The formalization of our tenets into actual ratified policy documents would be a great step in our cataloguing process as the document will serve not only as a reference material for future consultation but also a training manual that assures the section of continuity in the absence of key personnel” (OL 2).

“The formalization of these tenets into actual written policies would ease the training of staff, serve as a reference material and ease the transition of staff from other operations of the library into cataloguing” (OL 3).

The bulk of the cataloguing work at the Osagyefo library is copy cataloguing though a good number of materials require original cataloguing. Copy cataloguing as a result of its relatively less complexity, is undertaken by Para-professional staff in the cataloguing section of the library as well as professional staff with no specialties in cataloguing (OL 9, OL 5).

“By convention, the cataloguing staff of the satellite campus libraries located at Ajumako, Kumasi and Ashanti-Mampong are mandated to do only copy cataloguing work whilst all information resources requiring original cataloguing are sent to the Osagyefo Library to be catalogued” (OL 1).

The need to ensure that originally created cataloguing and bibliographic records are of the required standard and capable of meeting the criteria for resource sharing among libraries informs the OLCS’s decision to restrict in a way, who gets the opportunity to create bibliographic records originally. To this end experienced personnel of the cataloguing section with professional backgrounds and qualifications are mandated to carry out the original cataloguing work (OL 6, OL 8).

There are available, the required cataloguing and classification tools and resources needed for both original and copy cataloguing work (OL7, OL4). “The availability of the Library of Congress Subject Headings and Schedules though not of the preferred editions, enable the original cataloguing process to proceed unhindered whereas the remote access provided by the Virtua Integrated Library Management System provides the needed support required for the copy cataloguing work” (OL 3).

The building of staff capacity in cataloguing and classification regularly occurs at Osagyefo Library. “These training programs are usually organized during the long vacation (June-July) every academic year and are not limited to only cataloguing staff” (OL 1). These training programs are aimed at refreshing the capacities of staff and come off as and when the need arises (OL 3, OL 4).

The practice of outsourcing of parts or the whole of the cataloguing and classification work has been unheard of in recent years at the Osagyefo Library. Historically, outsourcing of cataloguing and classification work took place in Osagyefo Library during the transition from Dewey Decimal Classification System to the Library of Congress Classification System when the work was outsourced to two individual experts from the Balme Library Cataloguing Department of the University of Ghana (OL 1, OL 9). The perception of outsourcing of cataloguing and classification work at the Osagyefo Library is quite liberal. “Outsourcing logically robs cataloguing staff of learning opportunities and stalls their capacity development but there some peculiar circumstances that can only be resolved by outsourcing as a management practice” (OL 1).

Currently, the Osagyefo Library Cataloguing Section uses the provisions of the Resource Description and Access (RDA) as the standard for its copy and original cataloguing work (OL 1, OL 2, OL 6).

In the area of information technology support and back up for the predominant online cataloguing practice of the library, the OLCS relies on the IT staff posted to the library. “The Osagyefo Library does not have a dedicated IT section mandated to provide IT support services as found in other sister libraries but rather an IT personnel posted to the library to provide support services while acting as a liaison between the library and the University ICT Directorate” (OL 3).

4.2.2 Roles and Functions of Cataloguing and Classification

“The central position of cataloguing and classification in the operations of an academic library is testament enough for the myriad of arguments made regarding the role of cataloguing” (OL 4).

Personnel of the OLCS commonly exhibit a reaction of incredulity at a question seeking their opinion of the library's operations in the total absence cataloguing and classification. The reactions of some respondents are as follows.

"Forgive my apparent hesitation, but your question took me by surprise...to be blunt, the operations of the library would be in complete disarray in the absence of cataloguing and classification" (OL 7).

"I am struggling to picture the library's operations in the total absence of the cataloguing and classification section. I am inclined to agree with my former Head cataloguer's assertion that the library will cease to be a library in the absence of cataloguing as it is the heart of the library" (OL 2).

"The operations of the library in the absence of the cataloguing and classification section can be described by a single word in my opinion. Chaotic!" (OL 1).

The role cataloguing and classification play in the operations of the academic library is especially pronounced in these contemporary times of heightened competition from commercial search engines (OL 8).

"The major function of cataloguing and classification is to bring order into the chaos reminiscent of the magnitude of the collection of university libraries" (OL 4).

"Cataloguing and Classification facilitate access to the information resources contained in the collection of the academic library through the library catalogue (OL 9).

The relevance of cataloguing and classification in the library's operations can also be viewed from the perspective of its influence on other operations of the academic library. Cataloguing

and classification work provides all the background support and tools needed for the reference work (OL 3, OL 5, OL 7).

4.2.3 Level of Investment in Cataloguing and Classification

The investment into the practice of cataloguing and classification at the Osagyefo Library measured in terms of financial infusion into the technological infrastructure and resources required for the cataloguing work is at “an appreciable but not adequate level” (OL 1, OL 3, OL 6, OL 9, OL 2).

4.2.4 Management and Promotion of the Library Catalogue

The Osagyefo Library before its library automation project in the early years of the decade underway used the manual cataloguing and classification process and as such the Card catalogue was its main library catalogue (OL 1, OL 4, OL 7). With the library automation project fully stabilized and functional, the library currently uses an Online Public Access Catalogue (OPAC) facilitated by the Virtua Integrated Library Management System used by the library for all of its operations (OL 1, OL 2, OL 3).

The Head Cataloguer is solely responsible for the management of the library catalogue. Accessibility to the catalogue for the purposes of populating the database is granted by the Head Cataloguer through the issuance of usernames and passwords. Whereas the administrative part of the library catalogue is restricted and protected from unauthorized personnel, the user interface part of the catalogue visible to users are left unhindered and freely accessible (OL 2, OL 6, OL 9, OL 8). Re-cataloguing, reclassification, relocation and editing are some of the library catalogue management procedures carried out by staff of the OLCS periodically and aimed at keeping the OPAC up to date (OL 1, OL 2).

The OPAC of the Osagyefo Library, commonly known as WINNOPAC is a computer access catalogue facilitated by the Virtua ILMS. It was officially launched on 18th April, 2013 and serves as the main library catalogue of the University of Education, Winneba Libraries. It is a local union catalogue comprised of the catalogues of the different campus libraries and department libraries making up the University of Education, Winneba Library System (OL 1, OL 3, OL 5, OL 7).

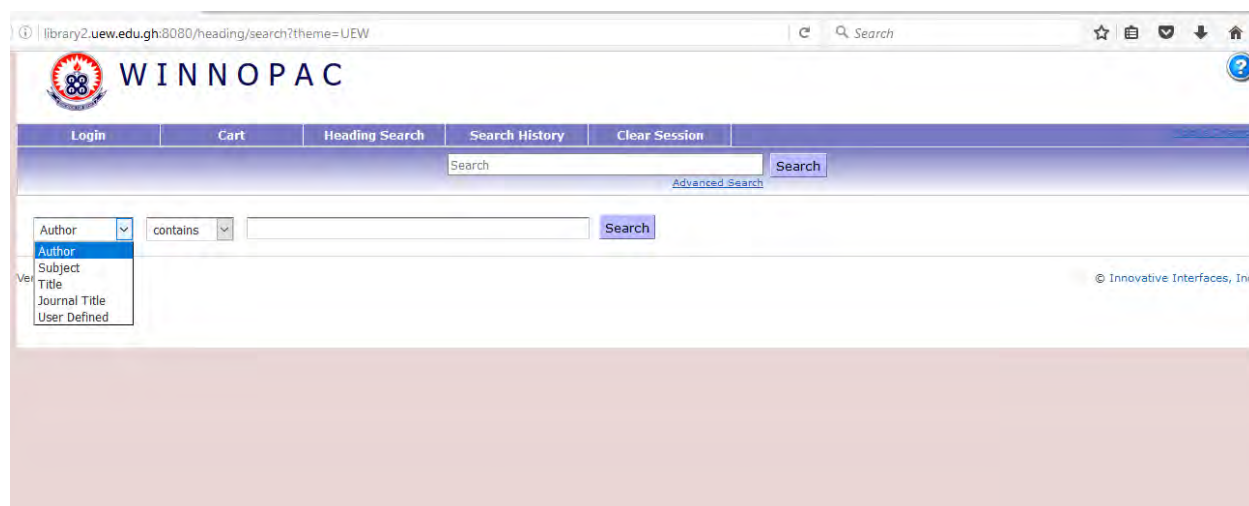


Figure 4.2 University of Education, Winneba Library Catalogue (WINNOPAC). (Source: University of Education, Winneba, 2018).

The WINNOPAC is a web OPAC accessible at www.library2.uew.edu.gh:8080 or alternatively via the website of the University of Education, Winneba. The cataloguing records in the WINNOPAC are catalogued on the basis of both AACR2 and RDA. The common access points available for use on the catalogue includes Author names, Title, Subject, Journal title, International Standard Book Number (ISBN) and International Standard Serial Number (ISSN). The basic or user defined search bar allows the search for information resources on the WINNOPAC through the use of a single access point. The WINNOPAC also allows the use of

multiple access points for information retrieval through the use of the advanced search option available on the interface. This option provides users the opportunity to limit their search by parameters such as library, language, location, place of publication and formats.

The WINNOPAC shows the collection of many Campus, College, School and Departmental libraries. Notable among these libraries are Osagyefo Library, North Campus Library, College of Technology Library, Institute of Educational Development and Extension Library, Faculty of Science Education Library and the Department of French Library among many others. The interface allows the search results to be sorted on the basis of relevance, creation date and publication date.

The WINNOPAC shows a comprehensive MARC record for each information resource with some tags providing information specific to the Osagyefo Library.

The provision of IT support for the WINNOPAC is carried out by the software developers who are contacted through emails.

The promotion of the WINNOPAC is paramount to the management of the Osagyefo Library and is regarded as one of the major reasons informing the decision to officially launch the library catalogue. Presently, the promotion of the use of the WINNOPAC is predominantly done through orientation programmes for students and the Information Literacy Skills course offered by freshmen (OL 1, OL 2, OL 3, OL 5, OL 8, OL 9).

The web nature of the WINNOPAC has been advantageous to the institution by enhancing its visibility and serving as a marketing tool for the parent institution (OL 3, OL 4).

4.2.5 Cataloguing and Classification Benchmarks

In a bid to achieve standardization, the Osagyefo Library models its cataloguing and classification practice against both local and international cataloguing practices of repute (OL 1, OL 2, OL 3). The aim is to ensure that the bibliographic records created are of the accepted standard capable of supporting the concept of resource sharing (OL 1).

“In Ghana, we benchmark our cataloguing and classification practice against the cataloguing practice of the Balme Library of the University of Ghana” (OL 3).

“Against international practices, the OLCS benchmarks its practices against the Library of Congress and the Online Computer Library Centre (OCLC) predominantly” (OL 1).

The creation of bibliographic records, the adoption of Integrated Library Management Systems, the adoption of cataloguing standards and classification schemes and lettering practices are a few of the issues that have been benchmarked against best practices in the library (OL 1, OL 2, OL 3, OL 6, OL 8).

4.2.6 Challenges Militating Against the Practice of Cataloguing and Classification

The Cataloguing and Classification practice of Osagyefo Library is saddled with a few challenges as can be expected from an academic library in the developing world.

The issue of internet connectivity is perhaps the most acute challenge facing the cataloguing and classification section of the Osagyefo Library. “The unreliability of the internet around campus is one challenge we are facing currently. This is because we are operating an online cataloguing system which requires stable internet connectivity with a healthy bandwidth” (OL 3).

The provision of adequate and comprehensive computer infrastructure needed for the online cataloguing system used by the Osagyefo Library is another challenge facing the cataloguing section of the library. “The adequacy of the computer infrastructure needed for our predominantly online cataloguing practice is a challenge for us. Much as we know the library management is doing their best, the challenge still exists” (OL 7).

The ultimate challenge for the OCLS is that of finance. The myriad of issues militating against the cataloguing practice can conveniently be reduced to the inadequacy of financial support for the section. “The library management provides the financial support we need for our work but I cannot say it is wholly adequate for the important work we do here. We would definitely welcome more” (OL 8).

4.3 Case Report of Balme Library, University of Ghana

The Balme Library Cataloguing Department (BLCD) is integral to the operations of the Balme Library (BL) as a whole (BL 1, BL 3). It is the head of cataloguing and classification activities and services for the entire University of Ghana Library System. It is headed by the Head Cataloguer who is assisted by a healthy combination of Professional staff and Para-professional staff with varied experiences in the cataloguing work (BL 1, BL 4).

4.3.1 Nature of Cataloguing and Classification

The Balme Library Cataloguing Department is presently using a mixed or hybrid cataloguing system with over 95% of the cataloguing work being carried out via the medium of technology. The few manual processes remaining in the cataloguing operations most notably original cataloguing still requires the intervention of technology to complete the process conclusively (BL 1). The transition to a predominantly online cataloguing and classification process was informed by the Library Automation initiative which was heralded by the introduction of ICT in libraries generally and cataloguing and classification specifically. The BLCD pioneered the online cataloguing process in Ghana with the adoption and use of Library Corporation's BibioFile Cataloguing Software. The need for a more integrated software for the entire operations of the library informed the decision of the library management to migrate to the use of the Millenium Integrated Library System. The BLCD presently uses the cataloguing module of the Sierra Integrated Library Management System for all of its cataloguing and classification activities (BL 1, BL 3, BL 4, BL 7, BL 9).

The transition to the primarily online cataloguing system has been hugely beneficial to both staff and users of the library. "Time savings, efficient work output, increased work output, reduction of errors and access to the bibliographic records of other libraries are some of the benefits the library has ascertained as a result of the transition from the manual cataloguing process (BL 1).

"The relatively easier access to information by users irrespective of their geographical location is a credible benefit users of the library have accrued as a result of the transition from manual cataloguing to online cataloguing" (BL 3).

The BLCD operations are guided ultimately by the Anglo-American Cataloguing Rules Second Edition. However, the department's activities are also guided by a Cataloguing and Classification Policy Document which is a part of the overall policy document of the Balme Library. Additionally, there is a Procedural Manual for the BLCD. "The Cataloguing and Classification Policy and Procedural Manual are very crucial documents in the library's cataloguing operations in that they guide every cataloguer and staff member within the University of Ghana cataloguing system as to what to do, when to catalogue, what to catalogue and what not to catalogue" (BL 1). The Cataloguing and Classification Policy and Procedural Manual is regarded by staff as extremely beneficial as they serve as training manuals and reference materials for staff in the determination of appropriate courses of action (BL 2, BL 4, BL 6, BL 8).

These documents are updated from time to time, however special circumstances like the change from one applicable standard or code to another could trigger the automatic revision of the policy document and its accompanying procedural manual (BL 1, BL 5). "It is a fact that Balme Library quite recently revised its policy document in 2016 to reflect the change from the Millenium ILMS to the Sierra ILMS. The revision of the Procedural Manual to reflect the change in the adopted Integrated Library Management System is currently underway and nearing completion" (BL 1).

A detailed content analysis of the Cataloguing Policy of the Balme Library shows a comprehensive document providing guidance to personnel involved in the cataloguing process. The policy document provides a list of items which are not supposed to be catalogued, the applicable cataloguing standard (Anglo-American Cataloguing Rules 2nd Edition) as well as the cataloguing and classification tools and aids required for the process. The listed tools and aids include the Anglo-American Cataloguing Rules 2nd Edition, the Library of Congress

Classification Schedule, Library of Congress Subject Headings, Library of Congress Catalogues, National Union Catalogue, Sierra Cataloguing Software, OCLC WorldCat and the Alphabetical Order Table. The policy document prescribes the collection codes for the different shelving locations in the library and the criteria an information resource must meet in order to be placed at a certain shelving location.

The BLCD as the Head of cataloguing in the University of Ghana Library System encourages all staff involved in the cataloguing process to carry out copy cataloguing as a first option. This kind of cataloguing is regarded as relatively less complex and is primarily the entire job description of staff engaged in cataloguing at the satellite libraries (BL 2, BL 6, BL 9). The remote access provided by the Sierra ILMs enables copy cataloguing to be carried out at the BLCD. The absence of bibliographic records in the Sierra database as well as other bibliographic utilities like the Library of Congress Online Catalogue and OCLC's WorldCat necessitates the use of the original cataloguing process. "Irrespective of the inherent difficulties and complexities of the original cataloguing process, I believe in encouraging every staff member to be engaged in the original cataloguing process albeit under supervision" (BL 1). The cataloguing and classification of theses, rare books and very old books are done through the original cataloguing process and is usually done by the experienced cataloguing staff (BL 1, BL 2, BL 3, BL 7, BL 8).

The training and education of staff of the BLCD is a regular occurrence at least twice in a year with staff undergoing instruction on emerging trends in the area of cataloguing (BL 4, BL 2, BL 5). With respect to staff newly posted to the BLCD, there is a movement from the earlier practice of on the job training to providing staff with formal training before they begin the cataloguing and classification work (BL 2, BL 3, BL 5, BL 6, BL 8).

By policy, the BLCD does not engage in the practice of outsourcing either in parts or the whole of its cataloguing operations. “As the Head of cataloguing in the University of Ghana Library System, we do not outsource any of our cataloguing operations but rather we take on projects from other libraries” (BL 1).

The BLCD currently uses the provisions of the American Cataloguing Rules Second Edition (AACR2) as its cataloguing standard though staff are thoroughly aware of the existence of its replacement, the Resource Description and Access (RDA). “We are aware of the coming into play of the RDA but the migration to this new standard requires some resources both logistical and financial as well as capacity development which are quite not at the required level currently” (BL 1).

The BLCD as a result of the online cataloguing system it uses requires the support of IT staff for troubleshooting and handling some of the difficulties that emerge through the use of the Sierra ILMS. The Electronic Support Unit of the Balme Library is the outfit responsible for supporting the BLCD in terms of its IT support services and personnel of the BLCD attest to the close working collaboration between the two outfits (BL 1, BL 3, BL 6). “Our electronic support unit is extremely helpful. They provide us with swift and timely support service for our activities” (BL 5).

4.3.2 Role and Functions of Cataloguing and Classification

“The central role cataloguing plays in the value chain of the library’s operations is not lost on staff” (BL 4). The relatively appreciable level of financial infusion into the cataloguing practice is testament to the integral role cataloguing and classification plays in academic libraries (BL 2, BL 5, BL 7, BL 9).

“Cataloguing and classification are the main activities for organizing the materials in the library. These practices ensure that a library user finds the required library material at the right time, in the right place and in the needed quantities” (BL 1).

“Cataloguing and classification brings order into the heterogeneous nature of the collections of academic libraries especially” (BL 2).

“Cataloguing and classification facilitates the easy retrieval of information resources in the library” (BL 3).

“Cataloguing is the heart of the library, without the cataloguing and classification section, there would be no library” (BL 1).

“The entire operations of the academic library will be in chaos in the total absence of cataloguing and classification” (BL 6).

4.3.3 Level of Investment in Cataloguing and Classification

The level of investment in the BLCD measured by the rate of financial infusion into the cataloguing and classification work is at an appreciable but not at an optimal level. “We are quietly satisfied with the investment made in our cataloguing practice in terms of the available resources we need for our cataloguing work as well as the technological gadgets we use” (BL 3).

4.3.4 Management and Promotion of the Library Catalogue

The library catalogue of the Balme Library known commonly as UGCat, is the end product of the cataloguing and classification process carried out by the Balme Library Cataloguing Department (BLCD) (BL 5, BL 2, BL 8).

The management of the UGCat is the responsibility of the Head Cataloguer with technological assistance from staff of the Electronic Support Unit of the library (BL 1). The BLCD uses the cataloguing module of the Sierra Integrated Library Management System for its cataloguing process. In managing the UGCat, cataloguers at the BLCD carry out library catalogue management procedures and activities such as reclassification, re-cataloguing, relocation and editing periodically (BL 1, BL 3, BL 4, BL 7).



Figure 4.3 University of Ghana Library Catalogue (UGCat). (Source: University of Ghana, 2018)

The UGCat is a web-OPAC accessible on the World Wide Web. The OPAC which is supported by the OPAC facility provided by the Sierra Integrated Library Management System is a Union Catalogue made up of different local catalogues of different College and Departmental libraries. These include the library catalogues of the Balme Library, Accra City Campus library, College of Agriculture and Consumer Science library, College of Health Sciences library, Faculty of Law

library, Noguchi Library, Population and Social Science library, University of Ghana Business School library, Department of Archaeology library, University of Ghana Graduate School library, Department of History library, School of Veterinary Medicine library and the University of Health and Allied Sciences (UHAS) main library.

The UGCat is accessible at library.ug.edu.gh and can alternatively be accessed via the Balme library website and the University of Ghana website. The UGCat provides a host of access points for the retrieval of information resources. These include notably; the author's name, title, subject, call number, International Standard Book Number and the International Standard Serial Number.

The UGCat provides a basic search system allowing the engagement of a single access point in retrieving information. There is also an advanced search system providing for the use of multiple access points coupled with a help guide on the use of search techniques such as Wildcard, Boolean operators, Field limits and Grouping.

The UGCat with its friendly user interface is populated with bibliographic records of information resources catalogued according to the tenets of both the Anglo-American Cataloguing Rules 2nd Edition and lately the Resource Description and Access mainly as a result of the practice of copy cataloguing.

Support for the UGCat is provided by the Electronic Support Unit in collaboration with the developers of the Sierra ILMS (BL 1, BL 3, BL 7).

There is a conscious effort to promote the use of the UGCat among users of the library mainly through user education. "All Senior Members of the Balme Library are subject librarians with the various Colleges and Schools of the University and one of our tasks in that capacity is to promote the use of the UGCat to our students" (BL 1). Promotion of the UGCat is primarily done

through orientations for fresh students and the handing out of library guides (BL 1, BL 2, BL 3, BL 5, BL 9).

4.3.5 Cataloguing and Classification Benchmarks

The BLCD as the pioneer cataloguing practice in Ghana quite naturally benchmarks against international bibliographic utilities and cataloguing practices. “As the premier cataloguing practice in the country, we aim to model our cataloguing practice against internationally acclaimed bibliographic utilities like the Library of Congress and the Online Computer Library Centre” (BL 1).

The standard practice at the BLCD has been to model our work according to the requirements of its bibliographic partners such as the OCLC and the Library of Congress (BL 2, BL 3, BL 5, BL 6, BL 7, BL 8, BL 9).

4.3.6 Challenges Militating Against The Practice of Cataloguing and Classification

The BLCD like every section operating in an academic library in Africa is beset by some challenges. Notable among these challenges are the inadequate financial resource infusion into the practice. “Finance is an issue for us. Though we are not in dire need for it, we definitely need more than we are provided currently” (BL 1).

Specifically, the BLCD is hampered by the insufficient number of experienced and trained cataloguing staff especially taking into consideration the fact that the section provides services for all the satellite libraries under the University of Ghana Library System. “There is an acute need for sufficiently trained cataloguers for the department but this need is currently being hampered by the unavailable funding” (BL 4).

Again the issues of internet connectivity, working conditions and frequent break-down of computer infrastructure tend to frustrate staff in the cataloguing and classification process (BL 2, BL 3, BL5).

4.4 Cross-Case/Comparative Analysis of The Three Cataloguing Practices

The relevance of the practice of cataloguing and classification in the three study sites is evidenced by the positioning of the activity in the value chain of the respective libraries' operations. The universality of the practice can only be determined by juxtaposing the local practice of the three cases to one another for commonalities and differences.

4.4.1 Nature of Cataloguing and Classification

The practice of cataloguing and classification is a predominantly online enterprise in the three study sites with the few remaining manual processes being completed with the aid of the online cataloguing system. The library automation initiative heralded by the introduction of ICT in the operations of libraries was adopted by all the three libraries albeit at different times and is manifested by the transition from the manual or traditional form of cataloguing to the online cataloguing system.

The library automation project in each instance began with the adoption and use of the BiblioFile Cataloguing Software for the cataloguing work. The need for an integrated software informed the decision of these libraries to discard the BiblioFile Cataloguing Software for other Integrated Library Management Systems. Whereas Sam Jonah Library (UCC), opted for an open source software (KOHA), Osagyefo Library (UEW) and Balme Library (UG) opted for proprietary

softwares. The Balme Library presently uses Sierra after some time with Millennium whiles Osagyefo Library uses Virtua.

Typical of the transition has been benefits such as increased work outputs, easier nature of the cataloguing work, reduced errors, time savings and ease of effecting changes which have accrued to all three libraries.

There is a general consensus in all three libraries about the importance of a cataloguing and classification manual. However, with the exception of Balme Library Cataloguing Department which has a policy document as well as a procedural manual, the remaining cases did not have a formal cataloguing policy document. Whereas Sam Jonah Library has a policy document at the draft stages, the initiative is yet to be commenced at the Osagyefo Library.

Training and building the capacities of staff in the area of cataloguing and classification is common to all three cases with the practice of training newly posted or transferred staff extensively before they are allowed to commence the cataloguing work. The organization of regular refresher training programs at least twice a year is also reminiscent of the three cases.

A major issue of similarity among the three cases is the job description of staff of the cataloguing section or department. There is general consensus about the relatively easier nature and cost-effectiveness of copy cataloguing on one hand and the relatively complex nature of original cataloguing on the other hand. However, whereas BLCD decentralizes the original cataloguing process albeit under very strict supervision, the SJLCS and the OLCS mandates experienced and professional library staff to carry out the original cataloguing process. Copy cataloguing however is open to all staff irrespective of expertise or experience in all three cases. In the undertaking of

these cataloguing processes in the three cases, staff concur on the availability of the required cataloguing and classification tools and aids.

The practice of outsourcing of either parts or the whole of the cataloguing work is not a popular initiative currently in the three study sites. Whilst the SJLCS and the OLCS had experienced instances of outsourcing, the BLCD are yet to experience it. Whilst personnel in all the three cases are not oblivious to the benefits of outsourcing, they are very much conscious of the fact that outsourcing limits the professional development of staff and is embedded with many unseen costs.

To ensure uniformity and allow the possibility of resource sharing, all the three study sites use universally accepted cataloguing codes and standards. Whilst the BLCD and the SJLCS are still using the provisions of the Anglo-American Cataloguing Rules 2nd Edition (AACR2), the OLCS has adopted the provisions of the Resource Description and Access for not only its copy cataloguing work but also its original cataloguing work. There is a general observation however from some staff across the three libraries to the effect that, bibliographic records for information resources published mostly after the year 2010 tend to be created based on the provisions of the Resource Description and Access.

There is a general satisfaction among staff of the cataloguing outfits of the three libraries with regard to the working relationship and collaboration between themselves and their counterparts in IT Support Services. With the exception of OLCS which did not have a dedicated IT Section to work with but rather an IT attaché or liaison, the remaining cases (BLCD and SJLCS) had dedicated IT Support services providing technological support in terms of troubleshooting and managing the computer infrastructure in use. Again, there is a good working relationship

between the BLCD and the OLCS as users of a proprietary ILMs and their software developers to a very large extent.

4.4.2 Role and Functions of Cataloguing and classification

The central role of cataloguing and classification in the value chain of the academic library's operations is not in question in the three study sites. There is universal congruence on the fact that cataloguing brings order into the collection of the library while facilitating easy access to the information resources in the collection. The role of the library catalogue as a marketing tool for publicizing the parent institution is referred to as a direct benefit of the use of web OPACs.

Respondents from across the three cases all agree to the fact that the operations of the library will be exceedingly difficult in the absence of the practice of cataloguing and classification. The chaotic nature of the library's operations in the absence of cataloguing and classification is generally attested to in all the three cases.

The essence and relevance of cataloguing and classification in other operations of the library, especially reference work is also very much common to the three study sites. In all the cases, attention was drawn to the fact that reference librarians use the library catalogue as their major working tool and this attests to the influence cataloguing has over that particular operation of the library.

4.4.3 Level of Investment in Cataloguing and Classification

The level of investment in the practice of cataloguing and classification across the three cases is generally not at the optimum level. Whereas the level of financial infusion in the practice in the

case of BLCD and OLCS was deemed satisfactory but inadequate, the level of financial support for the SJLCS was deemed downright unsatisfactory and inadequate.

4.4.4 Management and Promotion of the Library Catalogue

The management and promotion of the library catalogue is prevalent in all the three cases with the need and essence of such actions obvious to the respondents. The transition to the online cataloguing system has accounted for the migration from the use of the card and book forms of library catalogues to the use of the Online Public Access Catalogue (OPAC) in all of the three libraries. In all of the three cases there are available, card catalogue systems used in the past still existing in these libraries though they are seldom used. A common feature of the OPACs of the three cases is their web nature, with Balme Library's UGCat being the pioneer of the initiative before Osagyefo Library's WINNOPAC and Sam Jonah Library's UCCLibOPAC.

Typical of the three cases is the Head Cataloguer bearing the responsibility for the management of the OPAC usually with technological assistance from IT staff. Re-cataloguing, reclassification, relocation and editing are activities aimed at managing the library catalogue and are synonymous with all three cases.

From the observation and use of the OPACs of the three cases there are broad similarities. The three OPACs are all union catalogues made up of the local catalogues of the different Colleges, Schools, Institutes and Departments that make up the library system. The provision of access points, basic and advanced search systems are typical of the three OPACs. Quite apart from the WINNOPAC which has the MARC formats of its bibliographic records created on the basis of RDA, the UGCat and the UCCLibOPAC has their MARC formats created with the provisions of the AACR2.

The promotion of the use of the library catalogue, specifically the OPAC among the users of the library is an initiative common to all the three study sites. The application of user education notably orientation programmes for library users as a promotion technique is typical of all the cases. While the SJLCS and the OLCS relies on the Information Literacy Skills course offered by first year students as a promotion technique, the BLCD relies on the education provided by the subject librarians of the various Colleges, Schools and Departments to achieve the same objective.

4.4.5 Cataloguing and Classification Benchmarks

The practice of benchmarking and modeling against best practices in the cataloguing field is accepted across the three libraries as an essential initiative enabling them to share resources with their bibliographic partners.

Unlike the BLCD which does not benchmark or model its cataloguing practice against any local outfit, the SJLCS and OLCS benchmarks against the cataloguing practice of Balme Library, University of Ghana especially regarding the creation of bibliographic records of indigenous information resources which are yet to be found in the catalogues or databases of international bibliographic utilities.

The consultation of the catalogues and databases of international bibliographic utilities such as the Library of Congress and the Online Computer Library Centre (OCLC) as a parameter of the authenticity of the locally generated bibliographic records is a common practice in all three study sites.

4.4.6 Challenges Militating Against The Practice of Cataloguing and Classification

The set of issues challenging the practice of cataloguing and classification in the three libraries are commonly occasioned by the inadequacy of the financial support offered to these sections or departments. Of the three cases, the SJLCS is the most vocal of the inadequacy of its financial support while the two remaining cases (BLCD and OCLS) are mildly satisfied with the financial support offered them.

Specifically, the provision of adequate and modern computer infrastructure for the cataloguing work, reliable internet connectivity and serene working conditions remain a challenge for these three libraries and accounts for their inability to provide a top of the line cataloguing and classification service for their clients. These issues while frustrating the working cycle of staff of the cataloguing section thereby reducing their work outputs, also adversely affect their health and well being.

4.5 Conclusion

The current state of the practice of cataloguing and classification as indicated by the data collected through interactions with key stakeholders in the practice, is quite encouraging given the resources available to be worked with. Much as the essence and relevance of the practice is not lost on any of the decision makers in these academic libraries, the findings reveal a mixed feeling as to the readiness of these institutions to elevate their cataloguing and classification practice to an elite level. Confirmation or denial of this can only be done by subjecting the discoveries and findings to available essential literature.

CHAPTER FIVE

DISCUSSION OF MAJOR FINDINGS

5.0 Introduction

This chapter discusses the findings emerging from the analysis of the data from the three case studies. The study set out to investigate the practice of cataloguing and classification as it pertains in three public academic libraries (Balme Library, University of Ghana; Sam Jonah Library, University of Cape Coast and Osagyefo Library, University of Education, Winneba). This discussion juxtaposes the findings of the study with other relevant studies and literature regarding the myriad of issues under consideration.

5.1 Background

The practice of cataloguing and classification has been part of the operations of academic libraries for a very long time. As Reid (2003) observes, the magnitude of the collection of larger libraries makes the need to bring some form of order and organization into the collection paramount. The cataloguing and classification practice is vibrant in all the cases under consideration with widespread similarities and few notable differences. Ultimately, these outfits despite existing challenges carry out their mandate of being the hub of information organization in their respective libraries within the confines the human, financial and other logistical resources provided.

5.2 Nature of Cataloguing and Classification

To Agha (1986), automation in libraries has been a subject of discussion on the African continent since the mid -1970's. According to Egunjobi and Awoyemi (2012) the myriad of issues and challenges associated with this initiative is largely responsible for the late engagement of this initiative in libraries on the African continent. From the study it was determined that, the library automation initiative in the various cases was characterized by a host of challenges leading to changes in the Integrated Library Management System under use. In recent times, some stability has been achieved enabling the practice of cataloguing and classification to be carried out in a predominantly online system.

The study revealed an array of benefits from the perspective of both staff of the cataloguing section and users of the Online Public Access Catalogue that has been accrued as a result of the transition from the manual or traditional mode of cataloguing to the online form of cataloguing. This is in line with Adeleke and Olarunsola's (2007) opinion that the expensive nature of online cataloguing and classification in Africa is less in comparison to the very significant benefits that accrue from such a venture. Oduwale (2005) also agrees that automation of the cataloguing and classification process of academic libraries has resulted in increased efficiency of the cataloguing procedure and consequently led to a surge in staff productivity.

According to Abdussalam and Saliu (2014), the use of Integrated Library Management Systems (ILMS) is empowering libraries on the African continent to compete and provide better services to their users. The use of open source and proprietary forms of ILMS and their distinct challenges are revealed plainly in the study and this conforms to popular opinion that the availability of open source and proprietary ILMS software enables all forms of libraries

irrespective of their size to adopt the library automation initiative (Egunjobi & Awoyemi, 2012; Madhusudhan & Singh, 2016; Omeluzor & Oyovwe-Tinuoye, 2016).

To Beall and Kafadar (2002) and Yusuf (2009), copy cataloguing has gained popularity in academic libraries especially as a result of its efficiency and is widely acknowledged as the single most important factor in the struggle towards the elimination of backlogs of uncatalogued materials from the cataloguing department. From the study, it was realized that copy cataloguing is a significant activity in the practice of cataloguing and classification in the three case study sites. It was further determined that while copy cataloguing forms a major part of the job description of all categories of staff, its relatively less complexity and difficulty makes it easy to teach and learn thereby ensuring that staff with little or no professional qualifications are easily instructed on the copy cataloguing process. This line of thought is confirmed by El-Sherbini (2001), McCutcheon (2012) and Orbih and Aina (2014) that the simplicity of the copy cataloguing process makes it safe to be delegated to Para-professional staff and other lesser qualified staff while the professional staff deal with complex cases of copy cataloguing as well as original cataloguing.

Irrespective of the significant role of copy cataloguing in the operations of the libraries under study and the immense scale at which it occurs, the study reveals a clear and apparent relevance of the original cataloguing process in the case study sites. The growing numbers of locally published information resources which hardly find themselves in the databases of international bibliographic utilities makes the original cataloguing process extremely relevant. This state of affairs is in line with the determination of Fuller (2006) and Orbih and Aina (2014) that the description of information resources produced on the African continent and on subjects which

are very specific to the African way of life are credible opportunities for cataloguers on the continent to be contributors to the bibliographic universe and not just beneficiaries.

The category of staff mandated to carry out the original cataloguing process in the libraries under consideration is revealed by the study. From the study, it was determined that the original cataloguing process as a result of its difficulty and complexity is regarded as highly professional work and as such mandated to professional staff with the required experience and qualification. In the very few instances where lesser qualified and experienced staff were engaged in the practice, the study observed a strict supervision in place to ensure the accuracy of the bibliographic records created as a result. This practice is confirmed by the findings of El-Sherbini (2001) to the effect that professional librarians who are experienced in cataloguing are important assets to the library and as such better use of their skills and capabilities must be made.

To Adeleke and Olarunsola (2010), the efficacy of a library's cataloguing practice is dependent to an extent on the availability of the needed cataloguing and classification tools and aids. The availability of the required cataloguing and classification tools and aids is one outcome revealed by the study. Personnel of the cataloguing departments of the three study areas agree unanimously to the availability of the needed tools and aids for their work. Kim (2003) arrived at the same conclusion in his study and posited that the ability of cataloguers to create bibliographic records and assess same with the view to facilitating access to the information resources they represent depends greatly on their knowledge and expertise of the available cataloguing and classification tools and aids within the profession.

As indicated by Banush and LeBlanc (2007), cataloguing and classification policy documents are formal, written and ratified documents that seek to prescribe in detail the approved procedures

for a cataloguing and classification unit of a library. Hoerman (2002) notes that the number of cataloguing and classification sections or units currently operating without a formal policy document is very high and ascribes the need to get the cataloguing unit up and running in the shortest possible time as the reason why the enactment of the cataloguing policy document is often relegated to the background. The study reveals a rather encouraging situation in the three case studies. The Balme Library Cataloguing Department is the only case that had a fully functional and operational cataloguing policy document together with a procedural manual. The benefits of these documents are acknowledged by staff of the section. The two remaining cases (Sam Jonah Library and Osagyefo Library) however did not have a cataloguing and classification policy document, though the former had one nearing completion. These two cases relied on unwritten conventions and tenets that have served them well in making library specific cataloguing and classification decisions. This practice is in sync with the assertions of Hoerman (2002) and Reid (2003) that cataloguing policies must not necessarily be written down before they can be considered operational but that they can also be unwritten and serve as a convention.

This finding however contradicts the opinion of Banush and LeBlanc (2007), who opine that the inability of unwritten conventions to provide reference when there is the need ultimately defeats the purpose for the enactment of the policy in the first place. The prescription of appropriate courses of action and the elimination of the reliance of staff on their own discretion as noted by staff of the Balme Library Cataloguing Department is in conformity to the findings of Hider (2014) who recommended the consideration of all seemingly trivial issues in the course of writing the document so as to prevent the reliance of staff on their discretions after the policy document has been enacted and ratified.

Outsourcing of parts or the whole of the cataloguing and classification work is regarded as one of the contemporary issues threatening the future of the in-house cataloguing practice (Ugah, 2010). In the opinion of Libby and Caudle (1997), and Fisher, Lugg and Boose (2004), outsourcing of cataloguing work gained popularity in libraries mainly as a result of the need of these libraries to reduce their operational costs. The expensive nature of the cataloguing and classification practice in many libraries therefore makes it ideal for cost reduction measures such as outsourcing. This study revealed a generally strong determination of the management of the three libraries to maintain the practice of cataloguing in-house. Whilst two of the cases (Sam Jonah Library and Osagyefo Library) had outsourced parts of their cataloguing work in times past, the Balme Library has not felt the need to do so. Currently, the position of the management of the three libraries is to continue the practice of cataloguing and classification in-house into the foreseeable future. The ultimate goal is to build and develop the skills and capacity of the staff.

This finding is agreement with the findings of Dunkle (1996), Hill (1998), Ugah (2010) which converge at the point of indicating the dilution of the important practice of in-house cataloguing as well as the stifling of staff morale as consequences of the practice of outsourcing of cataloguing and classification work. This study also reveals the liberal attitude of some staff especially from Sam Jonah Library and the Osagyefo library towards the adoption of outsourcing as a management practice. The overall feeling is that the peculiarity of some circumstances such as the acquisition of information resources in foreign languages could require the invitation of an outsider. This finding corresponds to the assertion of Block (1994) that the practice of outsourcing is not necessarily a bad concept considering the benefits that could accrue from it when library management engage vendors in the cataloguing of special collections, archival

collections, foreign language collections and large uncatalogued backlogs that the library does not have the capacity for currently.

In the current dispensation of information and communication technology, most academic libraries have automated their operations. This has resulted in the practice of cataloguing and classification in most academic libraries being undertaken with the aid of technological gadgets. As Haliso (2011) predicates, the functions of academic libraries especially organization of information for use, used to be provided manually but are now facilitated through the use of ICT which makes things easier and faster. Using a predominantly online cataloguing system requires the support of IT staff who provide the requisite technological support and backing. The study reveals the existence of this support structure in all of the three libraries though it is comprehensive in the Balme Library and Sam Jonah Library as indicated by the establishment of separate sections for this support service. The study further shows the close working relationship and collaboration between the Cataloguing and Classification section and the Information Technology support unit. This state of affairs is ascribed to by Krubu and Osawaru (2010) who posited that the library automation projects ongoing in many of the academic libraries of the African continent would require the provision of technological support from IT personnel to traditional library staff who are finding their feet in this relatively new initiative.

The need to achieve standardization in the creation of bibliographic records as well as enable the concept of resource sharing among academic libraries gives credence to the use of cataloguing codes or standards as basis for the practice in academic libraries especially (Parent, 2014; Maurer & Panchyshyn, 2014). The use of the Anglo-American Cataloguing Rules (Second Edition) as the dominant cataloguing standard in two cases (Balme Library and Sam Jonah Library) is revealed by the study. There is an effort however on the part of the Osagyefo Library to adopt

the Resource Description and Access as its cataloguing standard. The movement or migration from the use of the AACR2 as a cataloguing standard to the Resource Description and Access is one being considered thoroughly by most academic libraries in the developing world (Ahonsi, 2014).

The findings of the study regarding the dominant use of the AACR2 as the cataloguing standard in two of the case study sites conforms to the position of Parent (2014) and Lisius (2015) that the continued use of the AACR2 instead of the RDA in most libraries especially those in the developing world stems from the fact that there is a similar structure guiding both standards whilst the bibliographic records created on the basis of both standards tend to be compatible with each other. This coupled with the fact that RDA was initially meant to be a radical version of AACR2 and has its foundations based on AACR2 makes the migration initiative not of immediate concern to many of these academic libraries. Sanchez (2011) also contends that the financial outlay required for the use of the RDA standard is also restrictive and largely contributes to the continued use of the AACR2 as cataloguing code or standard.

5.3 Role and Functions of Cataloguing and Classification

The role and function of cataloguing and classification in academic libraries has never been in doubt since the concept of information organization and management was conceived. Its essence and relevance has indeed taken on added importance as a result of the proliferation of information resources in various formats and the consequent information overload (Mohr & Schuneman, 1997). The position of cataloguing and classification in the value chain of the operations of the three cases in this study is one of repute. The study reveals the role cataloguing and classification plays in bringing order into the collection of the library and facilitating access

to same. The role it plays in providing the platform for other operations of the library notably reference work and the difficulties associated with the operations of the library in the total absence of cataloguing and classification are additional revelations of this study. In the opinion of Rowley and Farrow (2000), cataloguing and classification serve as the two main tools for organizing and bringing some form of order into the collection of libraries especially academic or university libraries whose collections tend to usually run into hundreds of thousands. Reid (2003) confirms the need to facilitate access to the information resources contained in the collection of the academic library as one of the core mandates of cataloguing and classification and one currently being achieved through the use of Online Public Access Catalogues via the engagement of access points.

Xu (1995) and Bopp and Smith (2011) are in agreement with the finding of the study as regards the provision of the required platform for especially the reference work to function effectively. In their opinion, the reliance of staff of reference sections and users of the library on the library catalogue is genuine testament to the essence of cataloguing and classification in libraries. Rowley and Farrow (2000) predicates that skipping the practice of cataloguing and classification in the operations of academic libraries especially is equivalent to skipping the information organization stage of the information management process. In confirming the findings of this study they assert that the absence of the practice of cataloguing and classification in the operations of libraries robs these libraries of any semblance of order in their collections and results in an atmosphere of disarray and bedlam.

5.4 Level of Investment in Cataloguing and Classification

Academic libraries are generally deemed to be more resourced in financial terms than the remaining kinds of libraries mainly because of the relatively better finances of the universities and other tertiary institutions they serve (Andaleeb & Simmonds, 1998). The level of investment in the operations of the academic library has not been encouraging as a result of the dwindling library budget reminiscent of the African continent (Emojorho, 2004; Mapulanga, 2011). Adeleke and Olarunsola (2007) credit the surge in financial infusion into the operations of academic libraries at the turn of the millennium to the library automation initiatives embraced by most academic libraries on the African continent. This study reveals an average level of investment in the practice of cataloguing and classification in the three case study sites. This conclusion is manifested by the inadequacy of computer infrastructure, unreliable internet connectivity, use of outdated cataloguing and classification standards, tools and aids as well as sub-par working conditions in these departments. Mapulanga (2011) lays credence to this latest finding when he posited that the budget of academic libraries, which are dwindling by the year, is consumed majority of the time by collection development and this has resulted in the reduced investment in reference work, cataloguing and other operations of the library. Oyedule and Ola (2008) however hold a different view and are of the opinion that the financial outlays expended on cataloguing and classification is high considering the fact that technical services, of which cataloguing and classification forms a part are not meaningful sources of income in the library system. Their opinion however stems from the discussions of library operations from the cost – benefit perspective.

5.5 Management and Promotion of Library Catalogues

The library catalogue as the key to the vast collections that has become reminiscent of academic libraries is an important tool in the operations of these libraries. Kani-Zabihi, Ghinea and Chen (2008) opine that the library catalogue as an important tool in academic libraries requires a strict management and promotion drive to ensure that the investment is worthwhile.

Re-cataloguing, reclassification, relocation and editing are the major library catalogue management procedures unearthed by the study in the three case study sites. Reid (2003) asserts in his study that the management of the library catalogue is just as relevant as the creation of the library catalogue. In his opinion, the management of the library catalogue ultimately ensures that the facility remains up to date and capable of satisfying the queries of users.

The study reveals the computer access catalogue commonly known as the Online Public Access Catalogue (OPAC) as the current form of library catalogue used in all the three case study sites. Fathahi (1995) found in his study that the probing, retrieval and presentation of bibliographic records as well as the innate flexibility of Online Public Access Catalogues are reasons informing the mass movement of academic libraries especially to the use of the OPAC. The movement of the three libraries understudy from the use of the computer access catalogue (which is effectively an OPAC accessible on a local network and accessible to users in a specific geographic area) to the web-OPAC which is accessible from everywhere across the internet is another revelation of the study. This current state of affairs is affirmed by Madhusudhan and Aggarwal (2011) who found in their study the potential of web-OPACs in serving the information seeking needs of remote users. In an earlier study, Craver (as cited in Starck and Zadeh, 2013) comes to the conclusion that the online catalogues influence the choice of colleges

among college-bound high school seniors and ultimately determines the extent of use of the academic library once they are enrolled. The publicity and marketability of the academic library and by extension, the parent institutions are benefits of the web-OPAC initiative as revealed by the study. Starck and Zadeh (2013) similarly found in their study that higher education institutions are engaging a wide array of marketing tools and approaches to attract students. The marketing and publicity avenues they revealed in their study include but not limited to web pages, OPACs, IT tools and personal attendances at events and open fairs.

Again this study shows the deliberate and conscious effort to promote the use of the Online Public Access Catalogue among users primarily through the medium of user education specifically orientation programmes and information literacy programs. This is contradicted by the findings of Mulla and Chandrashekara (2009) and Msagati (2016) who established that the promotion and awareness creation of OPACs in academic libraries are not at the required level and is grossly inadequate. They assert that the lack of awareness of patrons to the availability and functions of the OPAC has led to the gross underutilization of the facility.

5.6 Cataloguing And Classification Benchmarks

In the practice of cataloguing and classification in the three case study sites, benchmarking was determined to be a popular routine across the three cases. The study lay to bare, the creation of bibliographic records, the determination of classification numbers and the lettering practice as some of the most common activities that are benchmarked against both local and international cataloguing outfits or bibliographic utilities. This finding is synonymous to that of Adeleke and Olarunsola (2010) who concluded that the advent of ICT has contributed largely to the ability of today's cataloguers being able to compare their activities and practices to that of their

contemporaries both within their country of origin and across international borders. They identify the cataloguing practice of the Online Computer Library Centre (OCLC) and the Library of Congress particularly as excellent reference points for cataloguers on the African continent.

5.7 Challenges Militating Against The Practice of Cataloguing and Classification

The practice of cataloguing and classification in the three case study libraries, while exhibiting some genuine traits of organization and professionalism are beset by some constraints and challenges. The objective of these cataloguing outfits to be considered as elite cataloguing and classification practices has not materialized mainly as a result of the existence of these challenges in their operations.

The study revealed the unreliable and unstable nature of internet connectivity as a major challenge militating against the practice of cataloguing and classification across the three case study libraries. The predominantly online cataloguing system in use at all the sites coupled with the technology assisted cataloguing and classification tools and aids used in the process makes the issue of internet connectivity one of relevance. The frequent truncation in internet connectivity and consistent low bandwidth contributes generally to the low work output that is reminiscent of these cataloguing outfits. This finding is corroborated by a study acknowledged to Adeleke and Olarunsola (2007) who similarly found that internet down times constitutes a huge challenge to the online cataloguing initiative currently in vogue in many academic libraries. The fact that the OPAC which is the current form of library catalogue in use in these libraries requires uninterrupted internet connectivity to function efficiently exacerbates the challenge for these cataloguing outfits.

The study also lays to bare the inadequacy of the required computer infrastructure needed for the online cataloguing and classification system in use currently as a significant challenge for these cataloguing outfits. To provide a top of the line cataloguing service requires the use of modern and high performing technological gadgets like computer systems, barcode scanners, barcode printers as well as other equipments meant to provide staff of the cataloguing section a serene working environment. This finding corresponds with the outcome of a study by Arinola, Adigun, Oladeji and Adekunjo (2012) who contended that the provision of the required state-of-the-art technological gadgets is a pre-requisite for the library automation initiative but found the funds to acquire these resources to be lacking and as such the existence of sub-par technological gadgets.

Financial support for the practice of cataloguing and classification was determined to be average in all the three case study sites. Much as the infusion of financial resources into the practice was not at a dire level, the study revealed that the current level was not ideal. The challenge of finance was ascribed to by respondents as the common generic constraint from which all other challenges emanate. Adeleke and Olarunsola (2007) and Arinola, Adigun, Oladeji and Adekunjo (2012) allude to the fact that financial constraints have been the bane of most cataloguing and classification practices in Africa with challenges pertaining to inadequate tools and resources for cataloguing and classification, insufficient skilled cataloguers and lack of international exposure to cataloguing practices being a direct consequence of this apparent financial resource inadequacy.

5.8 Relationship of the findings to the Conceptual framework

The Knowledge Management Process model attributed to Bouthillier and Shearer (2002) was used to anchor the study. The model seeks to delineate the stages an academic library goes through from when a particular knowledge need is identified to when that knowledge is used and applied by the user.

Bouthillier and Shearer (2002) posit that the storage and organization of knowledge stage is central to the entire information and knowledge management process. As Rowley and Farrow (2000) put it, the organization of information and knowledge in the academic library is crucial to the operations of these libraries and identifies cataloguing and classification as the two main activities engaged in this endeavour.

In the respective academic libraries under consideration, the central role and essence of the practice of cataloguing and classification was attested to by professionals, para-professionals and non professionals alike. The general consensus regarding the difficulties a library is likely to face in the absence of the practice of cataloguing and classification also corroborates the views of various writers concerning its fundamental role in the knowledge management process.

5.9 Conclusion

The study set out to investigate the practice of cataloguing and classification in three academic libraries with the view to revealing the role and essence of cataloguing and classification in these libraries, the nature of the practice, the kind of investment made into the practice as well as the challenges constraining this important practice. In coming to this determination, the study sought to draw a holistic picture of the practice of cataloguing and classification by delving into the nature or form of cataloguing done, the roles and functions of cataloguing and classification,

management and promotion of the library catalogue, cataloguing and classification benchmarks as well the constraints of the practice. These formed the major thematic areas that enabled a comprehensive discussion of similarities and differences with earlier studies as well as current practices. The issues and findings of this study while emanating from only three cataloguing outfits are nonetheless very insightful regarding the overall practice of cataloguing and classification in academic libraries in Ghana.

CHAPTER SIX

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

The chapter under consideration summarizes the main findings of the study, provides the conclusions of the study, proffers some recommendations and finally specifies some areas for further research. The conclusions are primarily derived from the major findings of the study, which are effectively an attempt to answer the queries presented by the research objectives. The recommendations for policy makers and other stakeholders of the practice of cataloguing and classification are in turn based on the conclusions of the study. The chapter also provides other areas of further research with the potential of expanding the existing knowledge of cataloguing and classification from the African perspective.

6.1 Summary of Findings

The study set out to examine the practice of cataloguing and classification at the University of Cape Coast, University of Education, Winneba and University of Ghana libraries. It categorically sought to find out the nature of cataloguing and classification in these libraries, the level of investment in the practice over time and the roles and functions of cataloguing and classification in academic libraries. Again, the study revealed the strategies engaged to manage and promote the use of the library catalogues as well as the myriad of issues militating against the practice of cataloguing and classification in the study sites. This was achieved by determining the state of the practice in each individual case and comparing them to bring out the commonalities and divergences.

6.1.1 Nature of Cataloguing and Classification

The study sought to find out the nature and form of the cataloguing and classification practice in so far as the three study sites were concerned. It emerged from the findings that the practice was predominantly an online practice facilitated by the use of both open source and proprietary Integrated Library Management Systems. The study also revealed copy cataloguing as the major job description of staff of the cataloguing and classification outfits with the few materials that cannot be described using the copy cataloguing process being catalogued originally. The Anglo-American Cataloguing Rules (Second Edition) remains the dominant cataloguing standard used with the exception of Osagyefo Library that has begun using the Resource Description and Access as its operational standard. Again, the study revealed that the activities of these cataloguing and classification outfits are guided by some local conventions and tenets. However, it was only the Balme library which had formalized these conventions into an actual written policy document. The practice of cataloguing and classification is currently an in-house practice with the outsourcing of parts or the whole of the practice presently not under consideration. Finally, it emerged from the study that there was a close collaboration with the IT Support Units who provide the needed support for the online cataloguing and classification adopted in these libraries.

6.1.2 Role and Functions of Cataloguing and Classification

In the three cataloguing outfits under study, the roles, functions and essence of the practice of cataloguing and classification in the operations of academic libraries as well as its influence on other activities in the value chain of the librarianship profession was not lost on cataloguers and staff of the cataloguing section. The study revealed the awareness of staff of the various

cataloguing units to the potential difficulties of the operations of the academic library in the total absence of cataloguing and classification.

6.1.3 Level of Investment in Cataloguing and Classification

The level of investment into the practice was revealed as generally not at the optimum level in all three libraries.

6.1.4 Management and Promotion of the Library Catalogue

From the study, it came to light that the library catalogue was the most obvious end product of the cataloguing and classification process. It was again revealed that all three university libraries were using the most current form of the library catalogue, that is the Online Public Access Catalogue (OPAC). These catalogues which are currently Web-OPACs are managed by the Head Cataloguers with technological assistance from the Systems Administrators in all three cases. Again, the study revealed efforts to promote the use of the OPAC among users of the library primarily through user education.

6.1.5 Cataloguing and Classification Benchmarks

Benchmarking and modeling of the practice of cataloguing and classification against international bibliographic utilities was revealed by the study as prevalent in all three cases. With the exception of Balme Library, University of Ghana, the two remaining cases also benchmarked against local cataloguing and classification practices.

6.1.6 Challenges Militating Against The Practice of Cataloguing and Classification

Despite the very important role the practice of cataloguing and classification plays in the value chain of the academic libraries under consideration, the study found out that there exists a myriad

of issues constraining the practice and thus preventing it from achieving the desired objectives. These challenges which have their roots in the inadequate financial support for the cataloguing practice include but not limited to inadequate provision of modern computer infrastructure, unreliable internet connectivity and sub-par working conditions.

6.2 Conclusion

The findings of the study leave one in no doubt whatsoever of the essence and relevance of the practice of cataloguing and classification in operations of the academic libraries under consideration. The attention and importance attached to the practice coupled with the resources (albeit relatively low financial resources) allocated to the practice bear genuine testament to the relevance of the activity to library operations. The fundamentalism of the practice of cataloguing and classification to the librarianship profession has been especially pronounced in contemporary times mainly as a consequence of the introduction of ICT into the practice. The efforts expended on the Online Public Access Catalogue purposely towards its management and promotion is aimed at ensuring that the users of the academic libraries under consideration are provided with the very best of information seeking aids. There is, however, a gap between the desire of library management to make the practice of cataloguing and classification one of a high standard and the actual provision of the resources needed to achieve this desire. Despite these positives, the practice as it pertains in the three cataloguing outfits under consideration is beset by a myriad of challenges which ultimately denies these academic libraries the opportunity of having in their value chain a credible cataloguing and classification practice. The general admission on the part of stakeholders of the practice of cataloguing and classification at the policy level of the need to resource the practice in both financial and logistical terms breeds an air of optimism among practitioners.

6.3 Recommendations

Based on the findings and conclusion of the study, some recommendations are made by the study for stakeholders and practitioners of cataloguing and classification with the view to elevating the status of the practice.

6.3.1 Cataloguing and Classification Policies

The status quo in many academic libraries in Ghana has been to make the practice of cataloguing and classification take off before considering the need to guide the practice with a policy document. This has resulted in a situation where cataloguing outfits operate over decades without a formally written policy document. The study recommends to library management, the promulgation of cataloguing and classification policy documents for the libraries without such a policy. To this end, reference can always be made to the policy documents of existing sister cataloguing outfits.

6.3.2 Investment in Cataloguing and Classification

The study reveals a relatively low level of investment in notably financial and logistical terms. The study recommends to library management, an upward adjustment in the financial and logistical support provided to the cataloguing and classification outfits. The ultimate objective here is to bridge the gap between the admission of management of the academic libraries under consideration to the essence of the cataloguing practice and the level of investment both financially and logistically that is appropriated to the practice.

6.3.3 Capacity Development for Practitioners of Cataloguing and Classification

The existing trend in the three universities has been to regularly develop staff capacity through training programmes within the confines of the library and the country at best. Much as this is a great avenue for improving the proficiency of staff in cataloguing and classification, it denies staff involved in cataloguing and classification of the needed international exposure. The study therefore recommends to library management, the sponsoring of staff of the cataloguing and classification departments to conferences, workshops and other capacity building opportunities outside the country for the needed international exposure and experience on international cataloguing and classification best practices.

6.3.4 Cataloguing and Classification Staff Networking

Currently barring personal acquaintanceship and friendships between cataloguing staff across the three university libraries, there exists, not a single event or program that routinely congregates all staff of cataloguing and classification departments for discussions and sharing of ideas. The study recommends the periodic meetings of the practitioners of cataloguing and classification preferably under the auspices of a collaboration between management of these libraries and the Consortium of Academic and Research Libraries In Ghana (CARLIGH). This initiative will likely lead to an exchange of ideas and information and could serve as the foundation stone for the promulgation of a common local cataloguing and classification practice specific to academic libraries in Ghana.

6.3.5 Adoption of Resource Description and Access as a Cataloguing and Classification Standard

The study reveals the continued use of the AACR2 as a cataloguing standard as prevalent in the cases with the exception of one case which had made the decision to adopt the tenets of RDA. The study recommends the systematic adoption of the Resource Description and Access as a cataloguing standard through the identification of infrastructural and training needs required for the use of the RDA. The study further recommends the pooling of financial resources of academic libraries preferably through CARLIGH as a way of eliminating the impediment occasioned by the financial outlay required to adopt the RDA as a cataloguing standard. This is extremely viable considering the fact that CARLIGH is able to spearhead the efforts of academic and research libraries in Ghana to acquire academic databases for its members.

6.4 Areas For Further Research

The study when placed in existing literature reveals other equally essential areas worth researching. These include but not limited to:

- An evaluation of the cataloguing modules of the Integrated Library Management Systems under use in academic libraries in Ghana.
- Assessing the preparedness of Ghanaian academic libraries towards the adoption of Resource Description and Access as a cataloguing standard.
- An examination of the prospects of a National Union Catalogue for Ghanaian academic libraries.

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APPENDIX A

INTERVIEW GUIDE

LIBRARIANS

Nature of Cataloguing and Classification

1. How important is cataloguing and classification in the value chain of your library operations?
2. Is there a cataloguing and classification policy in your library?
3. What are the expectations of such a policy document?
4. How often is such a policy revised?
Probe: Are there special instances that could warrant the revision of the policy before the expiration of its term?
5. What is your opinion on the concept of outsourcing of cataloguing and classification work?
6. Would you be open to outsourcing the cataloguing of your backlogs?
7. What is your level of investment in cataloguing and classification over the years?
Probe: Is the level of investment steadily rising or declining?
8. What resources or expenditures take up this investment in cataloguing and classification?
9. What has been the impact of ICT in your cataloguing and classification practice?

Role /Functions of Cataloguing and Classification

1. How do you envisage the operations of your library in the absence of the cataloguing and classification section?
2. Specifically, what role does your cataloguing and classification section seek to perform?
3. Do you feel that the migration of your catalogue from the manual/traditional system to the online system has improved your cataloguing and classification practice?

Management and Promotion of Library catalogues

1. How serious do you regard your library catalogues?
Probe: Is anyone at all allowed to populate, manage and edit the catalogue?
2. What form(s) of library catalogue are you using currently?
3. Which Integrated Library Management System (ILMS) supports your library catalogue?
Probe: Is the ILMS open source or proprietary?
4. Do you have statistics of usage of your library catalogues?
Probe: If Yes, are you satisfied with the level of patronage of your library catalogue?
If No, how do you assess the level of patronage of your library catalogue?

5. How do you promote the existence of your library catalogue to your prospective clients?
6. Is your library catalogue online?
Probe: What benefits have you accrued as a result of this initiative?

Cataloguing and Classification Benchmarks

1. What are your expectations of the cataloguing and classification section of your outfit?
2. Do you have a best practice against which you are benchmarking your practice against?

Challenges in Cataloguing and Classification

1. What issues and factors militate against your cataloguing and classification practice?

DIGITAL LIBRARIANS

Nature of Cataloguing and Classification

1. In providing technological support for your cataloguing and classification department, is there collaboration between your outfits?
2. Are you and your staff knowledgeable in the basic rudiments of cataloguing and classification?
Probe: If yes, do you feel that this prior knowledge enable you to provide better support?
If No, do you feel that the sparse knowledge impedes your drive to provide better support services?
3. How supportive is library management in providing technological support recommended by your outfit for the cataloguing and classification department?
4. Which Integrated Library Management System (ILMS) is your library using?
Probe: Is it open source or proprietary?
Who provides the needed support needed for these systems?

Role /Functions of Cataloguing and Classification

1. What specific roles and functions is your outfit aiding the Cataloguing and Classification section to achieve?

Management and Promotion of Library catalogues

1. Who has the primary responsibility of managing the library catalogue?
2. Who has the primary responsibility of promoting the library catalogue?
3. Is the library catalogue online?
Probe: What benefits accrue from such an initiative?

Cataloguing and Classification Benchmarks

1. In regard to your support for the cataloguing and classification section, what would be your ideal scenario?
2. Do you have a practice, either locally or internationally that serves as a benchmark for your outfit?

Challenges in Cataloguing and Classification

1. What factors or issues preclude you from providing the best technological support for your cataloguing and classification section?

HEAD CATALOGUERS/ DEPUTY HEAD CATALOGUERS/ SENIOR MEMBERS

Nature of Cataloguing and Classification

1. How would you describe your entire cataloguing and classification process?
Probe: Is it a manual/card cataloguing system or an online cataloguing system?
2. When did you transition from the card cataloguing to the online cataloguing system?
3. What benefits have you accrued as a result of this transition?
4. Is there a cataloguing policy document to guide your entire cataloguing and classification practice?
5. Have you found the existence/absence of such a policy to be beneficial or detrimental to your cataloguing practice?
6. Are staff of the cataloguing and classification section aware of the existence of such a policy and its purposes?
7. How often is the policy document revised?
Probe: Are there special circumstances that could trigger the revision of the policy document?
8. What conditions occasion the use of original cataloguing process?
Probe: Which categories of staff are mandated to carry out original cataloguing?
Is your outfit adequately resourced with the required cataloguing and classification tools and aids needed for original cataloguing?
9. What conditions occasion the use of the copy cataloguing process?
Probe: Which categories of staff are mandated to carry out copy cataloguing?
Is your outfit adequately resourced with the required cataloguing and classification tools and aids needed for copy cataloguing?
10. Has the concept of outsourcing of parts of the cataloguing workload ever been considered by you or your management team?
11. How often is the staff in your outfit trained?
12. Which cataloguing standard or code are you using currently?
Probe: If not RDA, why not?
13. What is the level of investment in cataloguing and classification work in your library?
Probe: Is there a marked increase or decrease in the budget for your section?
14. What is the level of collaboration between your section and the digital section?

Role /Functions of Cataloguing and Classification

1. What specific roles does your section play in the value chain of the academic library?
2. What influence does cataloguing and classification have over the core functions of the other sections of the library?

Management and Promotion of Library catalogues

1. Who has the primary responsibility over the management of the library catalogue?
2. Is there a deliberate effort to promote the use of the library catalogue among users?
Probe: If Yes, who has the primary responsibility and what avenues are being used to promote the library catalogue?
If No, why not?
3. Is there enough signage in the library to aid clients of the library use the library catalogue?

Cataloguing and Classification Benchmarks

1. Which cataloguing and classification practice do you use as a yardstick for your practice?

Challenges in Cataloguing and Classification

1. What factors or issues militate against the cataloguing and classification practice in your library?
2. What challenges are you facing in the adoption of your current cataloguing standard?

CATALOGUING STAFF

Nature of Cataloguing and Classification

1. How long have you been a staff of the cataloguing and classification section?
2. Did you receive extensive training before starting the cataloguing work?
Probe: If No, how did you become proficient?
3. As a staff of the cataloguing and classification, what is your major job description – copy cataloguing or original cataloguing?
4. Do you have the necessary cataloguing and classification tools and resources required for the copy cataloguing work?
5. Do you have the required cataloguing and classification tools and resources necessary for the original cataloguing process?
6. What categories of staff are mandated to carry out original cataloguing work?
7. What categories of staff are mandated to carry out copy cataloguing work?
8. Are you aware of the existence or otherwise of a cataloguing and classification policy?
Probe: If Yes, do you find the provisions of the policy helpful in your day to day work?
If No, does the absence of the policy document impact negatively on your cataloguing work output?
9. Has the idea of outsourcing of cataloguing and classification work ever been mooted in your library?
10. In your opinion, has the transition from manual/card cataloguing to online cataloguing enhanced the practice of cataloguing and classification in your library?
11. Which areas of the work do you think has improved as a result of the transition?
12. How would you rate the level of investment in cataloguing and classification in your library?
13. What Integrated Library Management System are you currently using for your cataloguing work?

Role /Functions of Cataloguing and Classification

1. As a cataloguer, what are the specific roles and functions cataloguing and classification play in academic libraries?
2. How do you envisage the operations of an academic library in the total absence of cataloguing and classification?
3. What influence does cataloguing and classification have over other operations of the library?

Management and Promotion of Library catalogues

1. Are you aware of the existence of procedures aimed at managing the library catalogue?
Probe: Do you periodically carry out tasks aimed at managing the library catalogue (reclassification, recataloguing, editing, relocation)

2. Is there a conscious effort to promote the library catalogue to users of the library?
Probe: If Yes, what avenues and techniques are being used?
If No, why not?

Cataloguing and Classification Benchmarks

1. What cataloguing and classification practice do you consult for your cataloguing work?
2. Which bibliographic utilities/services/institutions do you benchmark your practice against?

Challenges in Cataloguing and Classification

1. What are the challenges you face in your daily work?