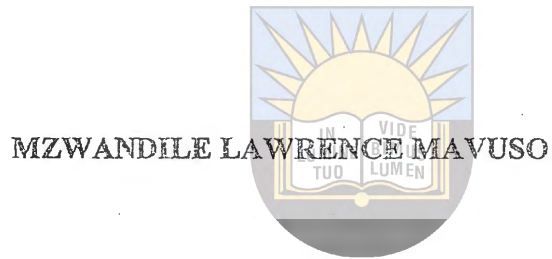


THE MANAGEMENT OF GREY LITERATURE IN ACADEMIC LIBRARIES IN THE
EASTERN CAPE: A CASE STUDY OF THE THESES AND DISSERTATIONS AT
HOWARD PIM LIBRARY AT THE UNIVERSITY OF FORT HARE.



University of Fort Hare
Together in Excellence

M. B.Bibl.

2015



University of Fort Hare
Together in Excellence

**THE MANAGEMENT OF GREY LITERATURE IN ACADEMIC LIBRARIES IN THE
EASTERN CAPE: A CASE STUDY OF THE THESES AND DISSERTATIONS AT
HOWARD PIM LIBRARY AT THE UNIVERSITY OF FORT HARE.**



By
MZWANDILE LAWRENCE MAVUSO

University of Fort Hare
Submitted in fulfilment for the degree of
Together in Excellence

Masters in Library and Information Science (M. B.Bibl.) from the

Department of Library and Information Science in the

Faculty of Social Sciences and Humanities at the

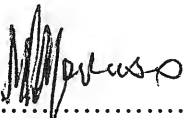
University of Fort Hare.

Supervisor: Mr. F.E. Khayundi

September 2015

DECLARATION

I, Mzwandile Lawrence Mavuso, declare that this dissertation entitled: an investigation into the management of grey literature in academic libraries in the Eastern Cape: a study of the Howard Pim Library at the University of Fort Hare, submitted to the University of Fort Hare for the Degree of Master of Library and Information Science has never been previously submitted by me for a degree at this or any other University, that this is my own work and that all sources of information used herein have been duly acknowledged.

Signature: 



Date: 16/09/2015 **University of Fort Hare**
Together in Excellence

DEDICATION

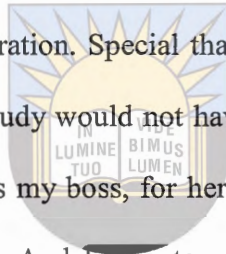
I dedicate this dissertation to my maternal grandfather, Mr. M.E. Booi for raising me while my parents could not undertake that responsibility. Your determination to send me to school up to matric against all odds was a foundation for my efforts to attain this degree. I salute you.



University of Fort Hare
Together in Excellence

ACKNOWLEDGEMENTS

By the grace of my Heavenly Father I became aware of the value of continuous self-improvement through life-long learning experience. Foremost I thank Him for the wisdom and efforts He bestowed on me to undertake this study to completion. I am privileged to have my family as support base, particularly my daughter, Phakama and my two sons, Lichumile and Ayavuya, and the opportunity to meet people from whom I have learnt a lot through the years. A word of appreciation goes to my ex-teacher Meneer Gideon Sam and one of our community members, Dr. J.M. Mbete for their inspiration. Special thanks go to my supervisor and mentor Mr. F.E. Khayundi without whom this study would not have materialized. I want to thank Mrs. Y. Soul, the University Librarian, who is my boss, for her resolute encouragement. I thank my colleagues and friends for their support. And lastly, to my parents, thank you for laying the foundation in my life.



University of Fort Hare
Together in Excellence

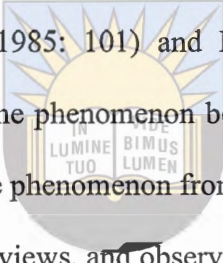
ABSTRACT

TITLE: AN INVESTIGATION INTO THE MANAGEMENT OF GREY LITERATURE IN ACADEMIC LIBRARIES IN THE EASTERN CAPE: A STUDY OF THE HOWARD PIM LIBRARY AT THE UNIVERSITY OF FORT HARE LIBRARY.

The aim of this study was to investigate the management of grey literature in academic libraries in the Eastern Cape with special reference to the Howard Pim Library of Africana. The study intended to achieve the following objectives:

describing to what extent is GL being acquired at UFH's Howard Pim library; describing how the processing of GL is being done; explaining how access to GL is facilitated; assessing the preservation of the GL; explaining the importance of GL in research; determining how GL is shared among academic libraries within SEALS; and establishing challenges faced by the integration of GL in the SEALS consortium, all of which spring from a premise of how GL could be managed in academic libraries in the Eastern Cape.

This investigation used a case study approach. The methodology used was a qualitative research approach which according to Leedy (1985: 101) and Merriam (2002) is used to answer questions about the complex nature of the phenomenon being studied. He further states that its purpose is to describe and understand the phenomenon from the point of view of the participants. The researcher used questionnaires, interviews, and observation processes to collect data in order to analyze it, and discuss the findings.



University of Fort Hare
Together in Excellence

The study revealed that the theses & dissertations collection are the only GL materials that were actively acquired and processed at the HPL and these were accessed by consulting the OPAC. However, other than T&D there is a bulk of unprocessed GL that remains inaccessible. Despite

being invaluable research resource the GL is under threat of deterioration because of lack of preservation mechanisms. As a result of inaccessibility it cannot be shared or integrated within the SEALS consortium.

Given the above, it is recommended that the library should lobby the university management for funding to establish the necessary infrastructure, training staff and users on management of GL and hire competent professionally qualified staff; to further research in this area as well as formulate and implement policies relevant to the efficient and effective management of GL.



University of Fort Hare
Together in Excellence

TABLE OF CONTENTS

CHAPTER ONE: THE INTRODUCTION

1.1 Introduction	1
1.2 Statement of the problem	6
1.3 Objectives of the study	7
1.4 Specific objectives	7
1.5 Research questions	8
1.6 Methodology	8
1.7 Significance of the study	8
1.8 The scope of the study	9
1.9 Limitations of the study	9
1.10 Definition of key terms	9
1.11 The chapter reviews	12
1.12 Summary of the Chapter	13



University of Fort Hare
Together in Excellence

CHAPTER TWO: THE LITERATURE REVIEWS

2.1 Introduction	14
2.2 Purpose of a literature review	14
2.3 Theoretical framework	16
2.3.1 Ranganathan's five laws	17
2.3.2 User behaviour	19
2.3.3 Acquisition-Cognition-Application model	21
2.3.4 Collection development: a critical function	23
2.4 Management of grey literature in the developed world	28

2.5 Management of grey literature in the developing world	38
2.6 Open Access (OA)	46
2.7 Institutional repositories (IRs)	50
2.8 Institutional repositories in South Africa	56
2.9 Summary of the chapter	59

CHAPTER THREE: THE RESEARCH METHODOLOGY

3.1 Introduction	60
3.2 The research site/ area	61
3.3 A case study approach	61
3.4 Research methods	64
3.5 Instruments for data collection	67
3.5.1 Document study	67
3.5.2 Questionnaires	69
3.5.3 Interviews	70
3.5.4 Participant observation	73
3.5.5 The interview schedule	74
3.5.6 Participant observation guide	75
3.6 Population and sampling	77
3.6.1 Population	77
3.6.2 Sampling	77
3.6.3 Sampling size	78
3.7 Ethical considerations	79
3.8 Data analysis	79
3.9 Validity and reliability	82



University of Fort Hare
Together in Excellence

3.10 Summary of the chapter	84
-----------------------------	----

CHAPTER FOUR : DATA PRESENTATION AND DISCUSSION

4.1 Introduction	85
4.2 Demographic characteristics of respondents	86
4.3 Acquisition of GL	87
4.4 The processing of GL	90
4.5 Access to GL	93
4.6 Preservation of GL	96
4.7 The importance of GL in research	97
4.8 How GL is shared among academic libraries within SEALS	98
4.9 The integration of GL within the SEALS consortium	100
4.10 Summary of the chapter	101



University of Fort Hare
Together in Excellence

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction	102
5.2 Conclusions	102
5.3 Recommendations	105
5.3.1 Policy	105
5.3.2 Funding	106
5.3.3 Networking	106
5.3.4 Further research	106
5.4 Summary of the chapter	107

BIBLIOGRAPHY	108
ANNEXURE 1	115
ANNEXURE 2	118
ANNEXURE 3	119
ANNEXURE 4	120
ANNEXURE 5	121
ANNEXURE 6	122
ANNEXURE 7	123



University of Fort Hare
Together in Excellence

LIST OF TABLES

- Table 1. - Difference between grey and published literature
- Table 2. - Collection instruments, the kind of data collected and the source of data
- Table 3. - Findings of each data collection instrument
- Table 4. - Distribution of designation, age and level of service of respondents
- Table 5. - Age distribution and level of study of student respondents



University of Fort Hare
Together in Excellence

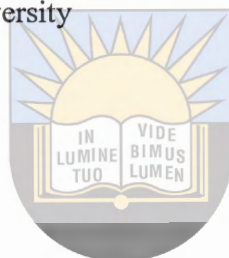
LIST OF FIGURES

- Figure 1. - Baughman's structural model of Collection Development

ACRONYMS AND ABRREVIATIONS

ALA	-	American Library Association
ACRL	-	Association of College and Research Libraries
CHELSA	-	Committee for Higher Education Libraries in South Africa
CSIR	-	Council for Scientific and Industrial Research
ECHEA	-	Eastern Cape Higher Education Association
ETDs	-	Electronic Theses and Dissertations
GL	-	Grey Literature
HDI	-	Historically Disadvantaged Institutions
HPL	-	Howard Pim Library
ILL	-	Inter Library Loans
IRs	-	Institutional Repositories
IS	-	Information Science
NDLTD	-	Networked Digital Library of Theses and Dissertations
NETD	-	National Electronic Theses and Dissertations
NMMU	-	Nelson Mandela Metropolitan University
NYAM	-	New York Academy of Medicine

- OPAC - Online Public Access Catalogue
- SEALS - South Eastern Academic Library Systems
- UFH - University of Fort Hare
- USA - United States of America
- WHSL - Witwatersrand Health Services Library
- WSU - Walter Sisulu University



University of Fort Hare
Together in Excellence

CHAPTER ONE: THE INTRODUCTION

1.1 Introduction

This study sought to investigate the management of grey literature (GL) in academic libraries in the Eastern Cape: a case study of thesis and dissertation at the Howard Pim library (HPL) at the University of Fort Hare (UFH).

Over time GL has been given various definitions. According to Keil and Lankenau (1993: 141) GL derived its name from the color by virtue of the manner by which it is acquired which is difficulty in locating it as in looking for something in foggy and dusty atmosphere. Difficulty is also experienced when cataloguing and classifying the contents of this literature lending further difficulty in retrieving the information it contains. A different perspective in terms of color is provided by Osayande and Ukpobor (2011) when they state that somehow GL may be connected to the brain's "grey matter" because of its seemingly high value intellectually, as well as its significance in research and development in various subject areas. According to the authors it is occasionally the only source of information for specific research questions and for this reason it is imperative for academic libraries to acquire the resources. They define GL as publications not published commercially or indexed by major database vendors.

Siegel (2004: 62) defines GL as "that which is produced at all levels of government, academic, business and industry in print and electronic formats, but which is not controlled by commercial publishers". According to Ranger (2005) the GL traditionally consists of technical reports, theses and dissertations, newsletters and datasets and these are often not cataloged and are therefore hidden from the public view. Furthermore, the author states that in addition to physical objects like paper, video, and microfiche, GL now includes websites, electronic datasets and

electronically published articles and reports. It is evident that Google and other search engines are fountains for this type of literature because they abound with websites that provide information on virtually any topic.

Okoroma (2012) takes a broader perspective. The author argues that GL is ephemera which is a name given to material which carries verbal or illustrative processes, as opposed to material in conventional mainstream formats. Materials that are ephemera include but not limited to calendars, clippings, company reports, guides, information leaflets, menus, newsletters, and press releases. Whatever definition one takes it is important that the management of this type of information should be the same as that of the mainstream print sources which entails acquisition, bibliographic description and storage, dissemination or access, and collection evaluation.

The importance of GL to research, teaching and as a source of information cannot be over-emphasized. According to Osayande & Ukpator (2012) GL serves both scholars and lay readers with research summaries, facts, statistics and other data that help to develop their topics of interest. Because of their nature of greater flexibility they are produced more quickly.

According to de Carvalho (2001: 9) "it is of vital importance in the economic and social development process of a country or a region..... in fact it is just as important, if not more, than knowledge that is published commercially, as each supplements the other".

Mackenzie Owen (1994) is of the view that digital information networks provide an opportunity for GL to become an important type of electronic publication. The author postulates that the concept of GL will evolve into a new concept of networked institutional publishing thus increasing its value.

Debachere (1995), as cited by Osayande & Ukpebor (2012) adds that GL is frequently original and usually recent and includes but is not limited to special collections, archival materials, unpublished manuscripts, patents, institutional reports, annual or activity reports, technical reports, theses and dissertations, conference proceedings, data and statistics, correspondence, and so on.

Schmidmaier (1983) gives the following three criteria that are characteristic of GL:

- Its content is not necessarily literature with original scientific contributions, but also literature of an informational nature;
- Most of it is not distributed conventionally and is outside normal marketing system of publishing houses and book vendors; and
- Most of it is not bibliographically catalogued and is therefore very difficult to locate or procure, yet libraries are crammed full of them.

According to Giustini (2012: 4) GL is also characterized by the following:

- ❖ Providing very current perspectives
- ❖ Complements or fills in gaps of traditional publishers
- ❖ Unconventional formats (i.e. pamphlets, ephemera, blogs)
- ❖ Lack of standard bibliographic description/ control
- ❖ Short life-cycle of the information

Giustini (2012: 2) states that the field of GL evolved into a world of its own with specific research methodologies, vocabularies, systems and solutions, however these issues are beyond the scope of this study. In the following table the author illustrates the difference between grey and published literature:

<u>Issues</u>	<u>Grey Literature: hard to find</u>	<u>Published Literature: easier to find</u>
<i>Number of documents being published</i>	Increasing at exponential rate	Increasing but at a measured rate
<i>Speed of production</i>	Instant, due to self-publishing on the web, speed	Slower, due to costs and editing process
<i>Cost</i>	Low (in most cases), free	High, increasing all the time
<i>Access</i>	Free, open, immediate in most cases	Locked, gated access
<i>Quality</i>	High variable	Excellent, edited, peer-reviewed
<i>Findability</i>	Improving but “hit and miss”	Generally stable
<i>Archiving</i>	Difficult due to sheer volume	Also
<i>Impact on libraries</i>	New opportunities and roles for search-savvy librarians	Problematic due to legal restrictions, licensing issues
<i>Role of publishers</i>	Some make content free to be good corporate citizens	Commercial interests based on economic models not scholarly

Table 1. Difference between grey and published literature

The author lists examples of traditional grey literature which may include:

- Theses and dissertations
- Census, economic and other “grey” data sources

- Databases of on-going research
- Statistics and other data sources
- Conference proceedings and abstracts
- Newsletters
- Research reports (completed and uncompleted)
- Technical specifications, standards, and annual reports
- Informal communication (i.e. telephone conversations, meetings, etc.)
- Translations



According to Giustini (2012: 4) GL include:

- e-prints, pre-prints,
- electronic networked communication,
- blogs and podcasts (audio) or video on the web,
- repositories,
- listserv archives,
- digital libraries,
- spatial data (i.e. Google Earth),
- meta-searching, federated searching, portals and
- wikis, Twitter, other social media.

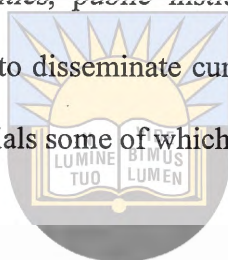
University of Fort Hare
Together in Excellence

The following have been identified as producers of GL:

- Government departments and agencies (i.e. municipal, provincial, national)
- Non-profit economic and trade organisations

- Academic and research institutes
- Societies, political parties
- Libraries, museums, archives
- Businesses and corporations
- Freelance individuals, i.e. bloggers, consultants, web 2.0 enthusiasts (Guistini, 2012: 5)

Weintraub (2006) also states that GL is produced by government agencies, professional organizations, research centers, universities, public institutions, special interest groups, and associations and societies whose goal is to disseminate current information to a wide audience. The UFH has produced a lot of GL materials some of which are kept at the HPL.



1.2 Statement of the Problem University of Fort Hare *Together in Excellence*

Available literature highlights the importance of GL while at the same time pointing to difficulty in accessing it. The problem of access is caused by difficulty in managing this type of material, in particular as a consequence of lack of standard bibliographic description elements.

This study has been prompted by the realization that GL in academic libraries in the Eastern Cape needs to be better managed than it is being done at present. Howard Pim library has GL, like theses and dissertations and all other unpublished materials that are produced at or by the institution, the bulk of which is not recorded on the library system thus rendering it inaccessible. This means clients do not have access to this primary resource.

The management of GL and its integration in the existing library circulation processes is important. Lack of sufficient documentation or literature on how GL is managed in the existing

academic libraries in SA makes it necessary for research in this area to underscore the importance of GL in the academic libraries in the Eastern Cape. It is hoped the findings of this study will inspire research in the area in other academic libraries in South Africa.

1.3 Objective of the study

The main objective of this study was to investigate the management of GL in the academic libraries in the Eastern Cape.



1.4 Specific objectives

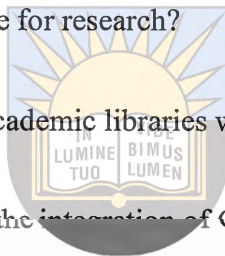
Specific objectives were to:

University of Fort Hare
Together in Excellence

- Establish how GL is being acquired at the UFH's HPL.
- Find out how the processing of this material is done.
- Find out how access to GL is being facilitated.
- Establish how the GL is preserved.
- Determine the importance of GL as a resource for research.
- Find out how GL is being shared among academic libraries within the SEALS consortium.
- Identify the challenges faced by the integration of GL within the SEALS consortium.

1.5 Research Questions

- To what extent is GL being acquired at the UFH's HPL?
- How is the processing of this material done?
- How is access to GL being facilitated?
- How is the GL preserved?
- How important is GL as a resource for research?
- How is GL being shared among academic libraries within the SEALS consortium?
- What are the challenges faced by the integration of GL within the SEALS consortium?



University of Fort Hare
Together in Excellence

1.6 Methodology

The methodology used to carry out this investigation was a qualitative research approach.

1.7 Significance of the Study

The implementation of the recommendations of the study will enhance the importance of GL collections in academic libraries. It will provide the ability to process it such that it becomes accessible to the research community of the University of Fort Hare, both digitally and manually. This availability of this research resource will in turn increase the appreciation of GL and stimulate more research endeavors. As the ability to share GL at SEALS unfolds, more research may be undertaken at other Eastern Cape academic institutions.

1.8 The scope of the study

The aim of this research was to establish how GL literature is being managed in academic libraries in the Eastern Cape and the process of doing so was guided by the specific research objectives or questions. The study was carried out at the HPL in the UFH library in Alice campus. It covered the unpublished materials such as theses and dissertations, inaugural lectures, Fort Hare Papers, previous exam papers, etc.

1.9 Limitations of the study

The library workers and users constitute the population of this study. This mix of respondents may not be able to answer some of the research questions although the researcher asked the library workers with the assumption that as librarians they should know all the processes of library management. As for the library users the researcher left out those questions which he deemed were beyond their scope.



University of Fort Hare
Together in Excellence

1.10 Definition of key terms

Academic libraries - those of universities, polytechnics, colleges, schools and all other institutions forming part of, or associated with, educational institutions.

Africana library – refers to Howard Pim Library of Africana

Archival materials – these are information objects that serve as evidence of some past events. They record information about past activities and act as memory aids that allow users to recall and relive them or to re-communicate information about those events at some point in future.

Berlin declaration - is a major international statement on open access or access to knowledge. It emerged in 2003 from a conference on open access hosted by the Max Planck Society in the Harnack House in Berlin. Organizations that commit to implementing this definition of open access can sign on the declaration.

Bibliographic control – 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.



Bibliographic information – details concerning a publication which are sufficient to identify it for the purpose of ordering. They may include the following: author, title, publisher, place of publication, edition, series note, number of volumes, parts and/or supplements; editor, translator or illustrator may also be necessary in the case of certain books. Sometimes called “trade information”.

Cataloguing and classification - this is a process of creating metadata representing information resources in a library catalogue.

Collection development - the process of planning a stock acquisition programme not simply to cater for immediate needs, but to build a coherent and reliable collection over a number of years, to meet the objectives of the service. The term demands a depth and quality of stock, and includes associated activity towards exploitation of the collection through publicity, staff training, etc.

Conference proceedings - in academia, proceedings are a collection of academic papers published in the context of an academic conference.

Digital libraries - electronic libraries are focused on collecting digital objects that can include text, visual material, audio material, video material, stored as electronic media formats, along with means for organizing, storing, and retrieving the files and media contained in the library collection.

Digitization - it is a process of changing data into a digital form that can be easily read and processed by a computer.

Ephemera - 1. Pamphlets, cuttings and other material, of ephemeral interest and value. 2. Such material of earlier periods which has acquired literary or historical importance.

Grey literature: 'Semi-published' material, for example reports, internal documents, theses etc. not formally published or available commercially, and consequently difficult to trace bibliographically.

Howard Pim – this is the name of a man, John Howard Pim, who was a member of the governing council of the University College of Fort Hare in the years 1933 and 1934 to which he bequeathed part of his personal library.

Information literacy - it is the ability 'to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information for the issue or problem at hand'

Information science – the study of the use of information, its sources and development; usually taken to refer to the role of scientific, industrial and specialized libraries and information units in the handling and dissemination of information.

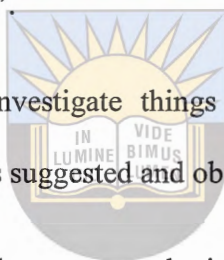
Institutional repositories - an institutional repository (IR) is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution.

Open access - means an unrestricted online access to peer reviewed scholarly research.

Primary sources – these are original manuscripts, contemporary records, or documents which are used by an author in writing a book or other literary compilation. They are also called ‘source material, and sometimes ‘original sources’.

Scientific inquiry - it is a way to investigate things and propose explanation for their observations. Data is gathered, hypothesis suggested and observations recorded.

Theses and dissertations - these are documents submitted in support of candidates for an academic degree or professional qualification presenting the author’s research and findings.



University of Fort Hare
Together in Excellence

1.11 Chapter overviews

Chapter one: Introduction: this gives the introduction to the background of the study and outlines the statement of the problem, the research questions, objectives of the study, the significance of the study and limitations of the study. It also outlines the structure of the thesis.

Chapter two: Literature Review: the chapter reviews the relevant literature and debate on the management of GL. It also discusses the theoretical framework relevant to the management of the subject of the study.

Chapter three: Research Methodology: the chapter outlines the research approach used in the study. It explains the research instruments used, the data collection methods and the data analysis procedures.

Chapter four: Data presentation and analysis: The chapter presents and discusses data based on the research objectives.

Chapter five: Conclusions and Recommendations: The chapter identifies conclusions based on the questions of the study and provides recommendations, and also suggests areas for further research.



1.12 Summary of the Chapter

University of Fort Hare

Together in Excellence

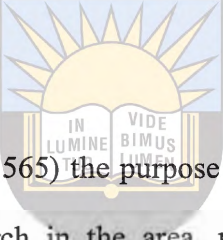
The chapter introduced the study by defining the concept of GL in terms of its characteristics, importance and attributes. The problem statement stated as well as the objectives and research questions. The chapter also gave the brief methodology, significance, scope and limitations of the study. Key terms were defined and chapter overviews given.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter discussed some relevant theories or models to the study. It also reviewed relevant literature pertaining to the management of GL.

2.2 Purpose of literature review

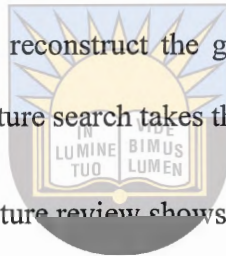


According to Babbie and Mouton (2001: 565) the purpose of a literature review is to bring the reader to date with the previous research in the area, pointing to general agreements and disagreements among the previous researchers. Becker and Bryman (2004: 69) concede that a literature review is an assessment of existing knowledge, both empirical and theoretical, relating the research topic, issue or question. The authors provide the following reasons for needing to conduct a literature review:

- To understand what has been covered about the area of interest in your research to avoid duplication and also to identify what gaps there are in the existing knowledge.
- To identify concepts and ideas that may inform you about the kinds of collectable data and how to interpret it.
- It will give you an idea about who should be the focus of the enquiry and how to go about choosing your sample.
- It will give you an idea of the research methods and research designs used to examine the area of interest.

- It will later on help you with the interpretation of your data and the formulation of conclusions.

According to Vom Brocke, Simmons, Niehaves, Riemer, Plattfaut & Cleven (2009) a literature review plays a decisive role in scholarship because new knowledge is often created in the process of interpreting and combining the existing knowledge. The authors give an example of this by paraphrasing Sir Isaac Newton who said that if he could see further, it was because he was standing on the shoulders of giants. Drawing from this metaphor, the authors posit that the goal of writing a literature review is to reconstruct the giant of accumulated knowledge in a specific domain. And in doing so, a literature search takes the fundamental first step.



Hofstee (2009: 91) adds that a good literature review shows:

- That you are aware of what is going on in the field, and thus your credentials;
- That there is a theory base for the work you are proposing to do;
- How your work fits in with what has already been done;
- That your work has significance; and
- That your work will lead to new knowledge.

This literature review was guided by the following research questions:

- To what extent is GL being acquired at the UFH's HPL?
- How is the processing of this material done?
- How is access to GL being facilitated?
- How is the GL preserved?

- How important is GL as a resource for research?
- How is GL being shared among academic libraries within the SEALS consortium?
- What are the challenges faced by the integration of GL within the SEALS consortium?

2.3 Theoretical framework

Carrigan (1995: 98) gives an insight into the concept of a theory by referring to the Webster's Third International Dictionary which defines theory as "a brief, policy, or procedure proposed or followed as a basis of action; a principle or plan of action." The author also makes reference to The Oxford English Dictionary, second edition which defines theory as "a conception or mental scheme of something to be done, or a method of doing it; a systematic statement of rules or principles to be followed".

According to Pettigrew and McKechnie (2001: 62) the use of theory by scholars in their research is a hallmark of their discipline's academic maturity. The authors state that a theory is a mark of the seriousness and respectability of research and that disciplines require theories that originate from within to attain recognition as an independent field of scientific inquiry. They argue that if fields such as Information Science (IS) are to delineate their disciplinary boundaries and build a central body of knowledge, they require their own theoretical bases for framing research problems, building arguments, and interpreting empirical results.

Hjoland (1998: 607) states that a theory in IS is a theoretical explanation of information systems' efficiency, of user behavior, and of the function of different search elements such as descriptors, citations, titles, etc. He contends that there are so few explicit theories in IS that it is difficult to

name just one good example. Instead, more often than not theories from other fields are applied but they are not theories of IS. The author contends also that Ranganathan's approach contains a theory of subjects that other authors do not count as a part of IS but rather as a theory in computer science. According to the author, the authors he refers to suggest that specific approaches such as algorithmic retrieval or citation-based retrieval, including Ranganathan's approach, should be termed "metatheoretical" because they rest on the basis of assumptions. Notwithstanding, the author contends that the theory of the five laws of library science was formulated by Shiyali Ramamrita Ranganathan in 1931.

According to Gopinath (1978: 60) Ranganathan had a passion for teaching and as such his students referred to him as a 'born teacher'. He encouraged the use of books by students and called his approach library-centered teaching thus avoiding the prevalent highly teacher-centered and notes/dictation classroom methods. Against all protestations he eventually accepted an appointment as a librarian, and later regarded his acceptance as designed by Providence. While studying librarianship in England he witnessed how libraries there had become community reading centers rendering service to all strata of the society. By the experience he had he discovered a social mission for his life. From the various libraries he visited while still in England he discovered that libraries used different library systems. The author states that all developments for a common system appeared to be a matter of trial and error and severely empirical and this inspired Ranganathan to formulate his Five Laws of Library Science.

2.3.1 Ranganathan's five laws

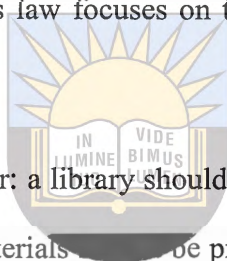
According to Bhatt (2011) Ranganathan's five laws are fundamental to the current principles of operating a library system.

First Law - Books are for use: Ranganathan observed that emphasis then was on preservation and storage of books. Much as these activities were important he was of the view that they promote and come second to book usage. He stated that without usage the items have little value. In this regard his attention was focused on access-related issues.

Second Law - Every reader his or her book: this means that in spite of our diverse interests there will always be a book out there to satisfy everyone.

Third Law - Every book its reader: this law focuses on the usefulness and availability of the item.

Fourth Law - Save the time of the reader: a library should have the ability to meet the needs of the user efficiently. This implies that materials should be processed systematically for quick and convenient retrieval.

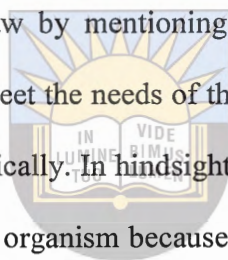


University of Fort Hare
Together in Excellence

Fifth Law - The library is a growing organism: this law focuses on the ability of the library to accommodate growth in staff, collection development, and increased patron usage.

According to Lancaster, Zeter, and Metzler (1992) Ranganathan's five laws have been frequently but perfunctorily referred to. The authors state that both Sewell and Wilkinson used the five laws as a theoretical framework for the evaluation of library performance. They mention Vickery who feels that the five laws should be used as a guide for all stages of document handling, from publishing to analysis to delivery. According to them the five laws have been updated by Rajagopalan and Rajan as the Five Laws of Information Science to emphasize that the interests of the users must be the central concern of all information services. The authors are of the view that Ranganathan's Five Laws should be seen as the basic philosophical framework of librarianship.

Of the five laws the first, the fourth and the fifth laws, according to the researcher, form the appropriate theoretical framework for this study. The problem statement of the study mentioned that lack of access to GL information results from challenges associated with the management of GL materials. The current situation is that “hidden collections” which are GL materials that are stored but not recorded in the library systems render them inaccessible. In this regard the first law states that without usage items have little value and therefore the approach focused on access-related issues. Because of access the usefulness or value of the material is appreciated, addressing the third law. The fourth law by mentioning that “save the time of the reader” advocates for the ability of a library to meet the needs of the user while those needs are required through processing the material systematically. In hindsight, the researcher includes the fifth law which states that the library is a growing organism because some models or theory on collection development could illuminate the study.



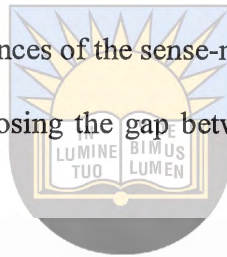
University of Fort Hare
Together in Excellence

2.3.2 User behavior

With regard to a theoretical framework of user behavior, in his article ‘Human information behavior’ Wilson (2000) focuses on the person seeking information. This led him to develop ‘a model of information seeking behavior that is prompted by the individual’s physiological, cognitive and effective needs (Wilson 1981)’ as he quoted himself in Wilson (2000: 51). He notes that the context of any one of the needs may be the person seeking information, or the role demands of the person’s work or life, or the environments within which that work or life takes place. He then argues that the barriers that impede the search for information will arise from the same set of contexts.

According to Wilson (2000: 52) another approach developed by Dervin (1983, 1996) is about sense-making. The author cites Dervin as defining sense-making as ‘a set of assumptions, a theoretic perspective, a methodological approach, a set of research methods, and a practice’. The approach consists of four constituent elements namely:

- A situation which defines the context in which information problems arise;
- A gap which identifies the difference between the contextual situation and the desired situation;
- An outcome, that is, the consequences of the sense-making process; and
- A bridge which is a means of closing the gap between situation and outcome (Wilson, 2000: 52).



Kuhlthau (1991) is known for developing a process stage model of information seeking behavior based, initially, on a study of high-school students. The stages of the model are the initiation, selection, exploration, formulation, collection, and presentation phases and each phase is associated with certain feelings and specific activities. According to Kuhlthau (1991: 367):

- The initiation phase is characterized by feelings of uncertainty, vague and general thoughts about the problem area, and is associated with seeking background information;
- The selection phase is associated with recognizing a need for information;
- Exploration is about analysing and searching for information on that general topic;
- Formulation is about focusing on a more specific area within the topic;
- Collection is about gathering relevant information on the focus; and
- Presentation is the end of information search and synthesizing the gathered information.

These stages of the model constitute the five information literacy competency standards for higher education which were approved by the Association of College and Research Libraries (ACRL) in 2000. Information literacy is a set of abilities requiring individuals to “recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” (American Library Association, 2000). This researcher mentions these standards to show that where GL exists the standards do not apply from the point of view of individuals seeking just-in-time information independently. The information seekers therefore suffer as a result of difficulty in accessing GL.

2.3.3 Acquisition-Cognition-Application model

Saracevic and Kantoor (1997) developed the Acquisition-Cognition-Application (ACA) model of information use. The assumption is that users of an information service are engaged in a project that gives them the reason to seek information and therefore use the service. Added to the cognitive and interactive aspects of information seeking is the intention to use the information hence the three dimensions of the model, namely Acquisition-Cognition-Application (A-C-A) model. This represents the three phases undertaken for information to be obtained from an information service:

- Acquisition – the process of getting information as related to some intentions;
- Cognition – the process of absorbing, understanding, and integrating the information; and
- Application – the process of or potential use of this newly acquired, understood, and cognitively processed information.

The application of this model starts when an information seeker has a task. Coming to the library and getting the materials represents the Acquisition phase. Reading and studying the materials

stimulates the cognitive processes, thus the Cognition phase. When the information seeker commits to the task of writing and expressing his/ her thoughts according to how he/ she understood what he/ she read is the Application phase.

The user behavior and Acquisition-Cognition-Application model frameworks are not quite appropriate for this study because they do not address the issues around the library materials. They address issues related to information literacy skills. Of Ranganathan's five laws, the first, third, fourth and the fifth laws deal with access-related issues, value or usefulness, processing of materials for retrieval, and collection development, respectively. These four laws are appropriate theoretical frameworks for this study. To support this view Igbashal and Tsegba (2011) state that information materials like books, journals, manuscripts, theses and dissertations, magazines, newspapers and a host of others are written, printed, and published on African continent. And that libraries and information centers are expected to acquire and ensure bibliographic recording and make available on request all that is written, printed, and published. In the authors' view bibliographic control has become so important that it provides surety for accessibility and utilization of the book and that it is a key factor in information search, delivery and dissemination. The authors contend that the extent of bibliographic control project in Africa is so important, fundamental, and indispensable that researchers seek the bibliographic information about these materials with tears to access and utilize them. They state that the fact that a book is recorded in the library, internet, or the information center is enough to give hope to the needful potential user that it may be possible to access and use it. In conclusion they add that the importance of bibliographic control and that of library services become glaringly indispensable.

2.3.4 Collection development: the critical function

Carrigan (1995: 98) states that collection development is a critical function within a library from which benefits are made possible. The author posits that a library collection is an investment and should be looked at from a perspective of benefits. He adds that the return on investment is the benefits received by patrons from use of the collection. In other words benefits are derived only when use is made of the collection. He observes that the better the job is done in matching the collections with the needs and interests of patrons, the greater will be the use of the collections, the attendant benefits, and thus the return on the investment in the collections is gained.

Similarly, Fordham (2014) states that the term “collection development” refers to the process of systematically building library collections to serve study, teaching, research, recreational, and other needs of library users. These are therefore the benefits of collection development and use. According to Mount (1995) as cited by Fordham (2014) there are four types of collection levels namely, exhaustive, research, working and browsing, of which research level is the one that is utilized at HPL. This level of collection pertains to a collection with enough material to support independent research on the topic and the collections include GL materials.

Ferguson (1986) is of the view that collection managers can benefit from adapting models developed by other social scientists to the circumstances in which libraries operate. The author posits that one of the models, the structural-function systems model, can enhance one’s understanding of the collection development/ management process. This is obtainable because the model focuses on the environmental factors within which libraries operate. By this the author refers to the following factors:

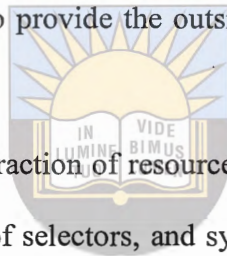
- demands made upon libraries,

- the support factors that influence library behaviour,
- the decision-making process, and
- the variety of outputs or decisions that must be made by the library to stay healthy.

Besides these environmental factors, the structural-functional model has five basic elements which, when examined, enable the collection manager to understand his library, namely:

- The environment where collection development librarians must first become knowledgeable in the library culture where they work before changes can be attempted. Furthermore, to effect change in such a situation, environmental forces that produce this library culture have to be changed,
- Inputs, including demands and supports wherein the collection development system experiences four types of demands for changes on the existing budgetary scheme; more participation; more information; and changes in the materials selection process. Supports are also significant and they include: university budgetary support of demands made upon them; selector and user approval for the existing budget allocation formula; continued performance in assigned or understood development roles; and symbolic support for or in deference to those performing roles in the collection development process.
- The six functions included within the collection development conversion process are:
 - a. interests are articulated which means voicing out interest by actually articulating it to those involved in the conversion or decision-making process;
 - b. interests are aggregated into concrete policy proposals accompanied with full budgetary support;

- c. decisions or rules are made; decisions are administered or implemented – to build support for a decision; the decision-making responsibility should be shared with those whose support is needed and once the decision is made it must be implemented,
 - d. conflicts over differing interpretations of how decisions should be implemented are resolved and that is the reason for having conflict resolution structures in place to mediate over conflicts; and
 - e. information deemed by the decision-makers are necessary for the selectors and users to have is communicated in order to provide the outside perspective needed to understand what is happening in the library.
- Four types of outputs include extraction of resources; demonstrate the need for a budget allocation; behaviour regulation of selectors, and symbolic action for example, writing a policy statement announcing the library's intention and what is already done.
 - A systems feedback mechanism is a means of measuring system responsiveness and a stimulus to further action.



University of Port Harcourt
Together in Excellence

Another model by Baughman (1977) is a structural approach which seeks to find a pattern of relationships, given that effective collection building is assumed to rest on identifying a structure. The author states that once the structure is determined, a plan for collection development will quickly emerge. To support this argument, the author provides a graphical illustration of the relationships among major constructs that are integral to collection development. To illuminate this observation the researcher reconstructs the author's illustration below:

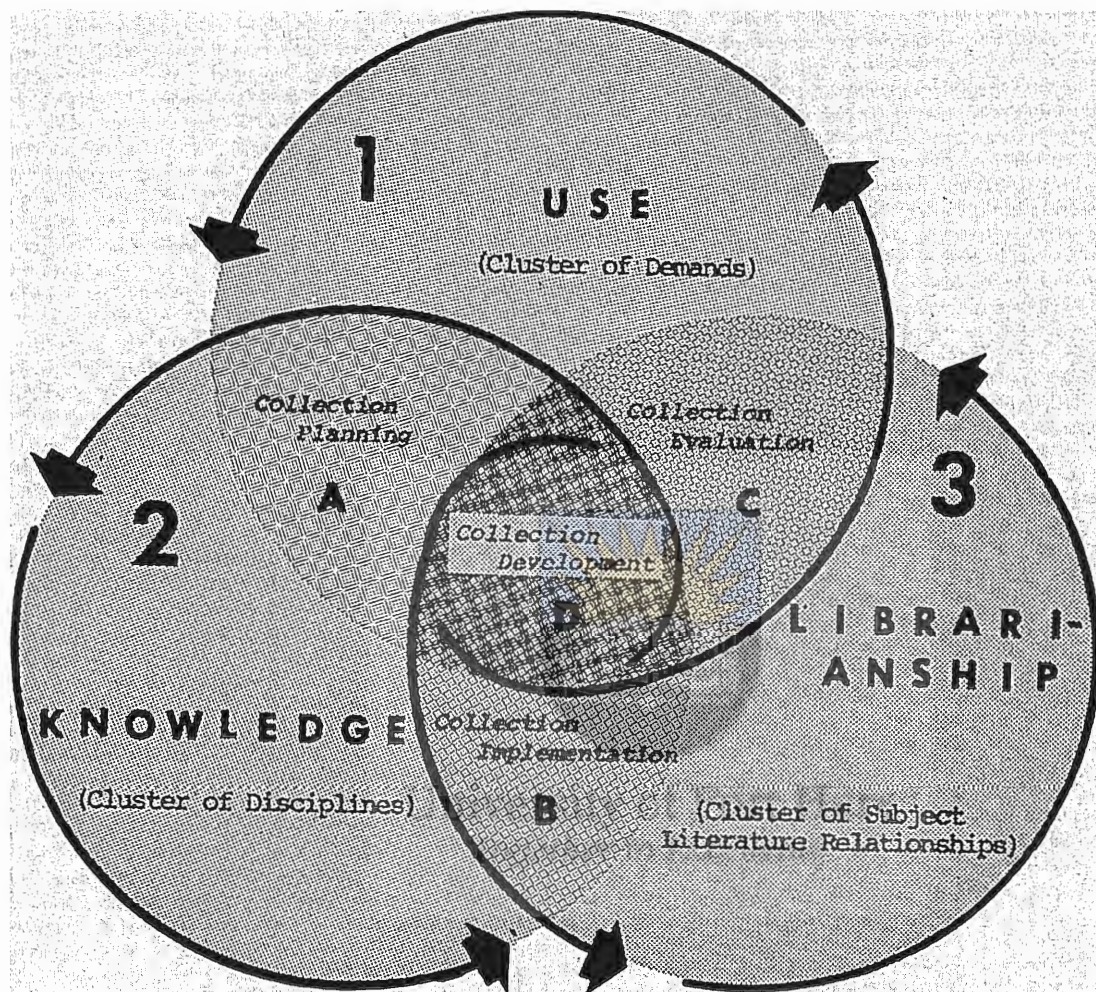


Fig. 1. Baughman's structural model of Collection Development

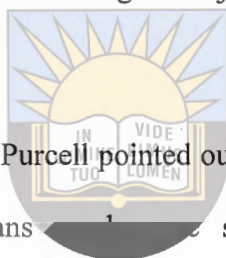
Integral to figure 1 are the three major constructs, namely:

1. Use – cluster of demands;
2. Knowledge – cluster of disciplines, subjects, topics, and areas of study; and
3. Librarianship – cluster of subject literature relationships

Collection development is represented in Segment D of the diagram which is the intersection of the concepts of planning, implementation and evaluation. The author also interprets the diagram

as follows: collection planning + collection implementation + collection evaluation = Collection Development where these concepts are defined as follows:

- Collection planning is a design for accumulating documents that belong together as determined by the needs, goals, objectives, and priorities of the library;
- Collection implementation refers to the process of making documents accessible for use; and
- Collection evaluation involves examining and judging with respect to goals and objectives.



According to Dahlin (1990), Hernon and Purcell pointed out that Baughman's model is a helpful theoretical construct, however, librarians need specific guidelines in a collection development approach that will be useful in daily operations. To satisfy this need the author states that Evans suggests guidelines in a model that outlines six practical activities which form part of a dynamic, interactive cycle of collection development, namely community analysis, policies, selection, acquisition, weeding, and evaluation is appropriate. And that these elements fit well with Baughman's theory. The researcher could not agree more because according to Dahlin (1990), Evans' first two activities tie in with collection planning concept; the next two tie in with collection implementation concept; and the last two tie in with collection evaluation concept above.

2.4 Management of grey literature in the developed world

The developed world consists of the nations of the world which are considered to be more economically and technologically advanced. Therefore it can be argued that GL may be better managed in these countries.

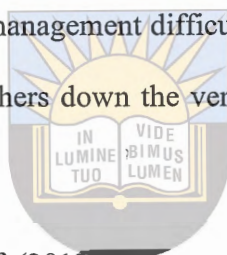
The manner in which GL is acquired in the United States of America (USA), Auger (1975) states that it can be obtained in various ways but two of these are commonly used, namely:

- exchange agreements with other organisations, if permitted, and
- purchases by subscription or on single item per order basis.

The acquisitions are facilitated by means of deposit accounts and prepaid coupons, monthly standing orders, annual subscriptions to publication of various agencies, and special arrangements with certain library suppliers. The author states however that the method of arranging with library suppliers is rare because suppliers are not really interested in trying to obtain reports on behalf of customers. Furthermore, the suppliers could take this as an added burden as this type of material is difficult to locate and falls outside of their routine. His alternative view is that it is more effective to order directly from the originators of the literature, or borrow them.

In contrast, the researcher argues that borrowing could raise some challenges. For example, how would the borrowing library locate the availability of such material when it cannot be indexed as a consequence of lack of standard bibliographic elements? By stating that librarians and information workers are justly renowned for their detective-like skills in tracing incomplete references, but eventually even their patience tends to wear thin, the author indicates that he is aware of the challenge raised by borrowing GL items.

A more recent trend in acquiring GL is by producing it as demonstrated by Siegel (2004). In discussing the results of a case study on the acquisition of GL at Portland State University in the United States the author reveals that centers and institutes produced much more GL than academic departments and argues that these should be captured to add to library holdings and make them available for inter-library loans. He adds that other types of scholarly GL are also produced on academic campuses and they include very important output. Since the distribution of GL is limited, it is often not given an opportunity for wider dissemination through traditional bibliographic treatment thus making its management difficult. Much as it is occasionally cited in scholarly works, in turn, it leads researchers down the very frustrating and often futile path of location and procurement.



At the University of Rochester, Sulouff (2012) discovered that rather than acquiring GL via subject librarians, patrons often go directly to Interlibrary Loans (ILL) Department (Dept.) to obtain the materials. The ILL Dept. used Google as a means to find items and the search results produced Internet links that are being passed on to patrons. This indicates that the GL found might as well be material that was digitized and made available online either produced at the university or any other institution for that matter. What mattered is the relevance of the GL to the university's patrons. However the service begs for two questions as to why would the patrons not search Google directly, in the first place, and why would the ILL Dept. not refer the patrons to Google?

According to Myers, Aloia and Bekwa (2011) a different strategy of acquiring GL is used by the New York Academy of Medicine (NYAM) which invited the Witwatersrand Health Services Library (WHSL) to partner with them in adding suitable South African public health and health policy documents to their GL. This led to WHSL formulating a strategy for digitization of the

material that it wishes to contribute. In other words the NYAM made its acquisition of GL through partnership and digitization.

Okoroma (2012) states that in Southern Illinois Library, GL materials are acquired mainly through a repository and gifts methods, after which the materials are integrated into the sections of the library. This is handled by a team of librarians. The author suggests that in order to enhance a better organized GL collection, libraries should develop a policy that will guide them to be selective in their acquisitions. The author is of the view that libraries should collect content that could be useful to users and that this could be achieved if team work and networking are emphasized within and among libraries.

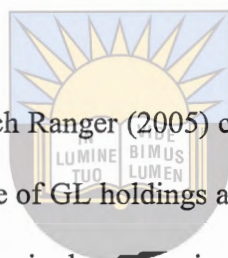


The difficult nature of managing GL is demonstrated by Siegel (2004: 62) when he states that:

“In academic libraries, discussion about creating bibliographic access to grey literature conjures up responses ranging anywhere from blank stares, to knowing grins, to terror. Why? The blank stares come from those who have no idea what you are talking about, mostly because it has, in the past, been in the realm of obscure library jargon; the knowing grins come from those who have wrestled with this literature, knowing its value, but also know the challenges of working with it; and the looks of terror come from those who know what it is in its broadest sense, and equate it with Pandora’s box. One reason, even within the world of libraries, for these varied responses, is that it is not a subject generally dealt with in formal library training”.

According to the author another problem with GL relates to its definition which he states as “that which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers”. The author adds that this includes things like instruction manuals for household goods, bus schedules, tax forms, etc., hence the looks of terror in the above extract. This means it is just impossible to acquire certain types of GL.

Another illustration of difficulty in the management of GL is identified by Yakel (2005: 96) when he states that after the GL materials have been collected they become 'hidden collections' that he describes as either not catalogued or unprocessed thus making them susceptible to loss or theft in which case they become very difficult to recover. This tends to hinder research. It may also result into security and or confidentiality risks if the collections are not properly vetted. The author adds that one may sometimes find them serendipitously, a process that consumes time and money. In such cases access depends intensively on staff and if they (staff) disappear, the collections disappear as well.



Similarly, in the thirteen libraries in which Ranger (2005) conducted research he established that academic libraries have the greatest range of GL holdings and that a large amount of GL was not catalogued because the nature of GL required cataloguing to be done on each document. The author attributes lack of dedicated cataloguing of GL materials to:

University of Fort Hare
Together in Excellence

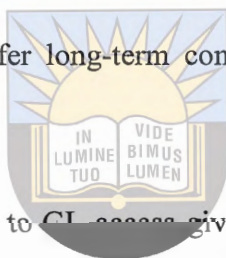
- Not doing retrospective cataloguing because of lack of funds;
- Lack of skilled employees with time to do the work; and
- lack of cataloguing standardization.

And he states that as a consequence of these attributes, access to GL is compromised.

Gelfand (1997) observed that the proliferation of GL in USA was accompanied by great challenges, concerns and responsibilities which it posed to librarians. Nevertheless the intellectual and academic value placed on it, as an original and primary resource, made the GL eligible for inclusion in many collection development policies. At the same time developments in scholarly communication and self-publishing via the Web were greatly beneficial as this gave them the ability to integrate formats and various datasets. This turned out to be the scholarly,

professional as well as commercial publishing platforms of choice. However, Gelfand does not lose sight of the alternatives when he states that libraries could consider the special needs required by GL, such as:

- developing experts with subject background to acquire and become aware of the literature;
- requiring original cataloguing and special processing to make it easily, expediently and readily available; and
- creating storage systems that offer long-term conservation and preservation (Gelfand 1997: 17).



Given that the situation of the difficulty to GL access gives rise to Yakel's scenario of hidden collections. Ranger (2005) advocates for the visibility of GL and suggests that it should, at least, be shown to its potential users and must be made readily available. He gives an example of a situation where research findings are reported in an organizational newsletter which will reach its intended audience, that is, members of the organization. This small arena of people will consume the GL because it is visible to them. However, the newsletter can find its way further afield where its usefulness is not appreciated, and this is where the GL use, collection, organization and retrieval become a challenge in terms of relevance, unlike if it were available online where it would be visible. Therefore, lack of visibility is another attribute that may render GL inaccessible. Nevertheless, Ranger (2005: 60) provides the following as a remedy to the invisible GL collections:

- A librarian with a longer service in the library as he is more familiar with the collection as such he is more able to help users find the GL; and

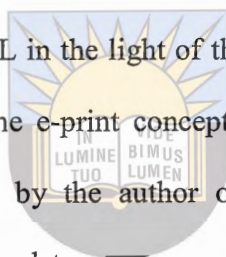
- Make the GL available through the Internet.

Access to GL had become such an issue that Keil and Lanckenau (1993) argue that even if more descriptive elements were to be added electronically for GL, there would be still a problem because these elements would not be compatible with the library's cataloguing system. To mitigate the problem, the authors argue that additional software tools would have to be used resulting in more work being done when cataloguing GL. They demonstrate the difficulty with management of GL by using the concept of color. They state that GL has its name from the grey color that is badly visible and synonymous to fog and dust. In the same manner the cataloguing and description of GL contents has much the same grey character. The greyness is also in the information retrieval means by way of raking around for information in a misty environment. The question they raise is whether or not this situation, in turn, gives rise to grey prospects of achieving the application of existing standards. They claim that despite earlier argument to mitigate problems regarding the application of standards by means of additional software tools that result in more work being done when cataloguing, more work needs to be done to achieve comprehensive description. However, once this is accomplished GL will be made available and its value will be promoted (Keil and Lankehau 1993).

Consideration for digitization as a means of access, McDermott (1995) suggests that GL should be converted into electronic format and be accessed electronically. He argues that this can be achieved in a country where electric supply, technological resources, politics and economy are all stable. He states that the electronic age has brought about powerful tools to help identify, control, organize and disseminate grey information. He adds that the advent of the electronic age has also brought about an explosion of yet more grey information in both traditional and new

formats. The researcher compares this information explosion with Google and other such search engines where one gets information on virtually anything.

Luzi (1998: 131) shares the same views as McDermott above when she makes a distinction between two kinds of GLs, namely the traditional and electronic. The author states that the electronic document (e-print) becomes accessible to a virtually unlimited number of users and thus lowers the difficulties of retrieval typical of traditional GL. According to the author, Carrol and Cotter (1994), Gelfand (1996) and McDermott (1996) share the same view that this distinction calls for a need to redefine GL in the light of the changes brought about by network use. However, the author adds that “the e-print concept is nebulous and general enough to include any electronic work circulated by the author outside of the traditional publishing environment. And that it could be defined to mean any electronic (not necessarily printable) research-related information provided by the author” (Luzi 1998: 31).



University of Fort Hare
Together in Excellence

Mason (2012: 4) also advocates ‘for some kind of universal standard protocol to be used to ensure that bibliographic access is available’. The author is of the view that the Internet and international co-operation could provide avenues that can be used to enhance access.

Tyndall (2008: 3) concurs with this view when he says that GL is easier to find than ever as much of it is being collected and archived digitally or otherwise. Libraries catalog and index collections by using metadata, and universities are digitizing theses and developing their own academic commons as well as collaborating in shared repositories. The author states that accessibility is not so much the problem, all they do is sort the sheer volume according to relevancy for their particular area of study or research. According to the researcher this could be the best way of facilitating access to GL.

In the researcher's view the three points raised by Gelfand above for libraries to consider the special needs required by GL have already been addressed. The first two scenarios, though ideal, have been regarded as not an ideal option because they are expensive both financially and technologically. The third scenario is feasible with digitization technology thus answering the study question regarding how GL could be preserved. This also answers the question of sharing because once the GL is digitized it could be accessed and shared electronically in a very efficient and effective manner. Gelfand (1997: 16) contends that GL is in its most popular and important era given so much electronic power behind scholarly publishing and communication, so much interconnectivity in evidence, the movement towards open files and public domain information, and a greater capacity for just-in-time indexing. Similar to how Osayande and Ukpebor (2012) perceive GL importance above, Gelfand (1997: 16) states that, with greater academic and scholarly value placed on GL, libraries and publishing arenas are forced to respond with a better grasp of the issues associated with making it more widely accessible. The author warns that if libraries do not want to be bypassed, they need to place greater or higher value on GL because of the inherent value it has in academic research even if it is not easy to collect or to control. He states that a paradigm shift has taken place from an ownership mentality to one of providing access. Given the author's arguments all that a repository or library needs is a commitment to digitize and retain.

The value of GL as an important research primary resource as indicated by Gelfand (1997) above. This is further elaborated on by Pappas and Williams (2011: 228) who state that the current research climate makes GL a vital adjunct to traditional library resources. The author is of the view that it takes a significant time for a research work to be published in a journal, if the work ever gets published. This means that it is convenient and time saving to use the research

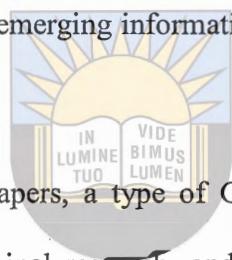
work than to wait for its published version. This view is supported by the study he conducted which revealed that the follow-up times from submission to full publication ranged between 8 to 127 months. He adds that it is important to note that although GL is not considered a scholarly form of publication, it is often produced by experts in the field.

The role of GL in research is articulated by Weintraub (2006: 1) when he quotes Auger (1989) as pointing out “that GL has advantages of GL over other means of dissemination are quick access, greater flexibility, and the opportunity to go into considerable detail when necessary. Thus, grey literature, covering nearly every aspect of the sciences, serves scholars and lay readers alike with research summaries, facts, statistics, and other data that offer a more comprehensive view of the topic of interest”. This view contradicts views of other authors who see GL as difficult to access. According to the author GL provides faculty and students embarking on research projects with introductions and overviews of their areas of interest. Moreover GL is everywhere in our lives as we read it regularly because it sometimes represents a point of view that we share, a cause we support, or an activity we are involved in. The author concludes that it is an indispensable resource for an informed and enlightened public and will undoubtedly continue to serve as a necessary supplement to journal literature well into the future.

Tyndall (2008; 2) states that, in her involvement in and awareness of, research in the Australian primary health care area has made it abundantly clear that a lot of the relevant literature is grey, probably more than fifty percent.

According to Weintraub (2006) many databases consider GL an essential part of the body of literature for disciplines they serve and they cite relevant resources in addition to the conventional references. The author states that some databases that cite reports issued by

governments and international bodies are devoted strictly to GL that is usually not cited anywhere else. Similarly, it cannot be overemphasized that these reports as well as similar forms of material are significant primary sources of information in teaching and research. McKimmie and Szurmak (2002) posit that 'grey questions' are unanswered questions for which answers are presumed to exist somewhere in the realm of GL. While this presumption may be true or false, a need arise to keep track of the 'grey questions' and search for answers from the GL wherein lies an immense potential to drive future research. The responsible information professionals can then alert researcher in all disciplines to emerging information needs, thereby providing research focus.



Okoroma (2011) observes that white papers, a type of GL, often contain findings based on surveys, interviews, other forms of original research, and business white papers. Pappas and Williams (2011) argue that GL often represent research at its initial development and may be a tool both to uncover innovative information and to shorten the time between research and practice.

University of Fort Hare
Together in Excellence

The importance of GL in collections is further illuminated by Newbold and Grimshaw (2010: 57), of the British Library, when they state that "the fact that grey literature has often been overlooked and is difficult to deal with does not diminish its worth as it offers many benefits to users. Grey literature, especially report literature, provides access to high caliber research often not published elsewhere. Documents produced and prepared for one organization or purpose may have relevance or resonance for other audiences. It is often free or low cost and can provide a faster route to publication than that offered by academic monographs or peer-reviewed scholarly journals. Information in research reports is often more detailed than in journal articles, where page limits may have been imposed. Moreover they cover failures as well as successes". In addition the authors have noted that researchers gradually recognize the value of GL, its increasing importance and usefulness as a resource, particularly for multi-disciplinary research and in areas such as

systematic reviews in evidence based health and social policy. They explain that systematic reviewers in all fields not only need access to research results published in report literature, but also themselves publish their work as reports, thus becoming both users and producers of GL. They state that the growing importance of evidence based practice in applied sciences such as healthcare and in social policy is creating greater awareness among researchers of the relevance and usefulness of GL.

According to the researcher, it is evident from the foregoing exposition that even in the developed world challenges of GL management exists despite the fact that their countries are financially and technologically advanced.



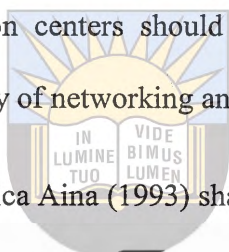
2.5 Management of grey literature in developing world

University of Fort Hare
Together in Excellence

The developing world refers to developing countries with relatively low availability of the necessary resources. Therefore the trends in managing GL may be more problematic when compared to those in the developed world.

Villars (1993: 248) states that libraries in developing countries lack foreign currency to purchase the foreign literature which in any case does not exactly bear relevance to their local needs. In spite of this they look down on their own local GL which is relevant and is freely available. A situation is created whereby a developing country may be perpetually dependent on a developed country for even information it has created. The author argues that this mentality is one of the vestiges of the colonial legacy whereby local productions are considered inferior compared to imported type. In addition to this line of thinking, librarians in developing countries consider local GL unattractive, has limited runs, poor non-uniform standards of production, poor editing,

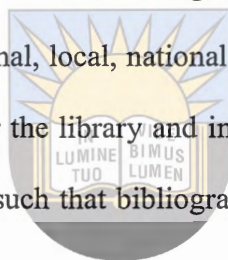
small size, poor distribution and accessibility thus making it to be undervalued. The author also state that librarians tend to concentrate on books and journals and fail to explore other information resources but the weak infrastructure for a thriving book industry contributes to the proliferation of GL. On the other hand librarians are often not very keen to handle this material because of, among other things, their demand for special storage equipment and facilities, and the issue of conservation arising from the poor durability as a result of the poor quality of paper from which they are produced. In the light of the above problems, the author provides a solution that developing country and information centers should have a more global perception of information sources and adopt the strategy of networking and resource-sharing.



In as far as the availability of GL in Africa Aina (1993) shares the same view with Villars when the author states that GL which is mostly produced by government agencies, universities, research organizations and the private sector, constitutes a substantial portion of literature in Africa. According to the author studies have revealed researchers in basic and applied sciences use a high proportion of GL which is the majority of literature produced in developing countries. While there is a general consensus that GL contains invaluable information which may never be found in the conventional literature, it is however less organized and therefore not widely disseminated. This situation results from the fact that no sooner the originators produce and use the documents than they neglect them. According to the author, Wood (1984) postulates that the problem lies with the originating organizations which have neither the staff nor the funds with which to control and disseminate GL. Moreover most countries do not have well developed infrastructures for organizing and controlling the GL. Aina (1993: 169) suggests a strategy whereby every country may have to establish a national documentation center specifically for the GL for purposes of acquiring, processing, preservation, access and dissemination.

According to Zulu (1993: 127) barriers which exist in Africa that impede effective harnessing and utilization of GL include but not limited to:

- accessibility – difficulty in locating and accessing unpublished reports due to lack of appropriate bibliographic tools and lack of publicity about the existence of such materials, sometimes even though the information is neither of a confidential nor security nature;
- bibliographic control – in most cases the bibliographic tools to locate and identify the literature do not exist at institutional, local, national, regional and continental levels. The researcher views this as a call for the library and information science sector to establish standards for the creation of GL such that bibliographic tools are universally conformed to;
- underestimation of their value – the attitudes of local people, particularly in Africa, tend to disregard locally generated ideas and information resources in preference for foreign information materials which in most cases are irrelevant to them;
- lack of appropriate information policies – locally generated GL should be used in defining Africa's information resources because they contain vital and relevant information necessary for solving local problems and for planning national development programmes. Unfortunately most policy makers in Africa do not perceive information as an important asset for development;
- underfinancing of information services – for the same reason of the attitude of policy makers as mentioned above, information services are poorly funded; and
- inadequate or poorly trained personnel – the problem of inadequate librarians, documentalists and information specialists is compounded by the general lack of



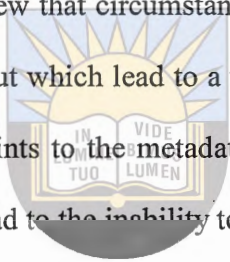
University of Fort Hare

Together in Excellence

recognition of information and the low status information and information professionals are accorded in most African institutions.

The author opines that to work towards achieving bibliographic control of this literature in Africa is to engage librarians at the level of institutional library where the GL originates. He suggests that they should be tasked to prepare finding aids to the collections and issue periodic lists of items they have produced over a period of time.

Similarly, McDermott (1995) is of the view that circumstances existed that caused a publication to be produced casually and informally but which lead to a total lack of traditional bibliographic elements which could provide access points to the metadata or the item itself. In addition, the author offers the following factors that lead to the inability to manage GL:

- 
- University of Fort Hare
Together in Excellence
- It is unavailable through dealers and jobbers;
 - It is produced in a very limited number of copies;
 - It is subject to restricted distribution;
 - It is not widely advertised, announced, or promoted; and
 - It is unlisted or partly listed in national bibliographies or in other major bibliographic tools of the book-selling industry.

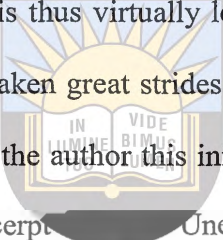
To mitigate the challenge of access McDermott (1995: 11) endorses the digitization and sharing of GL co-operatively.

Sturgess (1994: 273) posits that the GL documents are poorly represented in the holdings of national library systems, research collections or government agencies. According to the author the collection of GL in less developed countries is still extremely unsatisfactory. It is being taken care of by legal deposit regulations. However studies reveal that this does not happen

consistently and as such he stressed the need to solicit GL actively, rather than wait for it to arrive under arrangements such as legal deposit. The author is of the view that specialized institutes are usually more effective than national library or archives systems in identifying and collecting GL. The institutes often adopt an active collecting policy, rather than relying on awareness and goodwill of the producers towards legal deposit or archives regulations. He argues that the GL information could be repackaged to make it accessible even though repackaging mechanisms are poorly developed in Africa.

While GL has been defined as invaluable source of scholarly information and generally understood as difficult to manage, access to full-text versions of GL within academic libraries is currently being made possible by Institutional Repositories (IRs) (Chisenga 2006). The author states that academic, scholarly and administrative value of GL, as an original and primary source of information, is increasingly getting world-wide acknowledgement. Lynch (2003) defines a university- based IR as a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. According to Gelfand (1997: 15) many collection development policies are beginning to include GL as a body of information equally important as any other resources in research collections. This means therefore the integration of GL in the existing library and information systems requires no emphasis.

According to Yakel (2005) these are 'hidden collections' that are in the library but not listed in the library's catalogue because they are "un- or under-processed materials and thus inaccessible".

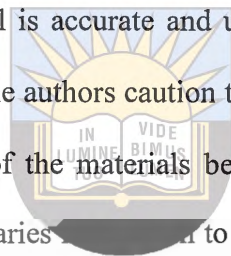
According to Kwafo-Akoto (1995: 11) twenty universities within Southern African region are very active producers of GL and most of these are not deposited in the university libraries but remain possessed solely by the individual authors. Ironically, most available GL about Africa, including Southern Africa is produced and marketed by several European and North American academic institutions. This view is also shared by Ubogu (2003: 70) who states that most of the theses and dissertations (TDs) produced in Africa are not easily accessible to other students or researchers. According to the author Sturgess and Neill (1998) posit that the vast bulk of research conducted in Africa remains as GL and is thus virtually lost. In a rather contradictory manner Ubogu (2003: 70) states that Africa has taken great strides in joining the global efforts to make TDs information available. According to the author this initiative is seen as very important and he quotes Fox (2001) who offered an excerpt from Unesco Guide for Electronic Theses and Dissertations that: “access to  University is the only recourse open to those in developing countries who cannot afford to make purchases from Proquest, who cannot wait for expensive shipping for copies through interlibrary loan, who cannot attend the myriad conferences that demand the considerable expenses related to travel, or who cannot pay for expensive journals (which only may have short summaries of thesis and dissertation results)”.

According to Alemna (2001: 38) an increased interest in African studies world-wide resulted in a center being set up in Nairobi, Kenya to collect indigenous literature including GL from the eastern, central, western and southern African countries. He opines that this presents an opportunity to use GL to make a significant contribution to the future of library and information services in Africa. At the same time the author acknowledges the fact that GL is not well documented and it is poorly represented in the holdings of national library systems, research collections or government agencies where these exist thus rendering them difficult to access. The

author adds that investigations indicate that libraries in Ghana have not only abandoned the idea of collection and storage of GL, but also, that the initial collections they had acquired are neither properly organized nor are they properly preserved. The reasons for the poor treatment of and inability to collect GL are cited as understaffing and underfunding.

Salanje (2013: 138) states that the collection of GL at the University of Malawi involves librarians visiting the campus offices and approaching authors to obtain copies of their documents. They then classify, catalog and shelve the documents at a particular location, popularly known as Malawiana Collection in most libraries. The author states that some libraries have created electronic databases, which are often subject-based, for their GL and the indexed documentation is shelved in boxes for easy retrieval. However in a survey conducted in 2003 it was discovered that none of the institutions, except academic organizations, had acquisition and dissemination policies. As a result, most publications are kept in offices and are not organized or catalogued in any way. Despite having no policy, some individual scientists expose their work to international community by publishing in peer-reviewed journals. However the academic institutions have their GL automatically deposited in the library. The University policy ensures that graduating student's projects and dissertations are deposited in the library, ensuring maximum dissemination. The other challenge is the unwillingness of some scientists who do not see any benefits in donating their papers to the library whilst others may demand payment. Contrary to earlier statement of managing GL, the author states that the Malawian materials are difficult to organize because many librarians lack skills for cataloguing, classification, electronic database management and digitization. In addition, there is lack of trained staff to provide access to the collections as well as lack of or inadequate financial resources to enable travel and collect publications, to pay for publications or to embark on digitization.

According to Lee, Zhang, Okuhara and Ma (2013: 327) collection development for East Asian legal materials is done through digitization and preservation. The East Asian region includes Korea, Japan and China. The authors warn that if a library is considering the digitization of East Asian materials, it is crucial that those working on the project understand the content of the materials. The content involves technical issues such as, for example, pre-1956 Chinese legal materials and most pre-1948 Korean legal materials which were written vertically and ran from right to left. Without doubt, scanning this type of material without this knowledge would literally create unreadable text. Also very crucial is accurate and useful metadata which is essential in making digitized materials accessible. The authors caution that this “requires strong and accurate skills in the language and the subject of the materials being digitized. They add that a cost-effective preservation solution is for libraries to create a consortium to work together and preserve the materials among the members (Lee, Zhang, Okuhara and Metzler, 2013; 328)

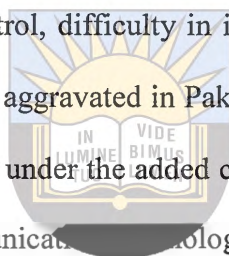


University of Fort Hare
Together in Excellence

The authors conclude by stating that developing an electronic collection removes the logistical barriers and added associated costs of acquiring and processing print legal materials far away from where they are published. In addition, the initiative eliminates time, costs and personnel, respectively associated with long physical distance, meaning longer delivery times and higher shipping costs, not to mention the efforts of the librarian in evaluating the utility and quality of the content when making purchase decisions. Furthermore, “materials in digital formats save researchers time and money and updating existing laws is much faster online. An added advantage for librarians is that they may take advantage of a free trial of an e-book or database before buying or subscribing” (Lee, Zhang, Okuhara and Metzler, 2013: 351)

Ameen and Haider (2007: 55) state, as a matter of fact, that it is unwise and impossible for poor countries like Pakistan to haphazardly follow the digitization trend of the developed world. The

authors however argue, at the same time, that university libraries in Pakistan cannot remain indifferent to digital developments. The authors are of the view that academic libraries need to strategically plan and develop a unique combination of traditional and modern services to meet this big challenge. In addition library managers need to learn extensive financial management skills in this regard because collection managers need to develop and manage sufficient, appropriate and balanced learning and research materials, cost effectively. The authors state that managing access to GL in academic libraries is another challenge. They attribute the cause for the challenge to weak bibliographic control, difficulty in identification and acquisition of such material. They state that this challenge is aggravated in Pakistan by the country's poor system of bibliographic organization. Nevertheless, under the added conditions of ever-increasing research needs, economic constraints and communication technology, the authors concede that libraries are forced to engage in aggressive plans for cooperative collection development.



University of Fort Hare
Together in Excellence

2.6 Open Access (OA)

Before discussing the concept of OA lets clarify the concept of access. Ribot and Peluso (2003) define access as the ability to benefit from things – including material objects, persons, institutions, and symbols. According to the authors benefits are important because people, institutions, and societies live on and for them and clash and cooperate over them. They conclude that access is about all possible means by which a person is able to benefit from things. A question arises as to what the things are that benefits are derived from. Well, in the context of this study the things are GL materials - the data. This reminds us of the earlier assertion by Carrigan that benefits are derived from the use of, therefore access to the library collection.

Croll (2011) so eloquently observes the abundance of data but questions why its ownership is so hard to have. According to the author industrial data is abound around us and search engines, governments, financial markets, social networks and law enforcement agencies rely on it such that they share, befriend, check in and re- tweet their every move, leaving a growing and apparently innocent trail of digital ‘bread-scrumbs’ in their wake. He states that the use of data affects its value. While benefiting from making copies of data effortlessly and each as good as the original, the copyright holder loses enormously. However, he states that some kinds of data are meant to be shared. The author advances a scenario by Stewart Brand where “on the one hand information wants to be expensive, because it’s so valuable and on the other hand, information wants to be free, because the cost of getting it out is getting lower and lower all the time”. According to the author we always find new ways to analyze data in order to make still more of it such that yesterday’s ~~online data~~ becomes the cornerstone of tomorrow’s new startup. Consequently, instead of asking who owns data, a better question is who owns the means of analysis. At the ultimate analysis the digital divide is about who can put that data to work. In the researcher’s view the answer to the question is the researchers who should be afforded open access to the data.

Sitek and Bertelmann (2010) define OA as implying free access to scientific knowledge for everybody. According to the “Berlin Declaration on Open Access to Knowledge in Sciences and Humanities”, the term scientific knowledge is defined as “original research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material.” The authors state that most journal articles are only accessible to scientists who are working in an institution with a library that has licensed the contents. Furthermore there are two well established and complimentary roads used to Open Access,

namely “Green” and “Gold”. Suber (2012) clarifies this jargon by referring OA delivered by journals as gold OA and that which is delivered by repositories as green OA.

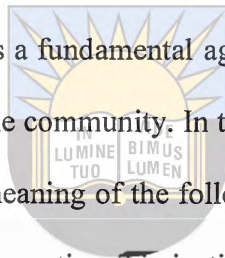
In conclusion, Sitek and Bertelmann are of the view that “grey literature has always played a role in scholarly communication and was mostly defined by its poor findability and dissemination. Usually, grey literature was published by scientific institutions in print with a low circulation rate. But if the content is trusted, reviewed, and is published Open Access by reputable institution in its own electronic publishing infrastructure, grey literature is up to playing a new and sustainable role in a future publication landscape...hereby, libraries could be one of the key players. Important for an Open Access future of grey literature is a thoroughly-built infrastructure which guarantees quality, persistence, and citability. New and emerging ways of scholarly communication can be included in such a structure.”

The researcher views the continuum of data production as exciting, encouraging research, accumulating knowledge and therefore should recur unhindered, especially in a setting of higher learning. This advocacy brings us to the question of Open Access. According to Garcia-Penalvo, de Figuerola and Merlo (2010) the Open Contents initiative refers to the free distribution, use, copy and modification of results of any creative activity. This is echoed by Wiley (2009) when the author analogizes it to measuring the openness of the door in centimeters with openness of content in terms of the rights a user of the content is granted. These rights are described by the 4Rs Framework, as follows:

- Reuse – the right to use the content in its unaltered form;
- Revise – the rights to adapt, adjust, modify, or alter the content itself;
- Remix – the right to combine the original or revised content to create something new; and
- Redistribute – the right to make and share copies of the original content, your revisions, or your remixes with others.

The author summarizes by stating that the fewer restrictions a license places on a user's ability to exercise 4R rights in the content, the more free the content is. In the researcher's view and given the above arguments, the more free the content becomes the more new knowledge is produced and that is innovation. This brings us to the concept of Open Innovation.

According to Garcia-Penalvo, De Figuerola and Merlo the Webster's Dictionary defines innovation as the introduction of something new or a new idea. According to the authors Albert Einstein once said "we can't solve problems by using the kind of thinking we used when we created it". They posit that a university is a fundamental agent that selects and quickly puts into practice the best ideas in order to serve the community. In the researcher's view if our institution could look critically into and adapt the meaning of the following concepts: data ownership, data custodianship, open content and open innovation this institution would find a grand strategy in realizing its mission.



University of Fort Hare
Together in Excellence

According to Willetts (2012), a report in the same year from the U.S. Committee for Economic Development had concluded that the US National Institute of Health's policy of open access had accelerated the transition from basic research to commercialization, generated more follow-on research and reduced duplicate or dead-end lines of inquiry – thus increasing the US government's return on investment in research. The author added that the researcher of the report had found that, when publishers randomly made articles open access on journal websites, readership increased by up to 250% while it furthers human knowledge and drives intellectual, social and economic progress. According to Fullard (2007) the economics of open access focuses on costs at the production end of the publication cycle to free up costs on the distribution end. The author states that the only previous study conducted by De Beer (2005) in South Africa,

found very limited knowledge and experience of OA among certain disciplines and that this highlighted the need for explicit advocacy or awareness building at the policy making level.

2.7 Institutional Repositories (IRs)

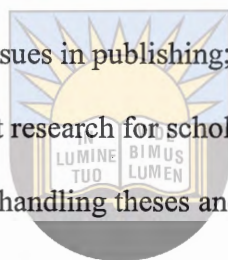
Armbruster and Romary (1989) state that after two decades of repository development four kinds of distinguishable publication repositories materialized, namely the subject-based repository, research repository, national repository system and institutional repository. This study discussed the latter which the authors refer to as containing the various outputs of the institution. Besides research results the outputs include works of qualification, teaching and learning materials as well as other institution publications (and all these publications are referred to as GL) thus forming a library and a showcase. According to the authors it is a library because it holds an institutional collection and it is a showcase because of the online open access display and availability or accessibility of the collection. According to the researcher once an item is accessible it is well managed.

According to Lynch (2003: 328) “a university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization, access and distribution... an effective institutional repository of necessity represents collaboration among librarians, information technologists, archives and records managers, faculty, and university administrators and policy makers”.

The Networked Digital Library of Theses and Dissertations (NDLTD) is a collaborative effort of universities around the world to promote creating, archiving, distributing and accessing

Electronic Theses and Dissertations (ETDs) (Suleman, Atkins, Goncalves, France and Fox 2001). It has been embraced by more than hundred universities since its inception in 1996. According to the authors it emerged as a result of the efforts of thousands of students, faculty, and staff at hundreds of universities around the world as well as the assistance from interested parties from companies, government agencies, and other organizations. Its multiple objectives are to:

- improve graduate education by allowing students to produce electronic documents, use digital libraries, and understand issues in publishing;
- increase the availability of student research for scholars and to preserve it electronically;
- lower the costs of submitting and handling theses and dissertations;
- empower students to convey a richer message through the use of multimedia and hypermedia technologies;
- empower universities to unlock their information resources; and
- advance digital library technology.



University of Fort Hare
Together in Excellence

The authors posit that before the advent of the networked environment, the intellectual output and the value of an institution's intellectual property were hidden in thousands of scholarly journals.

According to Connell (2001) of the Ohio State University libraries, the role of the libraries is one of knowledge management providing hardware, software, training, and support to entities on campus that want make available their digital assets. The author defines the role of IRs as capturing, disseminating, and preserving the intellectual output of an institution and its community members. According to the author Crow takes a similar view in stating that "the aim

of IRs is to preserve the entire intellectual output of the institution”. However, the author mentions Crow as raising the issue of the relationship of IRs and archives in which he views archives as being charged with the responsibility of maintaining and preserving materials related to the history of the institution and the activities of the campus community. In contrast, Lambert, Mathews and Jones (2013) do not see this distinction between IRs and archives because they state that an IR is a formal and managed archive of research output in the form of digital documents that is operated by a particular institution such as a university. The authors conclude that the IR, is integrated as a part of the overall institutional memory.

Singh (2006: 202) states that to manage the information overload effectively libraries take the advantage of technology available that is cost effective. The author mentions that every library and information service in India is talking about digitization and digital library. The author states also that the advent of computers in the 1980s enabled them to create bibliographic databases and housekeeping operations. However, subsequently the creation has been broadened by implementing it to conversion of full text, graphics, sound, video records etc. The author illustrated the close relationship between the mission of university libraries and the goals of digitization of GL. The former entails:

- Acquiring, storing, processing and distributing the information
- Support the teaching & research program
- Serve the information needs of students, teachers and staff
- Conservation and preservation of knowledge
- Dissemination of publication of research results
- To work for maximum satisfaction of users.

While the latter entails:

- Preserve to use for posterity
- To capture, store, process and disseminate information in digital form
- Save the both space and time
- Facilitate for networking and resource sharing
- Make available information to remote users
- Maximizing user's satisfaction by providing multiple and easy access
- Foundation of new value added library service.

According to Herb and Muller (2006: 23) repositories offer a variety of retrieval options such as:

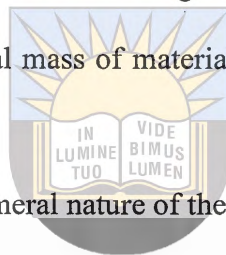
- Browsing through document types, faculties and institutions as well as subject classifications;
- Meta-data search; and
- Full-text search (PsyDok even offers a combined meta-data/ full-text search via the SCIRUS search engine)

The authors are of the view that IRs offer a rapid and global flow of scientific information such that “numerous studies have proved that the additional publication of documents in an open access repository increases the number of its citation” [Lawrence, (2001); Brody et al.,(2005); Brody and Harnad, (2004); Hajjem et al., Eysenbach, (2006)] as quoted..

According to Kelly and Letnes (2005: 158), Friedlander, (2002); Lawrence, (2001); Harnad et al., (2004) noted that faculty members prefer access to electronic versions of documents, and that

free online availability increases the impact of a paper. The author states that scholarly digital repositories introduce opportunities for librarians in a number of areas:

- Collaboration - with individual faculty members, departments, professional organizations, and other librarians
- Bibliographic enhancement and control – making it much more likely that a document can be located
- Open access – providing documents free of charge
- Organization – gathering a critical mass of material on a topic, and providing searching and browsing capabilities
- Preservation – changing the ephemeral nature of the print GL.



In addition, the author states that the five reasons for the movement include:

University of East Anglia
Together in Excellence

1. An interest in changing the current system of publisher- controlled scholarly publishing,
2. The hope of highlighting the intellectual output of the university, and
3. An attempt to locate and preserve materials that have often been overlooked in the academic environment.

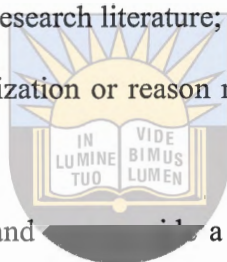
According to Juznic (2010: 41), an overview by Edminster, (2001) of these international efforts to develop the NDLTD focused on:

- The need to provide developing countries with equal access to current international scholarship;
- The collaborative development of training materials to facilitate wider global participation in the NDLTD;

- The work of multi-university/ library and corporate collaboration to establish centralized metadata for ETDs; and
- The development of multi-language search interphases.

The importance and role of GL in a collection is demonstrated by Newbold and Grimshaw (2010: 57) when they state that despite the fact that GL has often been overlooked and is difficult to deal with does not diminish its worth as it offers many benefits to users, for example:

1. it provides access to high calibre research literature;
2. documents created for one organization or reason may have relevance or resonance for other audiences;
3. it is often free or cost effective and provides a relatively faster route to publication than that offered by academic monographs or peer reviewed scholarly journals; and
4. information in research reports is often more detailed than in journal articles where page limits may have been imposed.



University of Port Harcourt
 Together in Excellence

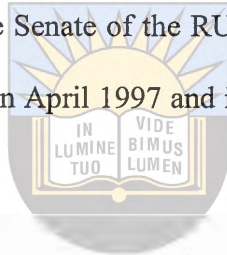
The author concludes by stating the general aim of GL as to make publicly funded research available to showcase the research outputs of university departments, and to preserve them for the lifetime of the repository.

The researcher agrees with Harnad (2006) when he states that no research institution can afford all the journals its researchers may need and as a consequence all articles lose research impact. The author is of the view that when articles are made Open Access by self-archiving on the web they are cited twice as much. As a solution he advocates for self-archiving mandate wherein the author/ public funded researcher, immediately upon acceptance for publication, must deposit into

the university's IR both the full-text and the bibliographic metadata of the final accepted draft but not the publisher's proprietary PDF.

2.8 Institutional Repositories in South Africa

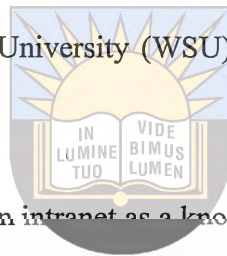
According to Ubogu (2003) the development of ETDs in SA started in 1996 when Rhodes University (RU) undertook an investigation into the holding of electronic copies of theses and dissertations. According to the author the Senate of the RU approved mixed submission of both print and digital copies of student ETDs in April 1997 and in the following month RU joined the NDLTD.



According to their website the South Eastern Academic Library Systems (SEALS) was originally established by eight constituent libraries as an informal academic library forum in the Eastern Cape Province in 1998. It became a formal academic library consortium in 1999 under the auspices of Eastern Cape Higher Education Association (ECHEA). Its objective was to foster improvement in access to information research to support and enhance high standards of teaching, research and scholarship in member institutions by promoting resource sharing of human, material and information resources between academic institutions within the region. In 2003 SEALS purchased the Millennium Media Management software for a shared digital theses and dissertations system for its member libraries. However, at the time of this study only RU and UFH have utilized the software. On searching the NMMU and WSU websites the researcher could not find IRs and on searching their Online Public Access Catalogs (OPACs) he established that their ETDs are among their mainstream resources and accessible via OPAC as metadata.

Academic libraries in the Eastern Cape function within the SEALS consortium which is one of the five library consortia in South Africa (SA), others being CALICO in Western Cape Province, esAL in KwaZulu Natal Province, FRELICO in Free State Province, and GAELIC incorporating the provinces of Gauteng, North West and Limpopo.

Thomas and Fourie (2006) state that SEALS was established as a forum for cooperation between constituent libraries attached to Rhodes University (RU), the University of Fort Hare (UFH), the University of Port Elizabeth (UPE) (now known as Nelson Mandela Metropolitan University [NMMU]), and later the Walter Sisulu University (WSU) which is a merger from Technikon libraries and the University of Transkei.

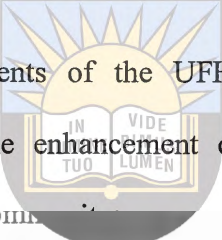


In their research about the utilization of an intranet as a knowledge management tool in academic libraries, Mphidi and Snyman (2004) concluded that intranets have become one of the most effective ways of knowledge management and the sharing of knowledge. They assert that the intranets, as knowledge management tools, can help libraries improve the quality of their service and promote the creation and maintenance of a learning culture within academic libraries in South Africa via the IRs.

According to Thomas (2007: 80) a collaborative partnership between the National Research Foundation (NRF) and the Committee for Higher Education Librarians in South Africa (CHELSA) was established in 2006 to drive the National Electronic Theses and Dissertations (NETD) project. This initiative was a project to make electronic theses and dissertations accessible both via the Intranet and over the Internet using IR technology and open source software. The collaboration committed NRF to:

- Support the project and provide custodial support to academic libraries that do not yet have the capacity to host their own electronic theses and dissertations (ETD) repositories;
- Provide funding to support the implementation of IRs at three pilot sites (two universities and one university of technology), with the preferred choice to support ‘historically disadvantaged institutions’ (HDIs). The University of Fort Hare (UFH) was chosen as one such institution with which NRF entered into a memorandum of agreement in 2008.

The University of Fort Hare Library (UFHL) (2008), in its UFHIR draft policy states that:

- 
- staff and post-graduate students of the UFH produce research outputs which contribute significantly to the enhancement of scholarly discourse within their disciplines, and to the wider community;
 - the focus of the proposed IR will mainly be ‘grey literature’, produced by the University’s research activities;
 - in an attempt to establish a more central archive and to make freely accessible such grey literature research output, the UFHIR environment on DSpace has been established to capture, preserve and provide access to these important, valuable and otherwise unsearchable resources.

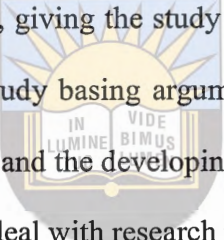
The UFH approved the proposed policy on the submission of electronic thesis and dissertation (ETD) (Printed and Electronic Copies) in 2008 and became effective from 2009.

According to Mitchell (2012) Innovative launched Content Pro IRX which is a new Institutional Repository Solution that can put a library at the center for knowledge management. According to SEALS it could drastically simplify the management of an institution’s digital content by providing a central store for institutional documents, academic

research, special collections, archival materials, among others. Furthermore, it provides all that a library needs to collect, manage, and disseminate its knowledge assets more effectively and easily than ever before.

2.9 Summary of the Chapter

This chapter discussed some theories or models relevant to the discipline and highlighted those that are relevant to the study in particular, giving the study a theory base. This was followed by reviewing the relevant literature to the study basing arguments on collection development, the management of GL in both the developed and the developing worlds, the concept of open access, and the use of IRs. The next chapter will deal with research methodology.

The logo of the University of Fort Hare is a shield-shaped emblem. At the top is a sun with rays. Below the sun is an open book. The Latin motto "IN LUMINE VIDE BIMUS" is written across the book. The shield is set against a light blue background.

University of Fort Hare
Together in Excellence

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodological approach used for the study. However, in order to get a better understanding of the concept of research methodology, Rajasekar, Philominathan and Chinnathambi (2013; 2 and 5) provide a definition of what research, research methods and research methodology are:

- Research is a logical and systematic search for new and useful information on a particular topic;
- Research methods are the various procedures, schemes and algorithms used in research; and
- Research methodology is a systematic way to solve a problem. In addition they refer to it as a science of studying how research is to be carried out.



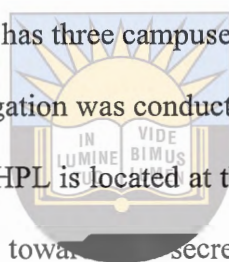
University of Fort Hare
Together in Excellence

The authors state that it is important for the researcher to know not only the research methods to use for the study undertaken but also the methodology. To further explain the distinction between research methods and research methodology, the authors state that the study of the former gives training to apply them to a problem and the study of the latter provides the necessary training choosing methods, materials, scientific tools and training in techniques necessary for the problem chosen. They conclude by stating that it is necessary for a researcher to design a methodology for the problem chosen.

According to Baxter and Jack (2008; 544) the explanatory case study type would be used if when seeking to answer a question that sought to explain the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies.

3.2 The research site/ area

The University of Fort Hare (UFH) is one of the Universities in the Eastern Cape Province of the Republic of South Africa. The institution has three campuses, one is in Alice, the other in Bhisho and another in East London. This investigation was conducted at the Howard Pim Library (HPL) of the UFH library in the Alice campus. HPL is located at the basement of the library. Once you enter the reception area and walk ahead toward the secretary's office, on your left-hand side there is a spiral staircase that leads to the basement. When you land at the foot of the stairs enter the door with "Howard Pim Library" signage on and enter again the door on your right-hand side. Further inside you will be welcomed by a door on which "Howard Pim Africana Library" and operating hours signage is written.



University of Fort Hare
Together in Excellence

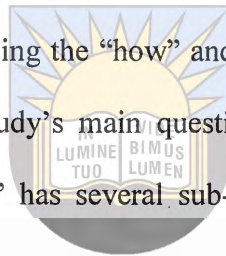
3.3 A case study approach

This was a case study. The technical definition of case studies is given as twofold:

- A case study is an inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident.

- The case study inquiry copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result benefits from the prior development of theoretical proposition to guide data collection and analysis (Yin, 2009: 18).

A case study according to Yin (2009) is used to contribute to our knowledge of organizational phenomena. The reason for choosing to use a case study is that the more study questions seek to explain some present circumstance by using the “how” and “why” questions, the more the case study method will be relevant. This study’s main question “how GL is being managed by academic libraries in the Eastern Cape” has several sub-questions, making the case study a relevant approach.



University of Fort Hare

Together in Excellence

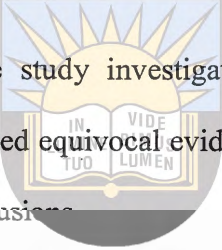
Yin (2009) states that a case study method allows the investigator to retain holistic and meaningful characteristics of real-life events. It is further stated that some of the best and most famous case studies have been explanatory case studies, however there are also exploratory and descriptive case studies. According to (Yin, 2009) the different methods are distinguished by three important conditions among which there are large overlaps. They include:

- The type of research question posed;
- The extent of control an investigator has over actual behavioural events; and
- The degree of focus on contemporary as opposed to historical events.

The author is of the view that a case study is preferred in examining contemporary events as long as the relevant behaviors cannot be manipulated. He likens it to history method approach except that it adds two sources of evidence, namely direct observation of the events being studied and

interviews of the persons involved in the events. According to the researcher these are the methods used in the study. To show relevance of the chosen approach Yin (2009) posits that its unique strength is its ability to deal with a full variety of evidence such as documents, artifacts, interviews, and observations beyond the scope of a conventional historical study. Another advantage Yin provides is that one can use multiple methods in any given study, for example, a survey within a case study or a case study within a survey.

However, disadvantages are also listed:

- 
- They lack rigor resulting in the study investigator being sloppy by not following systematic procedure, or has allowed equivocal evidence or biased views to influence the direction of the findings and conclusions
 - Case studies provide little basis for scientific generalization
 - They take too long, and they result in massive, unreadable documents

Welman, Kruger and Mitchell (2005; 25) view a case study approach as research that is directed at understanding the uniqueness and idiosyncrasy of a particular case in all its complexity. According to the authors the objective is to investigate the dynamics of some single bounded system, typically of a social nature, such as a family, group, community, participants in a project, institution and practice. Similar to Yin's views, the authors state that the term case study pertains to the fact that a limited number of units of analysis (often only one) are studied intensively.

Similarly, Leedy and Ormrod (2005) state that in a case study a particular individual, program, or event is studied in depth for a defined period of time. The authors add that a case study may probably be especially suitable for illuminating the unknown or establishing how an individual or program changes over time as a result of certain influences.

According to Rudestam (2007) the term case studies refers to studies that focus on a single individual, organization, event, program, or process. The author states that case studies are commonly associated with qualitative designs wherein an intensive effort exists to understand a single unit of study within a complex context. Despite the variation of research questions, the goal is to obtain a comprehensive understanding of the case. As is the case in this study despite the variation of research questions, the goal is to find out how GL is being managed in academic libraries in the Eastern Cape

The author is also of the view that any number of specific data collection methods might be included in a good case study. These would include interviews, observations, documentation, and archival records.



University of Fort Hare
Together in Excellence

3.4 Research Methods

Leedy and Ormrod (2005, 133) assert that researchers cannot just skim across the surface to answer some research questions – they must dig deep to get a complete understanding of the phenomenon they are studying. The authors state that in qualitative research researchers indeed dig deep to collect numerous forms of data and examine them from various angles to construct a rich and meaningful picture of the complex, multifaceted situation.

According to Merriam (2002) qualitative research attempts to understand and make sense of phenomena from the participant's perspective. It is characterized by the search for meaning and understanding. It is also characterized by the investigator becoming the primary instrument of data collection and analysis which is an inductive investigative strategy whose end product is richly descriptive.

Welman, Kruger and Mitchell (2005; 8) cite Denzin and Lincoln (1994) as stating that the aims of qualitative research methods are to establish the socially constructed nature of reality, to stress the relationship between the researcher and the object of study, as well as to emphasize the value-laden nature of the inquiry.

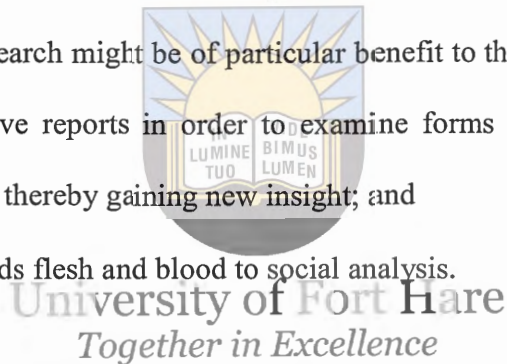
Hughes (2006; 4-5) advances the following key characteristics of qualitative research:

- Events can be understood adequately only if they are seen in context, therefore a qualitative researcher immerses her/himself in the setting;
- The contexts of inquiry are not contrived, they are natural, but nothing is predefined or taken for granted;
- Qualitative researchers want those who are studied to speak for themselves, to provide their perspectives in words and other actions. Therefore qualitative research is an interactive process in which the persons studied teach the researcher about their lives;
- Qualitative researchers attend to the experience as a whole, not as separate variables, the aim being to understand experience as unified;
- Qualitative methods are appropriate to the above statements and there is no one general method; and
- For many qualitative researchers, the process entails appraisal about what was studied.

The author also gives strengths and limitations of qualitative approaches:

Strengths:

- Because of close researcher involvement, the researcher gains an insider's view of the field. This allows the researcher to find issues that are often missed (such as subtleties and complexities) by the scientific, more positivistic enquiries;
- Qualitative descriptions can play the important role of suggesting possible relationships, causes, effects, and dynamic processes;
- Because statistics are not used, but rather qualitative research uses a more descriptive, narrative style, this research might be of particular benefit to the practitioner as she or he could turn to qualitative reports in order to examine forms of knowledge that might otherwise be available, thereby gaining new insight; and
- Qualitative research adds flesh and blood to social analysis.



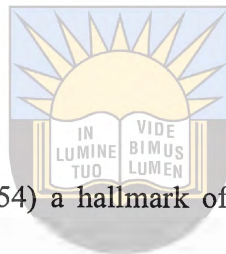
Limitations:

- The problem of adequate validity or reliability is a major criticism. Because of the subjective nature of qualitative data and its origin in single contexts, it is difficult to apply conventional standards of reliability and validity;
- Contexts, situations, events, conditions, and interactions cannot be replicated to any extent nor can generalizations be made to a wider context than the one studied with any confidence;
- The time required for data collection, analysis, and interpretation is lengthy;
- Researcher's presence has a profound effect on the subjects of study;
- Issues of anonymity and confidentiality present problems when selecting findings; and

- The viewpoints of both researcher and participants have to be identified and elucidated because of issues of bias.

The researcher used questionnaires, interviews, documents and observation to collect data the process which allowed the researcher to interact regularly with the respondents who were his colleagues. He used the opportunity of easy contact with them to his advantage by asking at random any questions that might clear a particular issue spontaneously.

3.5 Instruments for data collection



According to Baxter and Jack (2008; 554) a hallmark of a case study research is the use of multiple data sources, a strategy which also enhances data credibility (Patton: 1990 and Yin: 2003). The authors are of the view that potential data sources may include but are not limited to documentation, archival records, interviews, physical artifacts, direct observation, and participant- observation. Yin (2009) states that no single source has a complete advantage over all others, as such various sources are highly complementary. The researcher collected data using questionnaires, interviews, observation and document review.

3.5.1 Document study

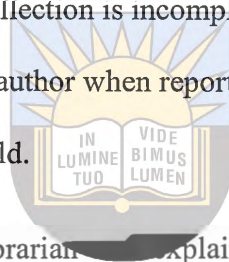
According to Yin (2009; 101) documentary information is likely to be relevant to every case study topic. This type of information can take many forms and should be the object of the researcher's explicit data collection plans because they provide different viewpoints to corroborate information from other sources.

According to the author this method has the following strengths:

- They are stable as they can be reviewed repeatedly;
- They are unobtrusive because they are not created as a result of the case study;
- They are exact because they contain exact names, references, and details of an event; and
- They have broad coverage including long span of time, many events, and many settings.

The method's weaknesses include:

- They can be difficult to find;
- They have biased selectivity, if collection is incomplete;
- They reflect unknown bias of the author when reporting; and
- Access can be deliberately withheld.



The researcher approached the HPL librarian [redacted] explained his research commitment as he produced his letter of introduction in ANNEXURE 1. When the librarian indicated consent to help, the researcher requested for documents connected with the management of GL in HPL. When access to the documents was provided the researcher consulted documents pertaining to collection development policy and policy on the final submission of theses and their electronic versions.

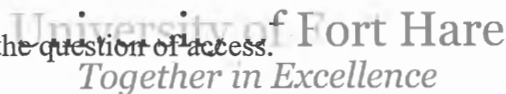
The collection development policy document states that HPL houses special collections that include but not limited to theses and dissertations, photographs, artifacts and UFH publications. The manner of acquisition is either by gift, deposit, purchase, or internal transfer. It also states that the library recognizes its responsibility to preserve these collections to support the institution's teaching, learning and research endeavors as well as for posterity. Identification of an item as supporting the institution's teaching, learning and research needs is highlighted as one of the criteria that should be met in order to recommend its acquisition. From the above

statements we may conclude that, although not explicitly mentioned, some kind of preservation is being done and the questions of whether or not GL is thus being acquired and preserved are answered.

From the policy for submission of theses and dissertations there is a declaration that the authors make that:

- Their theses or dissertations may be placed in the archive of electronic theses and dissertations and be made electronically available in its entirety soon after the date of submission into the ETD system (IR), or
- if the work is embargoed, soon after the scheduled embargo period has passed the ETD will be released worldwide (on Google) in other words as an open access.

The above statements answer the question of access.



3.5.2. Questionnaires

Hofstee (2009; 132) states that questionnaires are a form of structured interviewing, where all respondents are asked the same questions and are often offered the same options in answering them. It is vital that questionnaires are consistent and have direct and clear questions so that all respondents are able to understand them easily.

According to Eiselen (2009) the following are advantages of a questionnaire method:

- They are more cost effective than personal (face-to-face) interviews;
- They are relatively easy to administer and analyse;
- Most people are familiar with the concept of a questionnaire;
- They reduce the possibility of interviewer bias;

- They are perceived to be less intrusive than telephone or face-to-face surveys and hence, respondents will more readily respond truthfully to sensitive questions; and
- They are convenient since respondents can complete it at a time and place that is convenient for them.

There are disadvantages as well:

- The response rate tends to be low, especially when the questionnaire is too long or is complicated to complete, the subject matter is either not interesting to the respondent, or is perceived as being of a sensitive nature; and
- The researcher does not have control over who fills in the questionnaire even though it may be addressed or delivered to the intended participant.

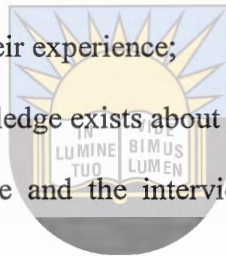
These advantages and disadvantages influenced the manner in which the researcher constructed the questions. He figured out the data to be collected and formulated the questions. This helped the researcher to minimize respondent boredom and inconvenience. The researcher used structured questionnaires with closed and open-ended questions and distributed them to library workers according to their designations, see ANNEXURES 2, 3, 4 and 5. ANNEXURE 6 was a set that was distributed to HPL users. Each questionnaire was accompanied by a letter of introduction in ANNEXURE 1.

3.5.3 Interviews

Kajornboon (2013) defines interviews as a systematic way of collecting data from individuals through conversations. According to the author the participants are able to discuss and express their perception and interpretation of a given subject. The researcher chose unstructured interviews because according to the author this type of interview is non-directed and is a flexible

method. The author adds that it is more casual than structured and semi-structured interviews and there is no need to follow a detailed interview guide. In this type of interview interviewees are encouraged to speak openly, frankly and give as much detail as possible. The following advantages are mentioned:

- Usually the interviewer has received virtually little or no training or coaching about the interview process and has not prepared much;
- The interviewers ask questions on which the respondents would be able to express their opinions, knowledge and share their experience;
- It is useful when little or no knowledge exists about a topic; and
- Structured interviews are flexible and the interviewer can investigate the underlying motives.



University of Fort Hare
Together in Excellence

There are also disadvantages as mentioned below:

- Some problems can be created because the interviewer may not know what to look for or what direction to take the interview, therefore structured interviews can be inappropriate for inexperienced interviewers;
- The researcher may not get the data that is relevant to the question of the study;
- Demand is placed on interviewer to be cautious about the questions to ask and how to ask and phrase them properly as well as know when to probe and prompt;
- The interviewers may be bias and ask inappropriate questions; and
- Respondents may talk about irrelevant and inconsequential issues and consequently it may be difficult to code and analyse the data.

According to Kajornboon, Gillham (2000; 38) lists ethical preconditions that a researcher should put in place before the interviews take place, such that respondents have:

- a clear idea of why they have been asked;
- basic information about the purpose of the interview and the research project of which it is a part;
- some idea of the probable length of the interview and that you would like to record it and explain why; and
- a clear idea of precisely where and when the interview will take place.

The researcher complied with the above preconditions before interviewing the systems administrator, in addition to the questionnaire and two cataloguers, individually. However, before he did so he explained the concept of GL. In addition to the questionnaire in annexure 5, the researcher wanted to find out from the systems librarian whether any GL material is recorded in the library system. According to him he had started recording such materials as the theses and dissertations, past exam papers, inaugural lectures and some archival papers into the institutional repository by means of Content Pro software. He explained that plans are afoot to roll self-publishing out to the Fort Hare community so that they personally contribute to the IR directly. Actually these are plans towards Open Access thus the question of sharing within the consortium is addressed.

With regard to the cataloguers, the researcher wanted to find out if they catalog GL materials. According to them the only GL material they catalog are theses and dissertations. They warned that it would be extremely difficult and time consuming if they were to catalog such material.

With regard financial aspects regarding the processing of GL, an indication was given by the University Librarian that there was budget only for the processing of theses and dissertations collections and few other UFH publications. Furthermore, there was no policy for other GL material than theses and dissertations.

3.5.4 Participant Observation

The researcher chose this method rather than direct observations method because it provided him with more insight and better understanding of the activities at the site within the short space of time at his disposal. According to Yin (2009; 111) this mode of observation has an advantage of not merely putting you as an observer in the setting. Instead it gives you an opportunity of participating in the events being studied. The author warns that though it provides certain unusual opportunities for collecting data, it also involves major problems. He states most distinctive opportunities as:

- The ability to gain access to events or groups that are otherwise inaccessible to a study;
- The ability to perceive reality from the viewpoint of someone ‘inside’ the case study rather than external to it; and
- The ability to manipulate minor events, for example convening a meeting of a group of persons in the case.

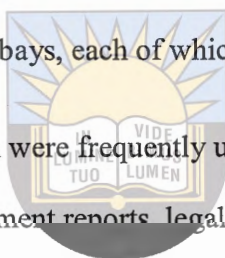
However, major problems relate to:

- The investigator has less ability to work as an external observer in which case he may assume roles that are contrary to the interests of good social science practice;

- The investigator may be influenced to support the group or organization being studied, if such support did not already exist; and
- The participant role may simply require too much attention relative to the observer role.

By observation the estimated amount of GL in the HPL besides the thesis and dissertations filled six rows of metal shelves on one side of the room. Each row of the shelves had forty bays each of which each was 88.5cm long. On the other side of the room, there were two rows of metal shelves with each row having eighty four bays, each of which was 87cm long.

Besides the thesis and dissertations which were frequently used by students, the other type of GL material comprised of government department reports, legal publications and UFH publications.



3.5.5 The interview schedule

University of Fort Hare
Together in Excellence

The researcher held discussions with the systems librarian, cataloguers and the librarian in charge of the HPL. He selected them purposefully because he wanted to solicit information regarding the management of GL in respect of their respective sections in the library. The interviews were guided by the following questions:

- Do you receive this type of material for cataloguing?
- If you do, can you give examples and frequency of receipt?
- How do you process them?
- How are they accessible?

3.5.6 Participant observation guide

During the time of this study and before the current incumbent arrived the researcher was one of the three information librarians. We used to take turns in relieving the previous librarian when he had to take leave of absence. This means we were quite familiar with the settings at the HPL. When he left and the new librarian arrived we continued to relieve her as we did previously and in no time we maintained a good rapport. The study took place around nine months of her arrival. I explained the significance of the study I am undertaking and asked permission to collect observational data. We soon arranged that I could come for a week, spending two hours per day.

My major objective was to find out how GL is being managed at HPL and the following specific research question would help work towards this objective:

- How GL is acquired?
- How is the processing done?
- How access to this material made possible?
- How is the preservation of the material done?

University of Fort Hare
Together in Excellence

While the researcher observed the interaction between the librarian and the students he noticed that when they enter the library they first sign an attendance register and approach her to request an item. He realized that users are not allowed to browse the shelves. He also noticed that different collections are located in different places where, in particular, he was interested in GL material. He found out from the librarian that these are being deposited by other units of the institution and are filed alphabetically in boxes according to their respective titles for ease of retrieval. As a means of preservation, in the area where collections are kept the lights are always switched off and only lighted when the librarian fetches an item. In addition the library is

situated at the basement which is slightly below ground level in which direct sun light does not enter, so the atmospheric conditions are quite stable. These settings gave reasons for the researcher to conclude that GL is indeed being acquired, processed, accessed and preserved.

The table below shows collection instruments, the kind of data collected and the source.

SOURCE OF EVIDENCE	KIND OF DATA COLLECTED	RESPONDENTS/ SOURCE
Document study	GL is being acquired , Access by OPAC & IR	Collection Dev. Policy Policy submission of ETDs
Questionnaires	Acquired, Processed Digitally & naturally, Access by OPAC & IR, Research value, shared, and integration in future.	University Librarian, HPL Librarian, Systems Librarian, Information Librarians, postgraduate students
Interviews	Access by OPAC & IR, OA; digital and manual processing, preservation digitally & naturally, integration in future,	Systems Librarian, Cataloguers, HPL Librarian
Participant observation	Acquired, processing by alphabetic arrangement & IR OPAC & IR, natural preservation	Researcher, HPL librarian

Table 2. Collection instruments, the kind of data collected and the source

3.6 Population and Sampling

3.6.1 Population

According to Welman, Kruger and Mitchell (2005; 52) the population is the study object and consists of individuals, groups, organizations, human products and events, or the conditions to which they are exposed. The authors define a population as the full set of cases from which a sample is taken. They add that in sampling, the term “population” is not used in its normal sense, as the full set of cases need not necessary be people. The population for this study was the UFH library staff and library users who were postgraduate students.

3.6.2 Sampling

The sampling procedure used was a Critical Case which Onwuegbuzie and Collins (2007) describe as choosing settings, groups, and/or individuals based on specific characteristic(s) because their inclusion provides the researcher with compelling insight about a phenomenon of interest. According to the authors this is a non-random (non-probability) sampling technique whose goal is not to generalize to a population but to obtain insights into a phenomenon, individuals, or events. In such a case the researcher purposefully selects individuals, groups, and settings for the phase that maximize understanding of the underlying phenomenon (ibid. 2007; 287). The authors quote Patton (1990: 169) as saying individuals, groups, and settings are considered for selection if they are “information rich”. However, they state that the appropriateness of each scheme is dependent on the research goal, objective, purpose, and question.

According to Ryan, Coughlan and Cronin (2007; 741) in qualitative research participants are usually recruited to a study because of their exposure to or their experience of the phenomenon

in question. The authors cite Fossey, et al. (2002) who explained that this type of sample tends to ensure richness in the data gathered and is known as purposive or purposeful sampling.

The criterion used by the researcher to select the sample was based on job positions held by the respondents and the seniority of students.

3.6.3 Sampling size

Onwuegbuzie and Collins (2007: 288) cite Creswell (2002) as indicating that 3-5 participants is the minimum sample size recommended for qualitative research designs of a case study. However, they state that in general, sample sizes in qualitative research should not be so small as to make it difficult to achieve data saturation, theoretical saturation, or information redundancy. They also cite Sandelowski (1995) as stating that at the same time, the sample should not be so large that it is difficult to undertake a deep, case-oriented analysis.

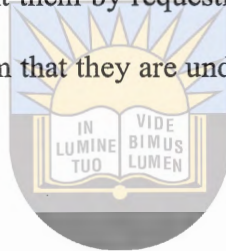
The quota for a minimum size as cited above guided the researcher to have a little more than the required minimum and the sample size for the study comprised of the following:

- The University Librarian,
- The librarian in charge of the HPL referred to as Africana Librarian,
- The systems librarian,
- Two information librarians, and
- three postgraduate students who were randomly selected as users.

3.7 Ethical considerations

According to Schutte (2012) data collection should not begin unless the researcher has a plan that others see as likely to produce useful knowledge. In this regard the researcher explained to the potential respondents the objectives and significance of the study and promised to keep them informed of its progress and findings.

With regard to the potential ethical problems related to privacy, confidentiality, and anonymity issues, the researcher promised to prevent them by requesting them not to disclose their identity whatsoever. The researcher also told them that they are under no obligation to continue assisting me if they felt otherwise.



University of Fort Hare
Together in Excellence

3.8 Data analysis

Foremost the researcher would like to state that this study has a theory base in Ranganathan's first, third, fourth and fifth laws as they deal with the following:

- The first law is about access related issues;
- The third law is about usefulness or value because of the availability of the item;
- The fourth law is about processing for just in time usage; and
- The fifth law is about collection development and increased patron usage.

Of course, other models mentioned illuminated this study because they offered conceptual frameworks but of different context to the study.

Ryan (2006; 95) defines analysis as the process of coming up with findings from your data. The author argues that the complete process of analysis requires that the data be organized, scrutinized, selected, described, theorized, interpreted, discussed and presented to readership. Furthermore, he explains that analysis goes beyond raw data, it provides evidence, it makes the familiar strange and it sheds light on the research question.

Taking the above view further, Kawulich (2004) cites LeCompte and Schensul (1999) as defining data analysis as the process which researchers adapt to reduce data to a story and its interpretation. The author cites Patton (1987) as indicating that three things occur during analysis, namely that:

- Data are organized,
- Data are reduced through summarization and categorization, and
- Patterns and themes in the data are identified and linked.



University of Port Hare
Together in Excellence

According to Kawulich (2004) the ways that researchers choose to analyze data should stem from a combination of factors, which include the research questions being asked, the theoretical foundation of the study, and the appropriateness of the technique for making sense of the data. The author states further that the technique for analyzing data involves immersing oneself in the data to become familiar with it in order to look for patterns and themes by searching for various relationships between data that help the researchers to understand what they have.

According to Thomas (2011) the use of constant comparative method in analyzing data is to emerge with themes that capture or summarize the essence of the data. The researcher, guided by the principles expressed above, made a list of all available raw data from the literature review, questionnaires, interviews, observation, and documents study. He fitted the data in the table

below which is constructed with seven columns, each representing one of the research questions and five rows representing each source of data. At the top row of the table, the researcher then listed the key words from each question as topics and under each listed the data from the reviewed literature. Indeed this captured or summarized the essence of the raw data. Table 2 was then merged into table 3 to consolidate the data. The consolidated data was then discussed, bearing in mind the objectives of the study.

Methods of data collection	Acquisition	Processing	Access	Preservation	Importance	Sharing	Integration
Literature review	For acquisition	For digitizing	Online access	Preserve digitally	Research value	Online	Consortium
Document study	GL being acquired	Arrange alphabet	OPAC; IR	Natural	None	Shared	none
Questionnaires	Acquired	For digitizing	Accessible	Preserved	Research value	Shared	In future
Interviews	Acquired	For digitizing	OPAC; IR; OA	Digitally	Research value	Shared	In future
Participant observation	Acquired	For digitizing	OPAC; IR	Digitally	Research value	Shared	None

Table 3. Findings of each data collection instrument

‘By way of making sense of the data the researcher looked for patterns, searching for various relationships between data gathered from the literature review and that which was collected using instruments of data collection, the following summary was made:

- Establishing how acquisition of GL is done - of the four instruments of data collection used the document study, questionnaires and the participant observation corroborated that GL is done either by gift or deposit and this is corroborated by the reviewed literature.

- How processing is done – the questionnaires and interviews indicated that processing is done through original cataloguing with regard to theses and dissertations only, and the electronic copies are uploaded on the IR. And a limited number of some GL is also uploaded on IR but the rest not as yet. The reviewed literature advocates for digitization.
- How access is facilitated – all four instruments corroborated that access is made possible through OPAC, IR, Google and/ or on request at HPL for those that are not recorded but kept on the shelves in boxes.
- How GL is being preserved – the questionnaires and participant observation indicated that indeed there is some measure of preservation at HPL. It can be deduced that by virtue of digitized content, its preservation is to some extent ensured.
- The importance of GL – questionnaires confirmed that GL is an important resource for research purposes. The reviewed literature corroborated the GL is intellectual value.
- The sharing of GL among academic libraries within SEALS – questionnaires and interviews indicated that the introduction of Content Pro software made this possible. The reviewed literature placed emphasis on the ability of digitized content to share.
- Challenges related to integration of GL – the questionnaires and interviews indicated that with the introduction of Content Pro this is being addressed. Again the reviewed literature was for the formation of consortia wherein GL can be integrated.

3.9 Validity and Reliability

According to Yin (2009) the disadvantages of a qualitative research are that they lack rigor resulting in the study investigator being sloppy by not following systematic procedure, or allow

equivocal evidence or biased views to influence the direction of the findings and conclusions, and that they provide little basis for scientific generalization, and take too long, and result in massive, unreadable documents.

Golafshani (2003) cited Lincoln and Guba (1985; 316) who stated that “since there can be no validity without reliability, a demonstration of the former [validity] is sufficient to establish the latter [reliability]. The author also cited Paton (2001) as confirming that reliability is a consequence of the validity in a study.

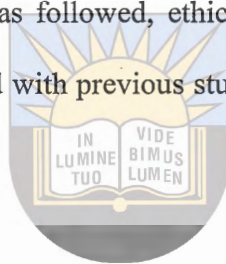
On the basis of the above inputs the researcher attempted to establish the validity of the study thus proving its reliability as well. Ryan, Coughlan and Cronin (2007; 742) state that rigor is the means of demonstration the plausibility, credibility and integrity of the qualitative research process. According to the authors, Koch (2006) is of the view that the rigor or trustworthiness of a study may be established if the reader is able to audit the actions and developments of the researcher. Again the authors cite Burns and Grove (2001) as arguing that the critique of qualitative research requires an appraisal of the rigor in documentation, procedural rigor and ethical rigor, as follows:

- Rigor in documentation ensures that there is a correlation between the steps of the research process and the study in question, commencing with the phenomenon of interest and following through to the recommendations and implications for practice,
- Procedural rigor refers to appropriate and precise data collection techniques and incorporates a reflective/ critical component in order to reduce bias and misinterpretations, and

- Ethical rigor describes how confidentiality issues and the rights of participants are dealt with during the research process.

According to Baxter and Jack (2008: 554) the use of multiple data sources is a strategy which also enhances data credibility as observed by (Patton, 1990 and Yin, 2003).

The researcher was of the view that each step of the research process was consistently aligned to the questions or objectives of the study. While an appropriate and precise data collection procedure using multiple instruments was followed, ethical considerations were applied. And given that the collected data corroborated with previous studies, validity and therefore reliability were attained.



University of Fort Hare

3.10 Summary of the Chapter *Together in Excellence*

The researcher introduced the chapter by briefly reiterating the purpose of the study; detailing the results that the method was designed to provide; and providing an overview of what will be discussed after the introduction. These included the research site/ area, a case study approach, and research methodology.

Instruments of data collection which included document reviews, questionnaires, interviews and participant observation were discussed including their strengths and weaknesses.

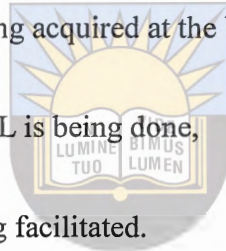
The chapter discussed also the population and sampling, ethical considerations, data analysis, and validity and reliability. The next chapter will deal with data presentation and discussion.

CHAPTER FOUR: DATA PRESENTATION AND DISCUSSION

4.1 Introduction

This chapter presents and discusses the analyzed data in relation to how GL is being managed in academic libraries in the Eastern Cape with specific reference to Howard Pim Library of the University of Fort Hare. The presentation and discussions were guided by the research objectives which aimed to:

- Describe to what extent is GL being acquired at the UFH's Howard Pim library,
- Describe how the processing of GL is being done,
- Explain how access to GL is being facilitated.
- Assess the preservation of the GL
- Explain the importance of GL in research,
- Establish how GL is sharing among academic libraries within SEALS, and
- Establish challenges faced by the integration of GL in the SEALS consortium?



University of Fort Hare
Together in Excellence

4.2 Demographic characteristics of respondents

Table 4. The distribution of designation, age and level of service of the respondents from the population of the library staff compliment:

DESIGNATION	AGE DISTRIBUTION	PERIOD OF SERVICE
Librarian from management	61 – 70	31yrs
Librarian from Systems Administration	30 - 40	3yrs
Information Librarian	41 - 50	24yrs
Information Librarian	30 - 40	3yrs
Librarian from Cataloguing	50 - 60	13yrs

Table 4. Distribution of designation, age and level of service of respondents

Table 4 above represents demographic characteristics of the members of staff of the UFH Alice campus who were interviewed during the study. The respondents were asked about their age and period of service.

Although the librarian from management had thirty one years of service, fifteen of them were served as the University Librarian. According to the library's organogram the University Librarian is the direct supervisor of the HPL and by virtue of this relationship she would be very informative about how GL is being managed. The impression the researcher has about systems

administrators is that they know what goes in and out of the library system. Information librarians should know the information carriers or tools of their library which are catalogued and classified by the cataloguers.

STUDENT	AGE DISTRIBUTION	LEVEL OF STUDY
Stu1	29 and below	PhD.
Stu2	30 - 40	Research Fellow
Stu3	31 – 40	Honours

Table 5. Age distribution and level of study of respondents

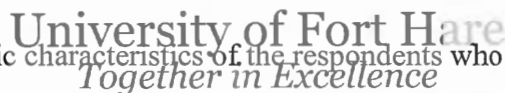


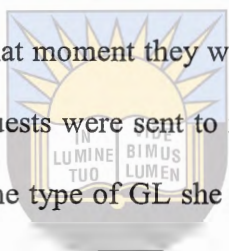
Table 5 represents demographic characteristics of the respondents who were using the HPL at the time of data collection. The study required of this group such demographic characteristics as age and level of study. The reflected levels of study imply that they could have some knowledge about the HPL.

4.3 Acquisition of GL

The respondents from the library management, HPL and the systems administration were asked whether or not GL was acquired at HPL and to what extent. The information librarians and library users were only asked whether or not GL was collected. They all indicated that GL was being acquired but they had different views with the extent thereto. For example, the librarian from management only stated that “it is collected but not all is processed in the library system”.

She went on to say that the unprocessed material is arranged alphabetically but that with the advent of the Content Pro software the processing of GL will be rolled out throughout the consortium. When the researcher asked what Content Pro was, she explained that it was the library system software that SEALS recently launched to facilitate the management of digital content of libraries for their institutional repositories. She was so passionate about this development that she envisioned HPL having a bigger space and all required GL being sent to the library in electronic format thus making GL accessible.

According to the Africana Librarian at that moment they were collecting literature related to the institution through deposits and that requests were sent to relevant departments/ individuals for donations. According to the researcher the type of GL she referred to are the UFH publications which are the only publications that are normally donated to the library or which the library requests from departments/ individuals if there are copies missing in that particular collection.



University of Fort Hare
Together in Excellence

This way of acquiring these publications, the researcher was informed and he observed the librarian was sending mails to all UFH staff requesting copies of certain missing publications in the collections. Some members of staff responded positively.

The librarian from Systems Administration indicated that GL acquisition is through purchase, donations and gifts. He did not specify the type of GL that is acquired. When the researcher went back to enquire he opened the IR to show him its contents. What the researcher found were theses and dissertations, course guides, past examination papers, newspaper clippings, Daily Dispatch Dialogues, Inaugural Lectures, Centres, Institutes and Units, and Faculties.

The Information Librarian indicated that GL is acquired through donations from outside (e.g. annual reports from both the private and public sectors) and within the institution. GL from

within comes from the institution's centres, institutes and units as well as departments. In particular, they collect course guides for collection development purposes after which they pass them on to Electronic Resource Manager (ERM) for inclusion into the IR and thus preserve them.

The researcher was informed by the librarian from cataloguing section whom he interviewed and had also observed that the examinations department deposits theses and dissertations to the library. These publications are research output which students have to submit to examinations department before they are conferred with their degrees. According to the documents consulted by the researcher, postgraduate students completing their studies are required to submit two complete hard bound copies of thesis, mini thesis or dissertation and one soft copy (PDF format) on a CD. Two printed copies of thesis and one electronic copy are deposited to the library for processing and dissemination (General Prospectus 2012). Their metadata are made available on OPAC. The electronic theses are uploaded on the University's Institutional Repository.

The HPL's General Information Booklet (2013) states that GL is acquired through gifts, bequeaths and deposits. The donations include books, and GL materials such as unpublished publications, reports from government departments and archival materials. As mentioned in the literature review that GL is difficult to process, the gifts are either put in marked boxes in some kind of sequence for easy retrieval or are stockpiled in a remote storage.

These findings corroborate the findings of previous work in this field whereby institutions, especially University libraries use different methods in the acquisition of GL. According to Auger (1975) in the United States of America (USA), GL is commonly acquired by means of exchange agreements and purchases by subscription or on single item per order basis. In

discussing the results of a case study on the acquisition of GL at Portland State University in Oregon in the USA, Siegel (2004) reveals that centers and institutes produced much more of this literature than academic departments and that these should be captured to add on library holdings and make them available for inter-library loans. Other means of acquisition include Interlibrary loans (Sulouf: 2012), partnerships with other institutions (Myers, Aloia and Bekwa: 2011), repository and gift methods (Okoroma: 2012). The production of GL is, according to Siegel (2002) a more recent trend of acquiring GL in the developed world. According to Sturgess (1994: 273), in the developing world the acquisition of GL is by means of legal deposit regulations which nevertheless are applied inconsistently. In addition, available literature indicates that many Universities in Southern Africa generate a lot of GL but most of these materials do not find their way into library systems (Kwafo-Akoto, 1995). This may be attributed to the fact that libraries have not formulated any recognized channels through which such materials may be acquired by University libraries. Acquisition of library materials is based on collection development policies of particular libraries. Acquisition of GL should be part of collection development as Gelfand (1997: 15) observes that many collection development policies are beginning to include GL as a body of information equally important as any other resources in research collections..

The findings of the study gave the researcher the impression that the acquisition of GL is a major problem world-wide. Available literature indicated that various strategies are being put in place to make acquisition of GL as enjoying the same status as other library materials. But this cannot be said of HPL where it became evident that no efforts were being made to deliberately acquire all forms GL other than the theses and dissertations. The researcher found that among the chief

causes of this included lack of capacity in the form of trained staff and inadequate budget allocation.

4.4 The processing of GL

According to the librarian from management, the theses and dissertations (T&Ds) were being processed initially using DSpace but subsequently migrated to Content Pro while some other GL collections were simply arranged alphabetically. When T&Ds were processed using DSpace they were made available on the library catalog as metadata. The librarian from cataloguing disagreed with the view that the processing of T&Ds migrated to Content Pro. He argued that the processing was still done by way of original cataloguing for all print copies which the researcher observed to be the practice at the time of this investigation. However, the electronic copies were uploaded on Content Pro thus making them available on the IR and on Google search engine in full text.

The cataloguer agreed with the view that the theses collection prior to 2008 was only processed on the library system via DSpace thus making them available as metadata only. Nevertheless, after this period they were processed by means of original cataloguing and then indexed on SEALS and made available by means of Online Public Access Catalogue (OPAC) which is shared by constituent libraries of the consortium. The electronic copies were being indexed on both the IR and Google in full-text. In other words they were processed by means of digitization, a move which according to Gelfand (1997) promotes developments in scholarly communication and self-publishing via the Web and facilitates the integration of formats and various datasets.

The HPL agrees with the view that other GL than theses and dissertations which is not processed is kept in marked boxes for easy access. In contrast the systems administrator had no clue about this other unprocessed GL material because he just indicated that the collection is well processed since it is looked after by a special person. Similarly the Information Librarians were not really specific as one indicated that GL is processed on the library system and then loaded onto Content Pro while the other indicated that GL is loaded into the IR through a library system called Content Pro.

The researcher observed that most of the GL materials that were processed are theses and dissertations, course guides, past examination papers, newspaper clippings, Daily Dispatch Dialogues and Inaugural Lectures and these are easily accessible both in print and online. The only processing done on print resources which were UFH publications was the alphabetical arrangement. The rest of the GL materials remained invisible because they were stacked away in remote storage thus making them not accessible.

These findings are consistent with those of previous studies on the subject. For example, Yakel (2005: 96) pointed out that after the GL materials have been collected, they become “hidden collections” and that are either not being catalogued or unprocessed which makes them susceptible to loss and theft. In some cases they become difficult to recover. It is important to state that it becomes impossible to use such material for research as

they literally not available. According to Aina (1993) studies have reviewed that researchers in basic and applied sciences use a high proportion of GL and the majority of this literature is produced in developing countries. It is therefore imperative that such materials are made accessible to researchers and other users.

According to Ranger (2005) a large amount of GL was not catalogued because GL requires original cataloguing which is time consuming and very expensive, given that it lacks cataloguing standardization. To overcome this Aina (1993) suggests a strategy whereby countries or institutions need to establish a centre specifically for GL for purposes of acquiring, processing, access, preservation and dissemination.

These findings gave the researcher the impression that valuable research materials in HPL are less exploited because they have not been processed and integrated in the existing library system and eventually in SEALS.



4.5 Access to GL

University of Fort Hare

Together in Excellence

The respondents were asked how the GL material is made accessible. The librarian from management indicated that with the help of Content Pro the TDs were digitized and indexed on Google thus making them available both nationally and internationally. The librarian stated further that the other GL which was not processed can only be accessed in the library. The view that TDs were digitized with the help of Content Pro is not accurate, according to the researcher and as disputed by the cataloguer. This view refers to ETDs. Furthermore the view that other GL which was not processed can only be accessed in the library is also not accurate. According to the researcher what can only be accessed in the library is the GL that is arranged in boxes as distinct from the one that is stacked away.

According to HPL librarian a request is made through the librarian in charge who then fetches the required item. This referred to the theses collection. She indicated that access to GL other

than theses was difficult because they were uncatalogued and she did not know what was contained in them.

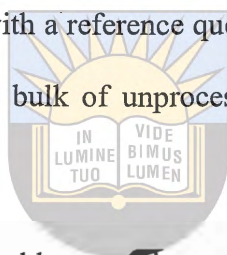
The Systems Librarian indicated that since HPL is a closed- access library, users go there after consulting OPAC or being referred to by information librarians with particulars of the item's location. The users give this information to Africana librarian who retrieves the items for them.

One of the Information Librarians indicated that GL material is accessible via Content Pro however before the advent of this system researchers used to come to the library because not all GL was loaded in the library system as is the case even presently. It was further explained that previously the theses collection was processed through DSpace and was made available on OPAC as metadata. As a result researchers would consult OPAC to identify the item they want.

It is further indicated that this collection was mainly arranged alphabetically by the author's first three letters of their surnames preceded by the letters TH to identify that it is a thesis. So far Content Pro has managed to process only examination papers, inaugural lectures, clippings collection, daily dispatch dialogues and Electronic Theses and Dissertations (ETDs). When users come to HPL they want mostly print copies of theses which are processed by means of original cataloguing. The arrangement of this collection is numerical by call numbers. The other information librarian indicated that access is by means of a dedicated link on the library Web page. However for the GL material that is not loaded on the system, the users physically visit the library to request for them.

The users were asked how they access the GL material other than the theses collection. They unanimously agreed that it was not accessible. They only see some of it as they come into the HPL and that is the only one that is accessible.

The researcher observed the digitized GL is accessible online but the few that are arranged alphabetically may be accessed in the library through the librarian in charge but the bulk of the unprocessed GL is not accessible. He observed that because users are not allowed to browse the shelves, they request theses by providing bibliographic elements of the needed item such as the author, title and shelf number to enable the librarian to retrieve the required item for them. This means they must consult OPAC to establish whether the item is available or not and determine if the bibliographic details and location are correct. For the other printed GL, like UFH publications, users consult the librarian with a reference query and the librarian would retrieve it for the user if it were available but the bulk of unprocessed materials remains invisible and therefore not accessible.



The previous research highlighted the problem and importance of access to GL (Yakel, 2005; Tyndall, 2008; Ranger, 2005; Gelfand, 1997; Keil and Lankenau, 1993; McDermontt, 1995; Luzi, 1998). The authors recognize the need to access GL but also agree that this cannot be achieved without attention being paid to how best to process the material. Suggestions range from cooperative acquisition and processing, digitization of the materials, and making them available on the Internet. This has implications for the availability of appropriate infrastructure including trained staff and funding.

The impression this researcher formed based on the findings of the study is that the University of Fort Hare may not be sufficient in most of the required resources. This means that access to the bulk of GL in HPL could remain a problem for some time to come. But this can change if the current collection development policies are reviewed to accommodate the acquisition, processing and dissemination of GL within the SEALS consortium.

4.6 Preservation of GL

According to Eden (1998:1) preservation is defined as all managerial, technical and financial considerations applied to retard deterioration and extend the useful life of materials to ensure their continued availability. The author states further that a preservation policy sets out an organization's approach to preservation, addressing the question of what needs to be preserved, why, for what purpose, and for how long. According to the author the policy clarifies the responsibilities of all concerned and that preservation strategies, work plans, procedures and processes should all follow from a preservation policy.

The respondents were asked how the preservation of the material was done. The librarian from management indicated that the controlled atmospheric conditions are the only means of preserving the GL collections in HPL. This view is shared by the HPL librarian who indicated that the environment is conducive because HPL is located where exposure to sunlight and harmful bacteria is limited. On further probing about policy in this regard she stated that there was no preservation policy. Also sharing the same view the systems administrator indicated that the collection is kept safe from natural hazards. He added that there are strategic plans to make the GL collection accessible digitally and thus be preserved in electronic formats.

In the literature review Gelfand (1997: 17) contends that the development in scholarly communication and self-publishing via the Web turned out to be the scholarly, professional as well as commercial publishing platforms of choice which, among others, creates storage systems that offer long-term conservation and preservation. Based on this view the researcher argues that Web-based materials occupy relatively less storage space than print materials and are conserved and preserved long-term.

The findings of the study bring out a precarious picture when it comes to the preservation of GL. Most GL is carried on unstable medium and failure to have any measure to preserve them may result in their loss. Not only GL, all materials acquired by libraries need protection against several hazards. The University of Fort Hare like other institutions in South Africa have no resources to ensure the digitization of all GL as a consequence a preservation programme becomes necessary. So the fragile and brittle GL materials not digitized cannot be efficiently preserved. It is evident from the findings that the University of Fort Hare library does not have an active preservation programme.



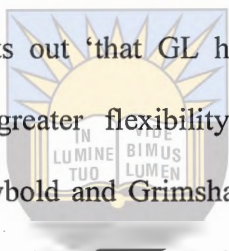
4.7 The importance of GL in research

All respondents were unanimous that GL is as good and necessary as any primary resource for research if not better.

The three users were asked what their response would be if they were to evaluate GL in terms of it being a good research material, an additional research material or just another library material. While two of the users indicated that this was a good research material, one user indicated that it was just an additional research material. When probed further about the frequency of use, two users indicated that although they knew the type of content some of the GL had, they seldom used them. One of the users never used it. It is possible that users could not easily evaluate the importance of GL because it was not easily accessible to them. The responses from the staff have indicated that most GL, except the theses and dissertations, was not catalogued. This means that users have no access to finding tools that would lead them to GL. This is unfortunate given the

research value inherent in GL. The importance of GL in research needs no emphasis as indicated in the reviewed literature.

Gelfand (1997 :16) states that, with greater academic and scholarly value placed on GL, libraries and publishing arenas are forced to respond with a better grasp of the issues associated with making it more widely accessible. He states further that these institutions need to place greater or higher value on GL because of the inherent value it has in academic research even if it is not easy to collect or control. The role of GL in research is also articulated by Weintraub (2006: 1) when he cites Auger (1989) who points out 'that GL has advantages over other means of dissemination such as quick access, greater flexibility, and the opportunity to go into considerable detail when necessary. Newbold and Grimshaw (2010: 57) state that the fact that GL has often been overlooked and is difficult to deal with does not diminish its worth as it offers many benefits to users. The above views are supported by Pappas and Williams (2011: 228) who states that the current research climate makes GL a vital adjunct to traditional library resources.



University of Fort Hare
Together in Excellence

The researcher formed the impression that the importance of GL in research has not been sufficiently marketed by the library to the academic staff and other users of GL. The researcher did not see any policy or regulations that require the academic staff to deposit their publications, academic papers, and other academic output with the library. As such, GL is likely to be lying in their offices or study rooms.

4.8 How GL is shared among academic libraries within SEALS

The respondents were asked about their views concerning how GL was shared among academic libraries within SEALS. The librarian from management indicated that the process of sharing GL

has started through the introduction of Content Pro otherwise previously, except for those items that were catalogued on Millenium or Sierra library systems, the information was not shared. This is similar to how patrons at the University of Rochester acquired their GL materials that were not available at their library –through interlibrary loans department (Sulouff: 2012).

The HPL librarian indicated that the sharing of GL was done to a very limited extent. The respondent was of the view that if more GL material were digitized and uploaded on the Website GL would be available to view.

According to the systems administrator SEALS facilitates and ensures access to HPL, e.g. according to him Rhodes has listed HPL in their list of archives repositories. But it is important to observe that although HPL is listed at Rhodes it is only the digitized GL that may be accessed.

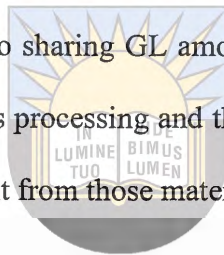
The bulk of the materials that are not digitized remain inaccessible.

The Information Librarians were of the view the ETDs and other GL material held in the IR could be shared but the one that was not digitized could not be accessed unless its existence is known.

Literature has revealed that the introduction of IRs is likely to be a practical, cost-effective, and strategic means to acquire, process, access and disseminate this important research resource. For example, in their research about the utilization of an intranet as a knowledge management tool in academic libraries, Mphidi and Snyman (2004) concluded that intranets have become one of the most effective ways of knowledge management and the sharing of knowledge. They assert that the intranets, as knowledge management tools, can help libraries improve the quality of their service and promote the creation and maintenance of a learning culture within academic libraries in South Africa via the IRs.

Although it was indicated by the respondents that the UFHIR can be accessed through Internet, this researcher is of the view that it may take time before the GL in HPL, other than theses, is shared among the academic libraries within SEALS. There are still many obstacles to be overcome. Zulu (1993) sees such barriers as being common to most of Africa. The obstacles according to this author includes accessibility, bibliographic control, underestimation of the value of GL, lack of appropriate information policies, underfinancing of information services, and inadequate or poorly trained personnel (Zulu, 1993: 127).

The findings of this study with regards to sharing GL among academic libraries within SEALS are that given the challenges related to its processing and therefore become inaccessible is done. The only sharing that is experienced result from those materials that are available on IR.



University of Fort Hare *Together in Excellence*

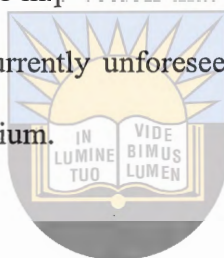
4.9 The integration of GL within the SEALS consortium

The respondents were asked to comment about the integration of GL within the SEALS consortium. All respondents felt that the challenge of integration of GL in the SEALS consortium lies in not having a common system from which to access the digitized GL of the various institutions. Their response was that the constituent libraries used different library systems but shared a common OPAC. However, the introduction of Content Pro, if widely used may make the integration of GL possible.

Available literature has revealed that the situation in the developing world, in terms of GL processing, access, preservation and sharing, can be mitigated by the establishment of IRs (Lynch, 2003). According to Lynch (2003: 328) "a university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital

materials created by the institution and its community members. It is most essentially an organizational commitment to the stewardship of these digital materials, including long-term preservation where appropriate, as well as organization, access and distribution... an effective institutional repository of necessity represents a collaboration among librarians, information technologists, archives and records managers, faculty, and university administrators and policy makers”.

All universities in the SEALS consortium share the same OPAC but sharing the GL requires the allocation of more resources. However, the historical background of the universities impact on their resources. The researcher formed the impression that the University of Fort Hare will need to deploy many resources, which are currently unforeseen, before it can be able to integrate comfortably its GL in the SEALS consortium.



4.10 Summary of the chapter

University of Fort Hare
Together in Excellence

The chapter was introduced by listing the research objectives as guides to the presentation and discussion of findings. The demographic characteristics of respondents were illustrated. The findings were presented and discussed in relation to the acquisition, processing, access to, preservation, importance, sharing, and integration of GL.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter was informed by the objectives of the study as set out below. The main objective was to investigate the management of GL in the academic libraries in the Eastern Cape.

The study / investigation aimed at answering the following questions:

- to what extent is GL material being acquired at UFH's Howard Pim library?
- what systems are being used to process GL for access by users?
- how is access to GL being facilitated?
- How is the GL preserved?
- How is GL important as a resource for research?
- How is GL shared among academic libraries within SEALS? and
- To what extent is the integration of GL in the SEALS consortium?



University of Fort Hare
Together in Excellence

5.2 Conclusions

Once more, the researcher would like to state that this study had a theory base in Ranganathan's first, third, fourth and fifth laws as they dealt with the following:

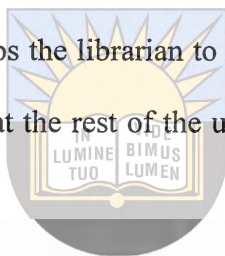
- The first law is about access related issues;
- The third law is about usefulness or value because of the availability of the item;

- The fourth law is about processing for just in time usage; and
- The fifth law is about collection development and increased patron usage.

1. The study revealed that the theses & dissertations collections are the only GL materials that were actively acquired at the HPL. They come in as two print copies and one disc copy. These are research publications that the UFH graduates are required to submit before a degree qualification is conferred on them. Over time the library had also collected events publications such as graduation ceremonies, memorial lectures, inaugural lectures, calendars and so on including other GL materials but which were never managed. Some of this material is on the shelves in marked boxes and the rest is stacked away in a room within the HPL and in a remote storage but they are all not recorded in the library system. This conclusion is illuminated by Alema (2001: 38) when the author states that libraries in Ghana have not only abandoned the idea of collection and storage of GL, but also, that the initial collections they had acquired are neither properly organized nor are they properly preserved. This situation is aggravated by what Salanje (2013) views as lack of trained staff to provide access to the collections as well as lack of or inadequate financial resources to enable travelling and collect publications, to pay for the publications or to embark on digitization.
2. The only GL that is processed and made available through OPAC, IR, and the Internet comprise of theses and dissertations, past examination papers, newspaper clippings Daily Dispatch Dialogue and Inaugural Lectures. The rest of GL is unprocessed and kept in

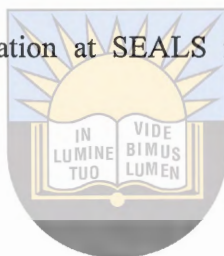
shelves that are not accessible to users. There is also no list of unprocessed GL to be put on users' attention.

3. Accessing the print version of theses & dissertations users are required to consult OPAC to get a call number and the item's barcode which they submit to the librarian in charge who then retrieves the item for them. With regards to the soft copies they consult the library's webpage and select the UFHIR. In the case of a request for GL material other than theses & dissertations, users seek the help of the librarian in charge. Familiarity with the collection that is in boxes helps the librarian to locate and retrieve the required item. The researcher's impression is that the rest of the unprocessed material is not accessible at all.



4. In respect of the preservation of GL, the HPL depends on natural circumstances in which the library is located. HPL is located at the basement of the main library building where the temperature remains cool even during humid conditions. The sunlight does not fall directly inside the library where the books are filed on metal shelves which are relatively conducive receptacles for books than wooden shelves. There are no preservation mechanisms.
5. The findings and previous research corroborated that GL is an invaluable research resource because it may be the only source of information available. The institution has produced a huge amount of this type of knowledge but most of it remains hidden throughout the institution's departments. Despite the importance of GL in research there are no strategies yet in the HPL to market the idea to the academic staff and other users. There is a lack of rules and regulations for the acquisition of GL from the academic staff.

6. The only GL that may be shared within the SEALS comprise of theses and dissertations and also that which is recorded in IRs. Other forms of GL are kept by individual members of the SEALS consortium. The historical background of the members of the consortium tends to impact on the availability of resources.
7. There are challenges associated with the integration of GL in the SEALS consortium. The major challenge includes non-availability of IRs in NMMU and WSU. This means they do not process their GL because if they did it would appear on OPAC which is shared at SEALS level. Therefore integration at SEALS is influenced by the availability of resources on IRs.



5.3 Recommendations

University of Fort Hare *Together in Excellence*

Given the findings and conclusions of the study the following recommendations are made:

5.3.1 Policy

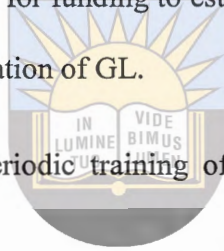
- Policy is key to the implementation of any programme. It is recommended that the University Collection Development Policy should be reviewed to cater for the active acquisition of GL.
- Relevant statutes should be reviewed to make it mandatory for academic and other members of staff involved in the generation of GL to ensure that copies of such publications, reports, records, etc. are deposited with the University Library.

- University Library rules should require all members of staff to be conversant with GL materials and their care and ensure that the materials are processed and made accessible to users.
- All GL in the library should be processed and integrated in the OPAC.

5.3.2 Funding

To strengthen the management of GL in the library it is recommended that the University library should lobby the University management for funding to establish the necessary infrastructure for the acquisition, processing, and dissemination of GL.

Funding should be allocated for the periodic training of staff and users on the acquisition, processing, and use of GL.



University of Fort Hare

Competent and professionally qualified staff should be allocated to deal with GL and other related materials in the library.

5.3.3 Networking

The University library should expand on the current networking on GL.

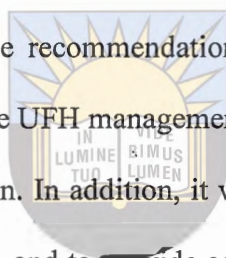
5.3.4 Further Research

Further research in this area should be undertaken in all SEALS libraries to explore the state of GL.

5.4 Summary of the Chapter

This chapter demonstrated that it is difficult to manage GL because in the first place the method of acquisition is not effective and this raises some challenges when it comes to processing it. Besides, if GL is not processed appropriately it cannot be accessed. Furthermore, there are no proper preservation mechanisms as a result the library relies entirely on atmospheric conditions to retard deterioration of GL. It is equally important to note that when materials are not accessible it is very difficult to promote their appreciation as well as it is impossible to share.

Given the above the chapter made some recommendations. It would be in the library's best interest to work hard for a buy-in from the UFH management to institutionalize the acquisition of GL and provide budget for its digitization. In addition, it would be quite beneficial to request a budget for the digitization of existing GL and to provide additional resources to facilitate access and preservation. Once access is made possible, marketing the GL materials and encouraging its use will be easier. More importantly, this will promote the integration and sharing of GL among constituent libraries among Eastern Cape university libraries.



University of Fort Hare
Together in Excellence

BIBLIOGRAPHY

- Aina, L.O. (1993). *The problems of organising and disseminating grey literature in Africa*. Proceedings of the 1st international conference on gray literature, cluster session ii, 13th – 15th December, 169 – 174. Accra: National Science and Technology Library and Information Centre.
- Alemna, A.A. (2001). The need for the collection and bibliographic control of grey literature in Ghana. *Library Review*, vol. 50 (1): 38 - 41.
- Ameen, K. and Haider, S.J. (2007). Evolving paradigm and challenge of collection management (CM) in university libraries of Pakistan. *Collection Building*, vol. 26 (2): 54 – 58.
- American Library Association. (2000). *Information literacy competency standards for higher education*. Chicago, Illinois: ACRL.
- Armbruster, C. and Romary, L. (1989). *Comparing repository types. Challenges and barriers for subject-based repositories, research repositories, national repository systems and institutional repositories in serving scholarly communication*. Cited from: <http://ssrn.com>
- Auger, C. P. (1975). *Information sources in Grey literature*, 3rd ed. London: Bowker-Saur.
- Babbie, E. and Mouton, J. (2001). *The practice of social research*. SA ed. Cape Town: OUP.
- Baughman, J.C. (1977). Towards a structural approach to collection development. *College & Research Libraries*, May: 241-248.
- Baxter, P. and Jack, S. (2008). Qualitative case study methodology: study design and implementation for novice researchers. *The qualitative report*, vol. 13 (4): 544-559.
- Becker, S. and Bryman A. (eds.). (2004). *Understanding research for social policy and practice: themes, methods and approaches*. Bristol: Policy.
- Bhatt, R.K. (2011). *Relevance of Ranganathan's laws of library science in library marketing*. India, Delhi: University of Delhi Press.
- Carrigan, D. (1995). Towards a theory of collection development. *Library acquisition: practice & theory*, vol. 19 (1): 97-106.
- Chisenga, J. (2006). *Information and communication technologies: opportunities and challenges for national and university libraries in Eastern, Central and Southern Africa*. Standing conference of African National and University Libraries of Eastern, central and Southern Africa. Dar es Salaam, Tanzania: the Courtyard Hotel.

Connell, T. H. (2001). The use of Institutional Repositories: the Ohio State University experience. *College & Research Libraries*, vol. 72 (3): 253-275.

Croll, A. (2011). Who owns your data? *Mashable*. Cited from <http://mashable.com/2011/01/12/data-ownership> Date: 04/08/2011.

Dahlin, T. C. (1990). Collection development in Canadian studies: a practical model. *Collection development*, vol. 13 (1/2): 97-108.

De Carvalho, E.M.R. (2001). *Grey literature and its contribution to knowledge society*. 67th IFLA council and general conference, August 16-25.

Eden, P. et al. (1998). *A model for assessing preservation needs in libraries*. London: British Library.

Eiselen, R. Questionnaire design (part one). *The Dissertation Bulletin*, vol. 9. Cited from: http://centaur.vri.cz/docs/BELOS/Diss_Bull_Exactica.pdf. Date: 10/02/2014.

Ferguson, A.W. (1986). University library collection development and management using a structural-functional systems model. *Collection management*, vol. 8 (1): 1-14

Fordham, A.E. (2014). *The collection development planning process*. Cited from: <http://faculty.libsci.sc.edu/bob/class/clis724/SpecialLibrariesHandbook/collection.htm>

Fullard, A. (2007). *South African responses to Open Access: a survey of the research community*. Cape Town: University of the Western Cape.

Garcia-Penalvo, F.J., De Figuerola, C.G., Merlo, J.A. (2010). *Open knowledge: challenges and facts*. Online information review, vol. 34 (4). Cited from: http://gredos.usal.es/jspui/bitstream/10366/121866/1/DIA_GarciaPenalvoGarcia%20deFiguerolaMerloJA_Openknowledge.pdf Date:03/11/2014.

Gelfand, J.M. (1997). Academic libraries and collection development implications for grey literature. *Publishing research quarterly*, summer: 15-23.

Giustini, D. (2012). *Finding the Hard to Finds: searching for grey literature*. Canada: University of British Columbia.

Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, vol. 8 (4): 597-607.

Gopinath, M.A. (1978). Ranganathan. *Encyclopedia of library and information science*, vol. 25: 58-86). New York: Marcel Dekker.

Harnad, S. (2006). *Maximizing research impact through institutional and national Open-Access self-archiving mandates*. Cited from: <http://eprints.soton.ac.uk/262093/2/harnad-crisrev.pdf>
Date: 06/05/2014.

Herb, U. and Muller, M. (2006). Institutional Repositories: the long and winding road – institutional and disciplinary repository at Saarland University and State Library. *OCLC Systems & Services: International digital library perspectives*, vol. 24 (1): 22-29.

Hjoland, B. (1998). Theory and metatheory of information science: a new interpretation. *Journal of Documentation*, vol. 54 (5): 606-621.

Hofstee, E. (2009). *Constructing a good dissertation: a practical guide to finishing a masters, MBA or PhD on schedule*. Johannesburg, SA: EPE.

Hughes, C. (2006). *Qualitative and quantitative approaches to social research*. London: The University of Warwick: Department of Sociology.

Igbashal, A. A. and Tsegba, J. F. (2011). Bibliographic control of publications: the impact on African countries. *Library Philosophy and Practice*.

Juznic, P. (2010). *Grey literature produced and published by Universities: a case for ETDs*. In: Farace, D. and Schopfel, J.M. *Grey literature in Library and Information Studies*. Berlin: de Gruyter.

Kajonboon, A.B. (2013). *Using interviews as research instruments*. Cited from: <http://www.culi.chula.ac.th/e-journal/bod/annabel.pdf> Date: 04/03/2014.

Kawulich, B.B. (2004). Data analysis in qualitative research. *Journal of research in education*: 96-113.

Keil, U. and Lankenau, I. (1993). *Description of grey literature: demand for standardization*. Proceedings of the 1st international conference on gray literature, plenary session ii, 13th – 15th December, 141 – 146. Accra: National Science and Technology Library and Information Centre.

Kelly, J. and Letnes, L. (2005). Managing the grey literature of a discipline through collaboration. *Resource sharing & information networks*, vol. 18 (1-2): 157 – 166.

Kuhlthau, C.C. (1991). Inside the search process: information seeking from the user's perspective. *Journal of American Society for Information Science*, vol. 42 (5): 361-371.

Kwafo-Akoto, K. (1995). Collecting, publicizing and providing access to socio-economic grey literature in Southern Africa with particular reference to Botswana. *Interlending & Document Supply*, vol. 23 (2): 10-16.

Lambert, S.; Matthews, B. and Jones, C. (2006). *Grey literature, institutional repositories and the organizational context*. Cited from: www.researchgate.net Date: 11/02/2014

Lancaster, F.W., Zeter, M. J., and Metzler, L. (1992). Ranganathan's influence examined bibliometrically. *Libri*, vol. 42 (3): 268-281.

Lee, J.; Zhang, X.; Okuhara, K. and Ma, E. (2013). Issues and trends in collection development for East Asian legal materials. *Law library journal*, vol. 105 (3): 321 – 351.

Leedy, P.D. and Ormrod, J.E. (2005). *Practical research: planning and design*. New York: Prentice-Hall.

Luzi, D. (1998). E-print archives: a new communication pattern for grey literature. *Interlending & Documentation Supply*, vol. 26 (3): 130 – 139.

Lynch, C.A. (2003). Institutional Repositories: essential infrastructure for scholarship in the digital age. *Libraries and the Academy*, vol. 3 (2) April: 327-336.

Mackenzie Owen, J.S. (1993). *Value and use of grey literature: the implications of networked publishing*. Proceedings of the 1st international conference on gray literature, cluster session iii, 13th – 15th December, 308 – 319. Accra: National Science and Technology Library and Information Centre.

University of Fort Hare

Mason, M.K. (2012). *Grey literature: history, definition, acquisition, and cataloguing*. Cited from: <http://www.moyak.com/papers-technical-literature.html>. Date: 11/06/2012

McDermott, J.C. (1995). *Defining grey literature for the 21st century*. GL 1995 Keynote Address.

McKimmie, T. & Szurmak, J. (2002). Beyond grey literature: how grey questions can drive research. *Journal of Agricultural & Food Information*, vol. 4 (2): 71-79.

Merriam, S.B. and associates (2002). *Qualitative research in practice: examples for discussion and analysis*. San Francisco: Jossey-Bass

Mitchell, A. (2012). *Innovative launches Content Pro IRX*. Cited from: http://www.iii.com/pr_display.php?id=535 Date: 29/05/2014.

Mphidi, H. and Snyman, R. (2004). The utilization of an intranet as a knowledge management tool in academic libraries. *The Electronic Library*, vol. 22 (5): 393 – 400.

Myers, G., Aloia, D., and Bekwa, P. (2011). *The greylit project: international co-operative challenges in capacity and resources*. Proceedings of the 2nd international conference on African digital libraries and archives, 14th – 18th November. Johannesburg: University of Witwatersrand.

Newbold, E. and Grimshaw, J. (2010). *Collection building with special regards to report literature*. In: Farace, D. and Schopfel, J. *Grey literature in Library and Information Studies*. Berlin: de Gruyter.

Okoroma, F. (2012). Grey literature management in Southern Illinois University Edwardsville (SIUE) Library, USA: a Macarther Foundation Grant Research Project. *Library philosophy and practice (e-Journal)*. Paper 706.

Okoroma, F.N. (2011). Towards effective management of grey literature, research and national development. *Library review*, vol. 60 (9): 789-802.

Onwuegbuzie, A.J. and Collins, K.M.T. (2007). A typology of mixed methods sampling designs in social science research. *The qualitative report*, vol. 12 (2): 281-316.

Osayande, O. & Ukpebor, C.O. (2012). Grey literature acquisition and management: challenges in academic libraries in Africa. *Library Philosophy and Practice*.

Pappas, C. and Williams, I. (2011). Grey Literature: its emerging importance. *Journal of hospital librarianship*, vol. 11: 228-234.

Pettigrew, K.E. and McKechnie, L. (2001). The use of theory in information science research. *Journal of the American Society for Information Science and Technology*, vol. 52 (1): 62-73.

Rajasekar, S.; Philominathan, P. and Chinathambi, V. (2013). *Research methodology*. Cited from: <http://arxiv.org/pdf/physics/0601009.pdf>. Date: 17/03/2014.

Ranger, S.L. (2005). Grey literature in special libraries: access and use. *Public Research Quarterly*, Spring.

Ribot, J.C. and Peluso, N.L. (2003). A theory of access. *Rural sociology*, vol. 68 (2): 153-181.

Rudestam, K.E.(2007). *Surviving your dissertation: a comprehensive guide to content and process*. Los Angeles: Sage.

Ryan, A.B. (2006). *Methodology: analyzing qualitative data and writing up your findings*. In: *Researching and writing your thesis: a guide for postgraduate students*. Cited from: <http://eprints.maynoothuniversity.ie/871/1/methodology.pdf>. Date: 06/06/2014.

Ryan, F.; Coughlan, M. and Cronin, P. (2007). Step-by-step guide to critiquing research. Part 2: qualitative research. *British Journal of Nursing*, vol. 16 (12): 738 – 744.

Salanje, G.F. (2014). *Managing grey literature in Fisheries and Aquaculture Information: experiences in Malawi*. Cited from: <http://community.eldis.org/59ee3fb9/Managing%20Grey%20Literature.pdf> Date: 20/01/2014.

Saracevic, T. and Kantor, P.B. (1997). Studying the value of library and information services. Part 1: Establishing a theoretical framework. *Journal of the American Society for Information Science*, vol. 48 (6): 527-542.

Schmidmaier, D. (1983). *Serials and "Grey Literature"*. Proceedings of the IATUL Conferences. West Lafayette, Indiana: Purdue University.

Schutte, R.K. (2012). *Investigating the social world: the process and practice of research*. University of Massachusetts, Boston: Sage publications.

Siegel, G. (2004). Capturing academic grey literature- starting at home. *Publishing research quarterly*: 62-29, Spring.

Singh, S.N. (2006). *Digitization initiatives and university libraries in India*. 4th Convention Planner. Aizawl: Mizoram University.

Sitek, D. and Bertelmann, R. (2010). *Open Access: a state of the art*. Cited from: http://oa.mpg.de/files/2010/04/berlin_declaration.pdf Date: 20/11/2014.

Sturgess, P. (1994). Using grey literature in informal information services in Africa. *Journal of documentation*. Vol. 50 (4): 273-290.

Suber, P. (2012). *Open access*. Cambridge: The MIT press.

Suleman, H., Atkins, A., Goncales, M.A., France, R.K. and Fox, E.A. (2001). Networked Digital Library of Theses and Dissertations: bridging the gaps for global access. *D-Lib Magazine*, vol. 7 (9), September.

Sulouff, P. (2012). *Learning about grey literature by interviewing subject librarians*. Cited from: <https://urresearch.rochester.edu/fileDownloadForInstitutionalItem.actio?Id=1710&itemField=2173>. Date: 30/07/2012.

Thomas, G. (2011). *How to do your case study: a guide for students and researchers*. Los Angeles: Sage.

Thomas, G. (2007). *Academic libraries in the second decade of democracy: critical issues and challenges*. Cited from: <http://www.dissanet.com/ifla/LIASA%2006%20Thomas.pdf> Date: 12/06/2014.

Thomas, G. and Fourie, I. (2006). *Academic library consortia in South Africa: where we come from and where we are heading*. Cited from: http://eprints.ru.ac.za/428/1/thomas_Academic_Library.pdf Date: 21/09/2012.

Tyndall, J. (2008). *How long can you go? : towards a hierarchy of grey literature*. Bedford Park (South Australia) : Flinders University.

Ubogu, F. N. (2003). *From DATAD to ETDs: the way forward*. Johannesburg: University of Witwatersrand. Cited from: <http://edoc.hu-berlin.de/conferences/etd2003/ubogu-felix/PDF/Ubogu.pdf> Date: 2013/02/18.

University of Fort Hare. (2013). *Howard Pim Library of Africana: Collection development policy*. Alice: The Main Library.

University of Fort Hare. (2013). *Howard Pim Library of Africana: General Information*. Alice: The Main Library.

University of Fort Hare. (2008). *Policy on final submission of electronic thesis and dissertation*. Alice: The Main Library.

Villars, J.A. (1993). *Efforts towards the bibliographic control of grey literature in Ghana*. Proceedings of the 1st international conference on gray literature, cluster session ii, 13th – 15th December, 245 – 259. Accra: National Science and Technology Library and Information Centre.

Vom Brocke, J., Simons, A., Niehaves, B., Riemer, K., Plattfeut, R. and Cleven, A. (2009). *Reconstructing the giant: on the importance of grey literature in documenting the literature search process*. In: Newel, S., Whitley, E., Fouloudi, N., Wareham, J. and Mathiasen, L. (eds.). (2009). Proceedings of the ECIS 2009. 17th European conference on Information Systems. Verona, S.

Weintraub, I. (2006). *The role of Grey Literature in the sciences*. Cited from: <http://library.brooklyn.cuny.edu/access/greyliter.htm> Date: 02/07/2013.

Welman, C., Kruger, F. and Mitchell, B. (2005). *Research methodology*. 3rd ed. Oxford: Oxford University Press.

Wiley, D. (2009). *Defining "open". Iterating toward openness*. Cited from: <http://opencontent.org/blog/archives1123> Date:03/11/2014.

Willets, D. (2012). Open, free access to academic research? This will be a seismic shift. *The Guardian*, Tuesday 1 May.

Wilson, T.D. (2000). Human information behavior. *Special Issue. Information Science Research*, vol. 3(2): 49-55.

Yakel, E. (2005). Hidden collections in archives and libraries. *OCLC systems and services*. vol. 21 (2): 95-99.

Yin, R.K. (2009). *Case study research: design and methods*. 4th ed. Los Angeles: Sage

Zulu, S.F.C. (1993). Towards achieving bibliographic control of unpublished reports in Africa.
Liri, vol. 43 (2): 123-133.



University of Fort Hare
Together in Excellence

ANNEXURE 1

LETTER OF INTRODUCTION

Dear respondent,

My name is Mzwandile Lawrence Mavuso, working at the University of Fort Hare Library (UFHL) as an Information Librarian and currently undertaking a Master's program in the Department of Library and Information Science.

My interest in the study was prompted by the realization that the bulk of the grey literature (GL), other than theses and dissertations, in the custody of UFHL needs to be better managed than it is done presently because it is not accessible. The purpose of this questionnaire/ interview is to study the Howard Pim Library (HPL) to determine how GL collections are being managed. The findings will be used to draw conclusions as to what could be done to recommend ways in which SEALS libraries can actively collect, manage and share this primary resource.

I wish to state clearly that you are under no obligation to answer this questionnaire/ interview but it is my sincerest request to ask you to do so for the success of this study. It is my solemn declaration that your responses will remain absolutely private and anonymous and therefore do not write your name or address on the form. If you have additional pertinent information please use the reverse side or an extra blank paper.

Your time taken to answer this questionnaire/ interview is highly appreciated. Indeed, without your participation the success of this study will not materialize.

Sincerely,

Mzwandile L. Mavuso

Information Librarian [Management & Commerce]

University of Fort Hare

Private Bag X1322

Alice, 5700

E-mail: mmavuso@ufh.ac.za

Tel. : 040 602 2696

Cell : 082 579 6496

Fax : 086 628 2626 or 086 620 4665



University of Fort Hare
Together in Excellence

ANNEXURE 2

QUESTIONNAIRE – HPL

Q1. How long have you been with this organization?.....

Q2. Gender?.....

Q3. Age? 30-40; 41-50; 51-60; 61-70; 70+

Q4. Does your library collect grey literature? Yes/ No

Q5. To what extent is grey literature, other than theses & dissertations, acquired at HPL libraries?.....

.....
.....



Q6. How is the processing of this material done?.....

.....
.....

University of Fort Hare
Together in Excellence

Q7. How is the material made accessible?.....

.....
.....

Q8. How is the preservation of the material done?.....

.....
.....

Q9. To what extent is the material shared among academic libraries within SEALS consortium?....

.....
.....

Q10. Is there any other information that could shed some light about management of this material?

.....
.....

.....

ANNEXURE 3

QUESTIONNAIRE – Library Management

Q1. How long have you been with this organization?

Q2. Gender?

Q3. Age? 30-40; 41-50; 51-60; 61-70; 70+

Q4. Does your centre collect grey literature? Yes/ No

Q5. To what extent is grey literature, other than theses & dissertations, acquired at your centre?

.....
.....
.....



Q6. How is the processing of this material done?.....

.....
.....
.....

University of Fort Hare
Together in Excellence

Q7. How is the material made accessible?

.....
.....
.....

Q8. To what extent is the material shared within the institution?

.....
.....
.....

Q9. Is there any other information that could shed some light about the management of this material?

.....
.....
.....
.....

ANNEXURE 4

QUESTIONNAIRE – INFORMATION LIBRARIANS

Q1. How long have you been with this organization?.....

Q2. Gender?.....

Q3. Age? 30-40; 41-50; 51-60; 61-70; 70+

Q4. Does your library collect grey literature? Yes/ No

Q5. How is the material made accessible?.....

.....
.....



Q7. To what extent is the material shared among academic libraries within SEALS consortium?....

.....
.....

University of Fort Hare
Together in Excellence

Q8. Is there any other information that could shed some light about management of this material?

.....
.....
.....

ANNEXURE 5

QUESTIONNAIRE – Systems Administrator

Q1. How long have you been with this organization?

Q2. Gender?

Q3. Age? 30-40; 41-50; 51-60; 61-70; 70+

Q4. Does your centre collect grey literature? Yes/ No

Q5. To what extent is grey literature, other than theses & dissertations, acquired at your centre?
.....
.....
.....



Q6. How is the processing of this material done?.....
.....
.....

University of Fort Hare
Together in Excellence

Q7. How is the material made accessible?

Q8. To what extent is the material shared within the institution?

Q9. Is there any other information that could shed some light about the management of this material?
.....
.....
.....
.....

ANNEXURE 7

ETHICAL CLEARANCE CERTIFICATE

Certificate Reference Number: KHA041 SMAV01

Project title: Investigation into the management of grey literature in the academic libraries in the Eastern Cape: A case of the Howard Pim Library at the University of Fort Hare

Nature of Project:

Masters

Principal Researcher:

Mzwandile L Mavuso

Supervisor:

Mr. PE Khayundl

Co-supervisor:

University of Fort Hare
Together in Excellence

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

The Principal Researcher must report to the UREC in the prescribed format, where applicable, annually, and at the end of the project, in respect of ethical compliance.

The UREC retains the right to

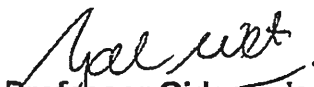
- Withdraw or amend this Ethical Clearance Certificate if
 - o Any unethical principal or practices are revealed or suspected o Relevant information has been withheld or misrepresented
 - o Regulatory changes of whatsoever nature so require
 - o The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.

The Ethics Committee wished you well in your research.



Yours sincerely

University of Fort Hare
Together in Excellence


Professor Gideon de Wet
Dean of Research

28 October 2013