

**ANALYSIS OF INFORMATION LITERACY TRAINING AT THE
NATIONAL UNIVERSITY OF LESOTHO**

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LFLIM002

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**A minor dissertation submitted in partial fulfilment of the requirements for the
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Declaration

I declare that this minor dissertation titled: *Analysis of information literacy training at the National University of Lesotho* is my own work; it has not been submitted to any institution or to any publishing house for publication, either in part or full. Each contribution to, and quotations in this study from the work(s) of other people have been acknowledged.

Signature:

Signed by candidate

Date: 16 February 2018

Dedication

**So do not fear, for I am with you; do not be dismayed, for I am your God. I will strengthen you and help you; I will uphold you with my righteous right hand:
Isaiah 41:10**

This piece of work is dedicated to my daughters, 'Mankuebe, 'Matsiu and 'Mamojela. Lineo is not excluded as God bestowed her as my additional responsibility; for their understanding in allowing me an opportunity to further my studies.

This work was done in memory of my late parents, Ntate January and 'M'e Mathabiso Lefalatsa, my late sisters and a brother whom their love and affection will always be remembered.

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Abstract

Information literacy skills are a necessity among university students, hence information literacy instructors should keep abreast with the 21st century information literacy curriculum, its delivery and assessment. The study investigated information literacy training and its needs at NUL. The purpose was to investigate information literacy curriculum, delivery and assessment at the National University of Lesotho. Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study sought to establish the extent to which the NUL information literacy programme considers ACRL frames or any other standard of relevance. The study adopted a qualitative approach using a phenomenology research design. Data was collected from NUL Subject Librarians through focus group discussions and one on one interview with the Lecturers. Data was generated from structured interview questions; analysed manually and presented in an interpretative form such that participants' responses were tabulated under subheadings corresponding to the items from the research instruments that were formulated from the research questions. Major findings are that there is no information literacy programme in place hence there is no specific curriculum at NUL, as a result there is also no benchmarking. NUL Subject Librarians take initiative to improvise information literacy content; they use lecture mode and library tours as their predominant mode of information literacy teaching and learning. Although there is a Communication Skills Course meant to assist students with information and communication skills, students struggle to search for information; they are even unable to consult a variety of information sources. The study therefore recommends NUL Library to establish a clear information literacy training programme that is delivered in collaboration with academic staff. It is further recommended that Subject Librarians should contribute to the content of the Communication Skills Course.

Keywords: information literacy, ACRL framework, higher education, curriculum, National university of Lesotho

LIST OF ABBREVIATIONS AND ACRONYMS

ACRL	Association of College and Research Libraries
CSS	Communication Skills Course
ECCD	Early Childhood Care and Development
FtF	Face to Face
HE	Higher Education
ICTs	Information and Communication Technologies
JC	Junior Certificate
LCE	Lesotho College of Education
LGCSE	Lesotho General Certificate of Secondary Education
LIS	Library and Information Studies
MOET	Ministry of Education
NHTC	National Health Training Centre
NUL	National University of Lesotho
SADC	Southern African Development Community
SAIS	Southern African Interlending Scheme
TML	Thomas Mofolo Library
UBLS	University of Botswana, Lesotho and Swaziland
UCT	University of Cape Town

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Chapter 1: Context of the study

1.0 Introduction

Information literacy is a global concern due to the advent of technology that has brought a tremendous change which has affected the way people learn, perceive and interpret the world of information around them. Learning takes place from cradle to grave; hence the government of Lesotho is dedicated to giving every citizen an opportunity to education from early childhood care and development to tertiary education. The flow of information is heavily impacting on information seekers due to robust information carriers recently found in this digital era. This brings attention to whether these information seekers have adequate skills to meet the demands of the information age. Mastery of the expected skill sets necessitates information literacy. Hence there are different types of libraries with resources and librarians to organise this complex information for easy access. This study investigates information literacy curriculum, delivery and assessment at the National University of Lesotho. Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study seeks to establish the extent to which the National University of Lesotho information literacy programme complies with the ACRL framework. Moreover, conceptual and contextual factors hindering and enabling information literacy practices at The National University of Lesotho (NUL) are investigated in this study.

Information literacy skills acquisition /inclusion are a global concern, as most academic libraries are holding onto “one shot” instruction. This hinders effective information literacy teaching and learning due to the fact that the planners of library first year seminars seem to ignore the fact that new instruction and learning are processes that take time.

1.1 Conceptual framework

The term Information literacy was defined as “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, 1989). Information literacy is a universal issue; hence scholars and corporate bodies at different levels of interest in different communities worked vigorously, to define and characterize an information literate individual based on the level of literacy skill sets depending on each cadre. Information literacy was defined as:

An intellectual framework for understanding, finding, evaluating, and using information – activities which may be accomplished in part by fluency with information technology, in part by sound investigative methods, but most importantly, through critical discernment and reasoning (De Coning 2010:14).

With respect to the above definition, it is evident that it was constructed during this digital era to give information seekers a wide discretion to demonstrate multiple capabilities in order to manipulate the digital resources through critical thinking until positive and nuanced decisions are taken.

Information literacy capabilities “provide students with a framework for gaining control over how they interact with information in their environments” (Information Literacy Competency Standards 2000:6). Sources of information for students usually come from library books and the internet, and should not be limited to their lectures. Therefore, libraries, through their staff, should form an integral part of information literacy tuition because staff manage and make available all library resources for easy access by students.

For the purposes of historical background and trends on how things change over time, ACRL came up with competency standards in 2000. NUL, the premier university in Lesotho, did not conduct/explore any of these standards as there had been no related study that had been evolved to testing those standards among students. This reflective process of ACRL competency standards has illustrated to an extent that NUL students are not introduced properly to competency standards compared to other common or ordinary and well developed university students. The ACRL made its revisions by looking at universities that were well developed whereas it could have based its revisions looking at the small universities like NUL. By looking at these smaller

universities that lack resources, the reflection on competency standards would add value to such institutions including NUL.

However, the ACRL information literacy framework for higher education of (2016) which superseded the ACRL competency standards of 2000 had been in operation for 15 years and came up with a revised definition of information literacy as follows:

the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning” (ACRL Board, 2016).

ACRL frames determine the student’s abilities through *knowledge practices* to enhance student’s understanding of literacy terminologies and *dispositions*, to look into “affective, attitudinal, or valuing” learning processes (ACRL Board). Building upon the ACRL competency standards’ definition of information literacy, the framework’s definition has broadened the definition by including multiple literacies (Knapp and Brower, 2014:461).

In this case, the study adopts the new version of information literacy definition by the ACRL framework for higher education because it is anticipated that the definition has espoused the latest capabilities that respond to the 21st century digital information literacy landscape.

Since the inception of information literacy, academic libraries have been using the traditional instruction such as orientation and user education. The National University of Lesotho (NUL) was not an exception to this. It used orientation and user education as means of information literacy teaching and learning. Higher Education Policy of Lesotho framed by the Lesotho Government urged the institutes of higher learning (HE) to “discard out-dated approaches and to adopt new ways of doing things in order to address the challenges of the future” and to adopt “new information and communication technologies (ICTs)” (Council on Higher Education, 2013). The bottom line is that higher education policy makers are aware of the rapid technological influences; hence

the policy is giving the institutes of HE a mandate to transit from the traditional to the advanced digital ways of doing things for enhancement of teaching and learning.

The digital era has changed the instructional techniques and instructional acquisition; hence the additional characteristics (of instructional techniques and acquisition) were anticipated to be influenced by advancement of technological tools and application.

Whatever instruction, whatever tools, every institution of higher education providing information literacy should do it within the set boundaries of ACRL information literacy framework for higher education. The ACRL framework stands as information literacy watchdog for higher education, it advocates mastery and improvement of information literacy at international level (Weiner, 2012:287).

Dadzie (2009:166) had a different perspective in defining information literacy. According to Dadzie, the following dimensions and aspects of information literacy were used to define information literacy based on the skills sets one should possess in order to qualify to be information literate: they comprise of library literacy, computer literacy, media literacy, technological literacy, critical thinking, ethics and communication.

In contrast, Ingutia-Oyieke (2008:30), asserted that “pedagogical theories and techniques” encompassing various methods like “problem-based learning, collaborative learning, hands-on learning, tools and electronic classrooms” were found to be the only factors which set the boundaries of information literacy through proper instruction. Due to the rapid digital information landscape, Johnston and Webber (2003:336) view information literacy as:

the adoption of appropriate information behavior to obtain, through whatever channel or medium, information well fitted to information needs, together with critical awareness of the importance of wise and ethical use of information in society.

Regardless of information literacy definitions from various authors and organizations, the possession of the aforementioned skills answered the information literacy objective/ purpose of nurturing students to make use of the information effectively and ethically to become independent life-long learners with high academic attributes.

1.2 Information literacy and African literature development

Information literacy does not function in a vacuum; the concerned international bodies on information literacy at higher learning are alleged to be watchdogs over information literacy development, instruction and acquisition. The following information literacy bodies including ACRL drew from one another to define information literacy interchangeably based on standards. As a result, information literacy literature in Southern African Development Community (SADC) countries is developed from these information literacy bodies' standards. The following table further illustrates this point.

Table 1: Highlight of selected information literacy standards

BIG SIX – six stages by Eisenberg and Berkowitz (1990)	SEVEN FACES—seven categories by Bruce (1999)	
1: task definition 2: information-seeking strategies 3: location and access 4: use of information 5: synthesis 6: evaluation	1: information technology conception 2: information sources conception 3: information process conception 4: information control conception 5: knowledge construction conception 6: knowledge extension conception 7: wisdom conception	
ACRL/ALA five standards of IL (2000)		
1: determines the nature and extent of the information needed 2: accesses needed information effectively and efficiently 3: evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system 4: uses information (individually or as a member of a group) effectively to accomplish a specific purpose 5: understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally		
ANZIIL six standards by Bundy (2004)		
1: recognises the need for information and determines the nature and extent of the information needed 2: finds needed information effectively and efficiently 3: critically evaluates information and the information-seeking process 4: manages information collected or generated 5: applies prior and new information to construct new concepts or create new understandings 6: uses information with understanding and acknowledges cultural, ethical, economic, legal, and social issues surrounding the use of information		
EIGHT STAGES—the Big Blue report	UNESCO six skills (Catts & Lau, 2008)	SEVEN PILLARS
1: recognising Information need	1: definition and articulation of information need	1: identify

2: addressing the information need	2: location and access of information	2: scope
3: retrieving information	3: assessment of information	3: plan
4: evaluating information	4: organisation of information	4: gather
5: adapting information	5: use of information	5: evaluate
6: organising information	6: communication and ethical use of information	6: manage
7: communicating information		7: present
8: reviewing the process		

As much as African universities are developing their own information literacy teaching and learning curriculum, delivery modes and assessment tools, advocated by ACRL framework for higher education, they all emanate from the above demonstrated information literacy bodies. This confirms that the African information literacy literature is constructed from international bodies' information literacy standards. However, ACRL 2016 has introduced the current frameworks to guide institutions of higher learning, particularly academic libraries including Thomas Mofolo Library (TML) to introspect and transform their teaching and learning practices, curriculum and assessments if they can acquaint and work under the following frames to enhance information literacy teaching and learning:

- Authority Is Constructed and Contextual
- Information Creation as a Process
- Information Has Value
 - Research as Inquiry
 - Scholarship as Conversation
- Searching as Strategic Exploration (ACRL Board, 2016:2).

1.3 Contextual Setting

Lesotho is an independent Kingdom which values education. Education is a global issue that is why educational bodies, governments and societies feel a need to participate to enhance the education sector across the board. Setoi (2012:01) indicates that “across the world, education is a powerful force for social change, for socioeconomic development and for tackling oppression, ignorance, victimization and dependence. It is a necessity for individual growth and liberation”. Additionally, Bitso (2011:1), emphasized the importance of education by indicating how Lesotho's Constitution,

section 28 (a), admitted that “education is directed to the full development of the human personality and sense of dignity and strengthening the respect for human rights and fundamental freedoms”. In summary, knowledge “does not restrict education to any specific learning process, at any time in life, to any specific location or to any specific purpose” (Jarvis 2010:41).

The administration and governance of education in Lesotho is the responsibility of the Ministry of Education and Training (MOET). Lesotho’s education is categorised into formal, non-formal and informal education.

1.3.1 Formal education

Coombs and Ahmed (1974:8) cited in Jarvis (2010:41) define formal education as the structured curriculum based education that takes place in a classroom setting. This education is governed nationally by the central government under particular rules and regulation. After completion of this education there is a certification awarded.

1.3.2 Non-formal education

According to Taylor (2012:11), non-formal education is defined as the “motley assortment of organized and semi-organized educational activities operating outside the regular structure and routines of the formal [education] system, aimed at serving a great variety of learning needs of different subgroups in the population young and old”. It supplements the formal education system, it is also certificated even though it takes place in different forms.

1.3.3 Informal education

It is a type of education which is not formalized, it takes place everywhere at any time. It is a voluntary learning, there is no mode of learning, with this type there is no curriculum therefore it is not certificated.

Since the study was conducted at the institute falling under the formal education category, it is evident that the formal education settings will lead this study.

Table 2: Outline of Lesotho formal education systems

Education	School/level	Age at initiation	Age at completion	Duration	Notes
ECCD		2	5	3	Not compulsory
Primary	Primary school	6	13	7	Education is compulsory between the ages of 6 to 13
Middle	Junior Secondary	13	16	3	Junior certificate (JC) administered by examination Council of Lesotho (Ministry of Education)
Secondary	High School	16	18	3	Certificate awarded/ Cambridge Overseas School Certificate (COSC) now replaced to Lesotho General Certificate of Secondary Education (LGCSE)
Tertiary	Teacher training in Technical Subjects	18	20	3	Certificate/Diploma awarded
Tertiary	University			4+ 4	National University of Lesotho, Limkokwing University of Technology

(MOET, 2012)

Pre-School education (Early Childhood Care and Development) (ECCD) – targets children from the age of 2 – 5 years. This is followed by basic primary education that is completed over seven years. The major goal is that of “achieving basic literacy and numeracy amongst all pupils, as well as establishing foundations in science, geography history, math, and other social sciences” (MOET, 2010:1). The new integrated curriculum comprises of eight subjects and categorized into five learning areas as indicated below. Learners write primary school leaving examinations and are certificated with a *Primary School Leaving Certificate* after the completion of seven years.

Table 3: Basic education curriculum in Lesotho

Learning area	Core Contributing subjects	Compulsory subjects
Linguistic and literary	Sesotho, English, Art & Crafts, Drama, Music and other languages	Sesotho and English
Numerical and mathematical	Mathematics	Mathematics
Personal, Spiritual and Social	History, Religious Education, Health and Physical Education, Development Studies	Life Skills
Scientific and Technological	Science, Geography, Agricultural Science, Technical Subjects	Science
Creativity and Entrepreneurial	Business Education, Home Economics, ICT	Any subject

(MOET, 2009:17)

ICT literacy is one of the literacies related to information literacy, as a result, there is an element of information literacy teaching and learning embedded in the ICT subject to the Lesotho basic curriculum. It should be noted that the ICT subject is not compulsory. It has been anticipated that being acquainted with ICT uses and applications enhance student's individuality which reflects a "constructivist learning" of individuals. In information literacy circles, constructivists advocate engagement and activity (Mikre, 2011). It is evident that the inclusion of ICT to curriculum necessitates information literacy.

To qualify for secondary education, the learners should have passed primary school leaving examination. There is no age restriction to take this education as long as one has met the requirements. This lasts for five years; divided into three years of junior certificate (JC) and two years of Lesotho General Certificate of Secondary Education (LGCSE). Secondary education prepares the learners for higher education. Moreover, Bitso (2011:2) indicated that secondary education in Lesotho "builds upon basic education and continues to prepare learners for further education and training and the world of work" as learners "acquire functional knowledge skills to be employed or self-employed". In relation to curriculum, MOET was in control of "curriculum development, delivery strategies and standardized assessment" asserted Bitso (2011:2).

Secondary education curriculum comprises of compulsory subjects and elective subjects.

Table 4: The curriculum structure of secondary education in Lesotho

Learning Area	Core contributing subjects	Compulsory subjects
Linguistic and literary	Sesotho, English, Art & Crafts, Drama, Music and other languages	Sesotho and English
Numerical and mathematical	Mathematics	Mathematics
Personal, Spiritual and Social	History, Religious Education, Health and Physical Education, Development Studies, Life Skills	Life Skills
Scientific and Technological	Science, Geography, Agricultural Science, Technical Subjects	Science
Creativity and Entrepreneurial	Business Education, Clothing and Textile, Food and Nutrition, Home Management, Information Communication Technology (ICT), Accounting	Any subject

(Raselimo & Mahao, 2015:6)

Primary and secondary curricula are very similar to each other; the demarcation is seen at the last learning area's core subjects where the secondary curriculum has more advanced subjects than the primary curriculum. This serves to attest that the education system in Lesotho is in a continuum form. The fact that ICT is an elective subject raised a series of questions of what the role of curriculum developers is to close the gap between the disadvantaged schools and the advantaged schools exposed to ICT teaching and learning. How were the disadvantaged learners going to cope with the university environment? This remained a challenge as secondary education prepares the learners for college/ university education.

1.3.4 Higher education

After the successful completion of a secondary education, learners, who qualify proceed to higher education. Lesotho has national and private institutions of higher learning, these institutions offer qualifications at diploma level except Limkokwing University of Creative Technology and the National University of Lesotho. At this level students are modelled

or trained into the field of specification and professionalism. The National University of Lesotho was the only university which offered certification to a Doctoral Degree. The certificate/diploma offering institutes comprise National Health Training College (HNTC), Lesotho College of Education (LCE), Lerotholi Polytechnic, Lesotho Agricultural College, vocational institutions include, Leloaleng Training Institute and Catholic Comprehensive Community College. However, the study focused at NUL, particularly its library as the place where the research was conducted.

Modern life demands that people have access to a combination of different forms of literacies (Wheaton, 2015). The need for information literacy has been evident since NUL was established in 1975 and was given full autonomy (NUL Information office: 2001). This autonomy came after the separation of the joined universities of Botswana, Lesotho, and Swaziland (UBLS), (NUL Strategic Plan 2015-2020:10). NUL consisted of seven faculties and one institute. For the academic year of 2016-2017, the enrolled students were 9,654 who needed to be information literate in order to achieve their academic goals (Student Records Office: 2016). NUL's mission is to "promote national advancement through innovative teaching, learning, research and professional services, producing high caliber and responsible graduates able to serve their communities with diligence" (NUL Calendar 2000-2005). NUL has a library which offers direct services to students in order to maximize the learning environment. As far as information literacy delivery and acquisition are concerned, TML offers a one-shot instruction that is at odds with the 21st century thinking on information literacy.

The role of a library necessarily depends on educational objectives of the institution (Allen, 1982: 531); to achieve this, NUL library's mission statement "strives to provide dynamic information service to its clientele in order to give practical meaning to the university's purpose as a centre of excellence in learning, teaching and research" (NUL Calendar 2005/2006:6). The library has to provide services that will work towards the accomplishment of its mission. NUL library has a branch located in the capital city of the country at Institute of Extra Mural Studies (IEMS). The library at the main campus,

named Thomas Mofolo Library (TML). Since the study is conducted at the main campus, then TML is targeted to be the referral of the study.

The Thomas Mofolo Library strategic Plan 1997 – 2006 (1997:9) believes that the library is a central unit at the university to disseminate information and thus plays a paramount starring role to ensure that libraries “provide education to their users with the intention of preparing as well as providing them with knowledge and skills in the use of the library resources and other information related issues”. The main purpose of this education is to enable users to use those materials/resources effectively, ethically and efficiently on their own for lifelong learning: (Aina, 2004:54). TML, an academic library is not an exception to this, for efficiency of library services. The TML library like any other library, is not an “absolute self-sufficient” library in terms of teaching and learning resources, hence it has taken an initiative to widen its services by becoming a member of the Southern African Interlending Scheme (SAIS) which is “linked to other libraries of the world” to share the resources (Library Regulations 2005/06, 2005:1). The library took this initiative to try to standardize its services with other libraries to “support the teaching programmes of faculties, and also to provide facilities for teaching, learning, research and leisure” (Library Regulations 2005/06, 2005:1). Furthermore, in order to make sure that every library user makes use of those resources, new students ought to be introduced to the library with instruction whether through “recorded audiocassettes or video tapes or as lunchtime drop ins one- on- one instruction or the use of guides and manuals” (Chipeta, 2008:5). De Jager and Nassimbeni (2002:174) refer to these instructions as “generic” in the sense that they are designed for students from different disciplines and therefore, they do not deal with “curriculum-specific material at any great depth”. Owusu-Ansah (2004:5) indicates that “librarians teach generic skills and subject faculty teach subject-specific skills”. Previously recorded instruction made it easier for individuals to come in their own time to learn how best library resources could be accessible with minimal time consumed (Aina, 2004:54).

1.4 Researcher's short history at NUL

The researcher is an employee of NUL, moreover a TML staff member. The researcher joined TML in 1997 when TML was in transit from manual to automated services where she therefore became part of the automating team. She has worked in different sections of TML, but mostly at the circulation desk. Furthermore, she has even worked at the branch library for six years. This brief history serves as the foundation of the researcher's long time experience and observations in relation to information literacy instruction offered by TML. Therefore this study was conducted to address a research problem based on observations and experience made over time.

1.5 Statement of the problem

Information literacy instruction is a global concern, this is evident due to how most academic libraries are practicing "one shot" information literacy instruction to students. The instructors believe that the users can capture what is taught once, and utilise it for the future, ignoring the fact that taking new instruction and learning are processes that take time. Fullard (2016:46) is concerned about this "one shot" process of which she finds to be "legion" frustrations.

By looking into the current information literacy at NUL including its curriculum, it is unclear where it is guided by ACRL frames, or how it compares with other curricula in the SADC region. The study wants to look into this "one shot" information literacy delivery/instruction that NUL has been practicing for a long time.

Upon realising the limitations of "one shot" information literacy training, NUL has decided to practice embedded librarianship (subject librarians) by going to the faculties to deliver information literacy and regardless of that, subject librarians are still practicing a one-shot instruction. The central issue is that there is ACRL framework has six dimensions which require strong collaboration /partnership between librarians and lecturers. For instance, its delivery also requires technology and strategy, as a result; the outstanding questions are how is NUL managing the whole delivery of information literacy that is informed by ACRL frames? Furthermore, how does this delivery accommodate students with different learning styles?

The researcher admits and understands that NUL has been using the “one shot” information literacy instruction that is amended or supplemented by subject librarians by going to the faculties. In the midst of that, there is another rising issue of whether there is a curriculum in place or a certain programme that is followed. It is therefore the researcher’s concern to find out if such programme complies with the ACRL frames.

The researcher acknowledges that for a long time librarians have been doing the one shot delivery which has been replaced by embedded librarianship like it has been indicated earlier, however, the researcher wants to investigate the effect of embedded librarianship from the lectures as there are some key things essential for students to be information literate captured through literature search. As a result, the researcher wants to check from the lectures the students’ information literacy skills and the common problems/gaps that are there to gain those insights to inform the intended curriculum.

Kiondo and Jangawe (2005:94) attested that information literacy is embedded into the curriculum at NUL, as the library is given a slot in the English Language Programme course called Communication Skills (CSS 101). Nonetheless there is still a question in place; do NUL librarians do the assessments? Are those assessments helping them to reflect on learning that is happening, are those assessments helping them to identify student’s progress on information literacy skills learning?

Finally, we are talking about globalization, in this vein, there is a question in relation to compliance, and is NUL complying with the current trends and international standards as compliance is seen to be a crucial aspect as far as information literacy is concerned, especially because information literacy is intended to assist students to be lifelong learners with high academic attributes.

The existing problem at NUL, as far as information literacy is concerned, is that of “one shot” instruction and the fact that TML is not adhering to international standards of information literacy training. A study investigating IL curriculum, delivery and assessment, but not the issue of “one shot” instruction, was conducted in 2006 but nothing changed with respect to IL standards. This one-shot instruction affects both students and librarians as students fail to be lifelong learners with academic attributes.

In a same manner, librarians are just doing the instruction for the sake of doing it and don't keep abreast with the 21st century information literacy spheres.

1.6 The aim of the study

The aim of this study is to investigate the issue of information literacy at NUL and to develop an information literacy programme that will adhere to international standards drawing from the ACRL framework for higher learning.

1.7 Objectives of the study are as the following:

1. To find out the extent to which the present information literacy curriculum at NUL complies with ACRL frames.
2. To establish how information literacy teaching and learning sessions accommodate learners with different learning styles.
3. To determine how librarians collaborate and partner with lecturers to embed information literacies in their courses.
4. To identify information literacy skills gaps among NUL students.
5. To demonstrate competencies and knowledge skills essential for effective delivery of information literacy based on ACRL frameworks for higher learning?

1.8 Research questions

The study poses the following research questions:

1. To what extent does the present information literacy curriculum at NUL comply with ACRL frames?
2. How do information literacy teaching and learning sessions accommodate learners with different learning styles
3. How do librarians collaborate and partner with lectures to embed information literacies in their courses?
4. Which information literacy gaps exist among NUL students?
5. What are the competencies and knowledge skills essential for effective delivery of information literacy based on ACRL frameworks for higher learning?

Kimani (2014:11) proposes that objectives and the research questions can determine the “possible data sources to be used in the study”, and can be displayed in a form of a table. Based on this study, the table reads:

Table 5: Mapping research questions, objectives and possible sources of data

Research questions	Objectives	Possible sources of data
To what extent does the present information literacy curriculum at NUL comply with ACRL frames?	To find out the extent to which the present information literacy curriculum at NUL complies with ACRL frames.	Subject librarians
How do information literacy teaching and learning sessions accommodate learners with different learning styles?	To establish how information literacy teaching and learning sessions accommodate learners with different learning styles.	Subject librarians
How do librarians collaborate and partner with lectures to embed information literacies in their courses?	To find out how librarians collaborate and partner with lecturers to embed information literacies in their courses.	Subject librarians Lecturers
Which information literacy gaps exist among students?	To identify information literacy gaps among students.	Lecturers
What are the competencies and knowledge skills essential for effective delivery of information literacy based on ACRL frameworks for higher learning?	To demonstrate competencies and knowledge skills essential for effective delivery of information literacy based on ACRL frameworks for higher learning?	Subject librarians

1.9 Significance of the study

The advent of technology influenced the institutes of higher learning across the board to develop/ improve their teaching and learning methodologies for students to accommodate lifelong learning. Information literacy tuition at TML is not an exception. NUL through TML needs to introspect its information literacy teaching and learning mode of delivery as one shot delivery has been used ever since the researcher joined TML. Lebotsa (1980:82), as long ago as 1980, critiqued the situation at TML by referring to these information literacy teaching and learning sessions as “user education”. Lebotsa suggested that these “programmes must be planned in such a way as to meet the individual requirements of user groups at different levels. The fact that NUL, through TML, has a user education which is confined to one week only at the beginning

of the academic year for new students, it is far from satisfactory from the point of view of students". A similar study "An evaluation of information literacy of postgraduate students of The National University of Lesotho (NUL)", focused on postgraduates which its findings showed that students did not have information literacy competencies (Mariti, 2006:122). In this situation, NUL through TML has not taken any action to mediate. A similar study by Kimani (2014) "Information literacy skills among incoming first-year undergraduate students at the Catholic University of Eastern Africa in Kenya" was conducted in Kenya with similar findings of the aforementioned study.

Therefore, the current study can act as an eye opener to NUL as well as TML to be aware that the impact of information literacy tuition influences strategy, things change; strategies change, teaching and learning strategies change, and curriculum changes. NUL should then act in accordance upon bearing in mind that every programme and modes of delivery are reviewed and revised for improvement. NUL, an information literate university rethinks strategy, to produce information literate students who have acquired the academic attributes. This study, being considered and put into practice, the NUL community will be direct beneficiaries of information literacy training that adheres to international standards and promotes lifelong learning as NUL will become an information literate university. This study will also benefit the Library and Information Studies discipline as a further contribution to the study of information literacy and IL training will be widely recognised and acknowledged as librarians have been lamenting that once off session is insufficient as learning research is a process. Hence curriculum developers / first year seminars should give librarians a platform to get rid of this one shot instruction to comply with ACRL.

1.10 Limitations and delimitations of the study

According to Locke, Spirduso and Siverman (2007:10), delimitations "describe the populations to which generalizations may be safely made". In other words, delimitations are characters that are ignored by the research.

The study focused on the subject librarians and the lecturers of NUL to get their insights on information literacy curriculum, its delivery and assessment at NUL for students to

possess different skill sets related to information literacy. Locke, Spirduso and Siverman (2007:10) further defined limitations as “limiting conditions or restrictive weaknesses”. Finance, as the study is not funded and time are some of the limitations in this study as the researcher travelled from country of study (where the researcher is studying) to the country of investigation.

With reference to **Appendix A section 1**, upon reflection, data indicated that at NUL most of the subject librarians are LIS Masters holders, but the fact that the researcher did not ask the subject librarians their areas of specialization within Library and Information Science was another of the limitations of the study. The researcher would have asked the subject librarians if they studied anything related to information literacy teaching and learning, or did they study anything to relate to referencing and citation librarianship, or did they study to be a scholarly communication or data librarian? These are the key areas the researcher was supposed to unpack as they were educated, they were educated in the areas that are not relevant to the 21st century, because information literacy teaching and learning need people who are competent to deliver information literacy in the 21st century, because we don't want them to just adopt rather adapt and tweak information literacy standards and framework.

Another observable limitation was in line with the **Appendix B section 3.4**. NUL is one of the under resourced and developing institution, which might not have a lot of advanced or the 21st century devices that enhance proper teaching and learning like anti plagiarism device. As a result; a question of how lectures determine plagiarism in a case where there is no anti plagiarism tool was omitted. The researcher acknowledges another limitation in the instrument for the omission of the question on the key competencies and skills, as a result; a researcher decided to mitigate this limitation with data from literature.

Out of 618 NUL lecturers, only 28 lectures participated in the study. This is detected as another limitation as the lecturer's community is represented in a limited number.

The researcher acknowledges the limitation of not inquiring the level or degree from which the supervision experience culminates as this could be at undergraduate, masters and/or PhD.

1.11 Chapter summary

Authors of information literacy had different perspectives on how to define it. Today's teaching and learning require someone who possesses multiple abilities/competencies required by the ACRL information literacy framework for higher education for one to acquire the desired academic attributes. Governments participated by responding to International bodies to promote and enhance access to education to the citizens to independently learn and to address the day to day information needs with relevant skills. The ACRL framework encourages information literacy instructors to hone their teaching abilities for the betterment and efficient information literacy teaching and learning methodologies, curriculum, its delivery and assessments.

1.12 Dissertation outline

Chapter one

Introduced the conceptual frame work and discussed the contextual setting of the study. Statement of the problem was also presented. The chapter outlined the aims, objectives followed by research questions and the significance of this study. Limitations and delimitations were also covered.

Chapter two

Presented the relevant literature related to the study and the theory guiding the study, under the said research questions, various subtopics were discussed.

Chapter three

Discussed the methodology carried out during the field work. This entailed research design and process, research sites and participants, data collection methods and data collection tools, including the research ethics.

Chapter four

Discussed the analysis and presentation of the collected data. Different data sets comprised of recorded and transcribed meetings. Analysed data were interpreted.

Chapter five

The last chapter consists of research findings, conclusions and recommendations arising from this study, all in accordance with the study's research questions and theoretical framework. The chapter further highlights opportunities for future research.

Chapter 2: Literature review

2.0 Introduction

The purpose of the study is to investigate information literacy curriculum, delivery and assessment at the National University of Lesotho. Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames. For a deeper understanding of information literacy curriculum design, delivery and assessment, this chapter took into account past research done, methodologies employed to identify the positive and negative factors which led to successes and failures of information literacy curriculum, delivery and assessment and the theory that framed the research and assisted in answering the research questions is articulated. In the light of this chapter, theory and its role in research are covered. Furthermore, the study's research questions are discussed extensively, covering what curriculum is, curriculum mapping, different learning styles, competencies and knowledge skills essential for effective delivery of information literacy.

2.1 Theoretical framework

Every occurrence is influenced by known or unknown phenomenon. To find a root cause of the occurrence a theory comes in place to inform the study under investigation. Theory was therefore anticipated as the “connections among phenomena, a story about why acts, events, structure and thoughts occur” (Sutton & Staw, 1995:378). On the other hand, research *gurus* suggested theory as “a set of concepts used to define and/or explain some phenomenon” (Ngulube, Mathipa & Gumbo). It could be concluded that theory is the frame which guides an investigator to be within certain boundaries through the entire study.

2.1.1 Role of theory in research

Theory integration in research played a significant part as it guided the researcher not to go astray in the processes of “analysis, explanation and interpretation” of the gathered data (Rakotsoana and Rakotsoana, 2007:14). However, Neuman (1997:76) listed the following characters which emphasized the relationship between theory and research

- “Theory frames what we look at, how we think and look at it.
- It provides basic concepts and directs us to the important questions.
- It suggests ways for us to make sense of research data.
- Theory enables us to connect a single study to the immense base of knowledge to which other researchers contribute.
- It helps a researcher see the forest instead of just a single tree.
- Theory increases a researcher’s awareness of interconnections and of the broader significance of data”.

This study employed the ACRL Information Literacy framework for Higher Education which rescinded the ACRL competency standards as its theoretical framework. ACRL has existed before the digital era with guidelines that would assist institutes of higher learning to nurture students to become lifelong information literate students.

Digital information age has enhanced high information creation and distribution in diverse formats for everyone who has the competencies to access, evaluate and logically use such information. Thus, digital dispensation caused information to be

at disposal of electronic tools, to be accessed at any time therefore this triggered ACRL (2016) framework for higher education to come up with these frames to nurture students to meet the demand of the 21st century information literacy teaching and learning to reflect and possess multiple skill sets to be information literate (Dao et al, 2011:4).

The emergence of the uncontrolled digital information has made the information literacy concerned bodies like ACRL to deeply look into how students should explore a couple of literacies to use such information. ARCL created the following frames to guide the information instructors to assist students to become lifelong learners. The frames were:

- Scholarship as a conversation
- Authority is contextual and constructed
- Research as an inquiry
- Information creation as process
- Information has value
- Searching as strategic exploration (Fullard, 2016:49-52).

The aforementioned frames are referred to *threshold concepts* and they are defined as:

[Core] or foundational concepts that, once grasped by the learner, create new perspectives and ways of understanding a discipline or challenging knowledge domain. Such concepts produce transformation the learner; without them, the learner does not acquire expertise in that field of knowledge. Threshold concepts can be thought of as portals through which the learner must pass in order to develop new perspectives and wider understanding (Chuppa-Cornell & Zimmerer, 2017:459).

The study under investigation tried to ascertain information literacy curriculum design, delivery and assessment at NUL against ACRL information literacy framework for higher education. In this regard, the study wants to find out if the current information literacy practices at NUL produce students with the expected graduate attributes. Hence the researcher opted to employ ACRL frameworks as a benchmark to information literacy curriculum delivery and assessment at NUL.

2.2 To what extent does the present information literacy curriculum at NUL comply with ACRL frames?

2.2.1 What curriculum is?

The term curriculum, broadly defined, includes goals for student learning (skills, knowledge and attitudes); content (the subject matter in which learning experiences are embedded); sequence (the order in which concepts are presented); learners; instructional methods and activities; instructional resources (materials and settings); evaluation (methods used to assess student learning as a result of these experiences); and adjustments to teaching and learning processes, based on experience and evaluation (Laureate & Wieman, 2016:18).

Curriculum mapping (CM) was unveiled as the liberal art as far as information literacy teaching and learning is concerned.

2.2.2 Curriculum mapping

It was defined as “a process for evaluating the various components of a curriculum for cohesiveness, proper sequencing, and goal achievement” (Buchanan et al, 2015:95). It should be noted that curriculum mapping is a plan of action to map library learning outcomes, the major purpose of this was to close the gap between curriculum (student learning) and the library in relation to student’s outcomes. Buchanan et al (2015:95) further indicated that CM at its simplest depended on these fat questions who, how, what and when. Uchiyama and Radin (2009:272) saw CM as a shift from traditional and autonomous state just like traditional learning resources are shifting to digital state. Uchiyama and Radin refer this shift to “collegiality and collaboration”. This raised the question of what must be done to integrate the two together, particularly at NUL as it was stipulated in the Strategic Plan 2015-2020 (2016:14) that NUL was under the black cloud of “low levels of teamwork and professionalism, which reflects lack of shared vision (for failure to communicate the vision of to all levels of the University community”.

Information literacy tuition and acquisition for lifelong learning need passion and dedication especially if there is a reward and motivation on student’s point of view. Students engage themselves fully in a subject matter if there is an assessment and feedback to gauge their understanding and mastery of the content. Assessment would intervene and promote students’ participation in information literacy teaching as all is in vain without assessment. This was attested by Horowitz (2014:217) by indicating how ACRL frame work, the central benchmark of this study has “given rise to numerous assessments of student learning throughout the library community”. From the university and faculty point of view, to infuse information literacy into curriculum is the development of the teaching librarians as academics are sceptical about librarians teaching competencies, hence librarians should improve their teaching skills to be in a position to engage pedagogical practices and learning styles including assessment tools for information literacy teaching and learning.

2.3 How do information literacy teaching and learning sessions accommodate learners with different learning styles?

Learning styles are “used as a metaphor for considering the range of individual differences in learning” (Sanderson, 2011:377). Information is presented in different formats to give students preference to use information that best answer their information need. That speaks to different learning tactics and modes that make students to be engaged and to participate effectively in information literacy teaching and learning. Students look for appropriate information to solve the present problem. This cautions information literacy instructors to consider that student’s prior knowledge determines teaching instruction (Pashler et al, 2008:108). It was supported that prior knowledge influences “knowledge acquisition” which leads to student’s achievement, by applying Blooms taxonomy of lower to higher order learning. It was further indicated that the “mismatch” between instruction and student’s knowledge “learning may be hampered from the start of the studies” (Hailikari, Katajavuor & Lindblom-Ylanne, 2008:1).

Instructors should be flexible to apply different strategies as teaching and learning strategies do not generalize the calibre of students. Hence visual, auditory and kinaesthetic learning styles should be applied in teaching and learning to influence every single student to fully participate in information literacy teaching and learning.

2.3.1 Visual learning

Students learn best through what they see, they need physical objects to make meaning out it, they are analytical, and these learners can analyse and interpret pictures, which can be in a form of “presentations and training guides” to stimulate critical and creative thinking of such students. This study “Learning styles and visual literacy for learning and performance” indicated how the powers of visual presentations propel students to ask inquisitive questions as one student said “I am a visual learner. I need to see it. Can you show me?” (Aisami, 2015:542).

2.3.2 Auditory learning

Auditory students are extroverts by nature, they learn better with spoken explanations and written communication, lecturing, assessment are suitable for these learners. Auditory learning enhances verbal understanding of the students as these students enjoy presenting in front of the colleagues. In essence, reflection in auditory learning

environment is a platform for students to ask questions and get involved in active discussions.

2.3.3 Kinaesthetic learning

Kinesthetic students learning preference lies on practical physical activity. As far as information literacy is concerned these learners are involved in hands-on activities. They are regarded to be action oriented students. This kind of learning stimulates learning as students are exposed to different instructional devices which enhance student's critical thinking as they develop an ability to manipulate information. This exercise propels students to ask questions during the process (Pashler, H. et al., 2008). However; the following are argued to be information literacy learning styles' as teaching the one-shot class, teaching diverse students in the online environment, teaching within course management software, teaching distance education students, and teaching through online tutorials"(Sanderson, 2011:377).

2.4. How do librarians collaborate and partner with lectures to embed information literacies in their courses?

A Chinese proverb declares that "a thousand teachers; a thousand methods" (Bitso, 2016).

The success of information literacy teaching and learning needs the joined efforts, strong faculty –librarian and academic's collaboration, partnership and cooperation to enhance information literacy tuition and acquisition. It is evident that this partnership would achieve the institutional common goal of producing an information literate society. Williams (2012:17) emphasises on this faculty –librarian and academic's collaboration by saying:

"in this collaborative effort, the librarian acts as expert, scaffolding the faculty member's skill in technology; the faculty member is an expert, scaffolding the librarian's knowledge of research and teaching pedagogy; and the faculty member and librarian (as peers) collaborating to scaffold students' research methods, knowledge and skills" (Williams 2012:17).

Somi (2004:35) posed that collaboration is very important as it expands library teaching to the institutional level whereby subject specific teaching and library information literacy

tuition outcomes are evaluated together to achieve a common goal. Teaching and learning in the 21st century information age need special competencies for the betterment of teaching and learning, hence librarians as information experts, need to equip the subject specific experts with technological use as far as research is concerned. The importance of collaboration in higher learning was attested by Franklin (2013:2) by indicating that librarians themselves argued that they should be integrated / incorporated at curriculum level as this “is the best avenue for ensuring that information literacy is integral and not tangential to students’ learning throughout their academic career”. Similarly, Chisango (2012:25) contributed to this by emphasizing how the two parties need each other in module building and taking into account each other’s roles. Hence (ACRL 2011) as cited in Chisango (2012:26) has highlighted how exchanging of ideas between the duo (academics and librarians) would be of paramount importance as:

- “Academics bring with them a pedagogical understanding of students’ strengths, weaknesses and the content to be taught.
- Librarians possess in-depth knowledge of Information Literacy skills and methods of integrating them into the courses”.

It is evident that librarians value academicians’ expertise as they are “primary curriculum developers” and librarians are considered to be information literacy engineers as no one can do better than them as far as information literacy is concerned. However there is a question in place concerning librarian’s confidence and competences as far as teaching and learning is concerned. Franklin (2013:13) indicated that librarians who are nominated into curriculum committees or have status in faculty “are not the most powerful or influential decision makers in the curriculum development process”. In this case, to what extent do NUL librarians convincing NUL curriculum development committee about their strengths and influential competencies to holistically have “curriculum collaboration/curriculum mapping” as far as information literacy is concerned? Some academics are questioning librarian’s education and assessment strategies librarians’ use in education. The implication is that librarians need to hone their teaching abilities/competencies to remove the lectures scepticism on

their (librarians) teaching ability. The following were identified as some of the barriers that hinder collaboration:

- (i) preparedness of academic librarians to take on a teaching role for which they have no, little or some formal qualifications
- (ii) the status of the librarian within the academic institution - librarians are seen as support staff and not as part of the academic staff
- (iii) academic staff is not willing to share their class time and the increase in workload that developing and implementing of information literacy would mean (Williams 2012:17).

It is assumed that the way librarians conduct the teaching process might lack the “pedagogical” skills, therefore, librarians need to undergo educational training to enhance teaching and learning. This is supported by Johnston and Webber (2003:342) where they indicate that librarians themselves admitted that “it is likely that they need more education about learning and teaching, so it is perhaps not surprising that much of what they are doing could be criticized from an educational perspective”. However; true collaboration is regarded to be based on shared negotiated and explicit goals, contract between academic departments and library, recognized responsibilities and competencies, should take place at all level within the university and should apply bottom- up and top-down approaches to necessitate true collaboration (Jiyane and Onyancha, 2010:13).

2.5. Which information literacy gaps exist among students?

Gross and Latham (2013:181) echoed how the attainment of information literacy is a penetrating skill that prepares students to actively participate in the digital information circles, as well as preparing them to overcome the workplace information challenges. This study “Learning from faculty voices on information literacy: opportunities and challenges for undergraduate information literacy education” has identified student’s incompetency in various aspects.

- Students lack ability to critically evaluate and engage with information sources.

- Students fail to synthesis what they have read, instead they regurgitate what they have read.
- Students show inability to adequately conceptualize the context in which their research takes place
- Students' overreliance on Google and a tendency to rely on the first few things they find (Bury, 2016:239).

On the other hand, statistical literacy and data literacy have been identified as emerging skillsets that students must possess, these literacies are acknowledged as components of information literacy, the core concept of the current study (Carlson, et al, 201:5). The authors have defined the statistical literacy as “the ability to read and interpret summary statistics in the everyday media: in graphs, tables, statements, surveys and studies” and the expectation is that a statistical literate student should be able “think critically about basic descriptive statistics, analyzing, interpreting and evaluating statistics as evidence” (Carlson, et al, 201:5). Similarly, data literacy amalgamates an understanding and the meaning of data, reading of graphs and charts, drawing conclusions from data and to recognise when data is inappropriately used, the anticipation is data literacy student should “be able to access, assess, manipulate, summarize, and present data”.

Students are “not blank slates” (*tabula rasa*), i.e.; there is no individual who lacks knowledge but bring past experiences and cultural factors to construct new knowledge in given situation (Khalid & Azeem, 2012:170).

Skills and knowledge derive from tacit and explicit knowledge. In the light of this study, explicit and tacit knowledge are explained thus:

- Explicit knowledge – academic knowledge or “know-what” that is described in formal language, print or electronic media, often based on established work processes, use people-to-documents approach
- Tacit knowledge – practical, action-oriented knowledge or ‘know-how’ based on practice, acquired by personal experience, seldom expressed openly, often resembles intuition (Smith, 2001:314). Hence Bury (2016:239) has comprehended that faculties have realized student’s strengths in using

information technology, using online search tools and uncovering sources on the free Web.

2.6. What are the competencies and knowledge skills essential for effective delivery of information literacy based on ACRL frameworks for higher learning?

Competencies are defined as “combination of skills, knowledge and behaviour patterns vital to organizational success, personal achievement and career development” (Otianho, 2016:46). According to Dunning, (2004), as cited in (Otianho, 2016:46), competencies are “characteristics which underpin effective and/or superior performance across a range of tasks”. The information age is automatically changing the existing traditional roles of librarians. This is a call for librarians to change from being traditional information organizers, to “information teachers” (Onwuchekwa, 2017:50). Thus they (librarians) should apply appropriate skills in teaching and learning by engaging students information literacy capabilities to reflect their own knowledge and perceptions, “rather than just ‘doing it to them’”, highlighted Onwuchekwa (2017:50). For a good teaching and learning etiquette, the Library and Information Science (LIS) professional should consider the nature of the involved audience and apply appropriate learning styles to enhance student’s active participation whether in traditional or online classroom. This would assist students to construct new knowledge on their own.

The uncontrolled digital information confuses students; librarians are the only mediators between students and digital information resources. The librarian’s role of resource selection and filtering such information is to curb the complexity of library resources to meet the demands of students. The filtered resources demonstrate accessibility, currency, credibility, authorship and students point of view based on resource. These characteristics speak to ACRL authority is constructed and contextual, information has value and scholarship as conversation frames. These frames are a benchmark to information literacy instructors for information literacy development. Onwuchekwa

(2017:50) credited librarians for their outstanding knowledge to structure information to “remove some of the feeling of chaos and uncertainty experienced by many people”.

The ever-changing digital information forces the librarians to demonstrate technological competences to become “information technology educators” to demonstrate ability to “teach the skills of using information technology to obtain access to information sources” (Sun et al, 2011:322). Using technology is not all about enhancing educator’s efficacy, vice versa; it is a motivation to students as “most students become more comfortable utilising the computerized tertiary references in comparison to the secondary databases due to assignments and exposure in other courses. As a result, many students may not retain and expand their search and literature evaluation techniques” (Sun et al, 2011:322). Librarian as an educator is caped with multiples tasks to perform such as being an organized information disseminator, an educator guides, empowers, sensitizes, mobilizes, influences, conscientizes and creates awareness (Gboku & Lekoko, 2007:145). LIS professionals should also take into account some of these roles to advance teaching and learning as far as information literacy development is concerned, information literacy librarian must demonstrate capabilities to develop and integrate in “academic structures” It is also reiterated that “development of information literacy is a continuing process, so many of the skills need to be introduced at a simple level and reinforced at increasingly sophisticated levels to develop depth as the students’ progress through his or her studies” (Bridges, 2003:34-35).

It was indicated by Onwuchekwa (2017:50) that there are some uncertainties about LIS professionals on information literacy teaching and learning, as Hooks (2005:249) cited in Onwuchekwa lamented that the success of information literacy teaching and learning depends on the flexibility of librarians to discard and “re-think” teaching and learning strategies in accordance with the 21st century information age and information literacy simultaneously. Information is not static; it keeps on changing hence LIS professionals also need to have sufficient knowledge and skills to satisfy information literacy teaching and learning demands of the 21st century, this was recommended by NUL strategy’s activities to “enhance continuing professional development” to have competent staff to provide quality, efficient and professional services. For the development of information

literacy LIS professionals should comply with ACRL 2016 framework to assist them to achieve the required standard to improve information literacy.

In addition; these competencies were categorized into: “discipline-specific knowledge (that is, knowledge that relates specifically to the LIS profession), generic skills (general skills which apply to all disciplines) and personal competencies (attitudes, values and personal traits)” (Raju, 2014:163).

2.6.1 Generic skills

In the context of this study, generic skills are skills and competencies that can be applied to any given job at any life context (Young and Chapman, 2010:2). The aforementioned authors also categorize these generic skills needed to be possessed by the information literacy instructors into “communication, problem-solving and conflict resolution”

2.6.2 Personal competencies

The 21st century information environment needs skills and competencies that are referred to competencies needed to inform the requirements of the LIS graduates' job settings. These are agreed to be knowledge managers, digital librarians, technical services, and information literacy instruction as well as reference services (Bronstein, 2015:130).

2.7 Information literacy in SADC region

Academic libraries in SADC region are striving to embed information literacy into curricula; various barriers were identified that hinder information literacy practices in various universities. The summary of the identified universities that share a common characteristic in information literacy practices as far as information literacy curriculum its delivery and assessments are concerned is illustrated below. This seems to be a challenge from way back and they are never attended to.

Table 6: Summary of review of relevant studies conducted in Africa

Source	Target group	Focus	Research methods	Major findings
Fullard (2017)	Lecturers across different disciplines at the university of Western Cape	Strategies to bring about literacies that are valued as generic to graduate attributes needed in the 21 st century	interviews	Develop a short course for lectures that will assist them to embed literacies within their curricula
Owolabi et al (2016)	Undergraduate students in the Faculty of Social Sciences and Education	Evaluation of utilization of e-resources	Descriptive survey design	Internet services, e-mail services, online databases and cybercafés are sources often used by undergraduate students. But they often encounter challenges such as inadequate power supply, poor network/internet connectivity and limited access to computer terminals.
Baro and Keboh (2012)	Five universities in Africa (University of Ibadan, University of Botswana, University of Malawi, University of Pretoria and University of Makerere and University of Uganda)	Examination of information literacy practices Identification of barriers facing IL programmes in Africa	survey	Barriers facing information literacy programmes in Africa were lack of facilities; low use of distance education for teaching information literacy and yet there is a significant number of students studying through distance learning. Recommendations were provision of essential facilities, computers with internet connectivity in university libraries; regular power supply; training for librarians on IT; librarians' collaboration with other stakeholders in their institutions to ensure information literacy policy formulation and implementation in their institutions.
Kamalie (2011)	Community and Health Science students at the University of the Western Cape (UWC)	Description of the use of a collaborative framework for integrating information literacy into the undergraduate students' curriculum and it's assessment	Survey	Deficiency in information literacy skills has a negative impact on academic achievement, as well as personal and professional development. Collaboration of information literacy training and clear faculty-established

				guidelines and requirements for the use of scholarly resources results in increased quality of students' research
Oberprieler, Masters and Gibbs (2005)	Diverse group of students in South Africa	Provision of IT and information literacy skills among health care professionals	Survey	<p>Health care professionals IT competency is fundamental both for their successful training and as an essential skill for lifelong learning.</p> <p>Pre-semester identification of the computer literacy profile of incoming first year and subsequent targeted training interventions have proven to be the most successful model in addressing a diverse range of student's needs.</p> <p>IT skills need to be integrated into the mainstream curriculum to enhance and complement information literacy skills' training.</p> <p>Students need a range of IT and information literacy skills, which should gradually be integrated into all levels of training.</p>
Somi and De Jager (2005)	Undergraduate and postgraduate students	Students' information literacy	Survey	Students have difficulty in finding, critically evaluating and using information
De Jager and Nassimbeni (2003)	Students at tertiary level educational institutions	Generation and incorporation of justified systems of standards and benchmarks	Exploratory survey and follow- up survey	Suggested approach to obtaining consensus on preliminary standards for information literacy among South African students and a process of evaluation

2.8 Chapter summary

With reference to the research questions which inform this chapter, literature reviewed revealed that benchmarking would act as a pillar for efficient and effective information literacy teaching and learning sessions. An African proverb reads “To go fast, go alone. To go farther, go together” (Uchiyama and Radin, 2009). It is important to note that information literacy teaching and learning is a process that needs a strong faculty–librarian collaboration to produce students with the expected academic attributes. It was unearthed that students showed some deficiencies in various aspects as far as information literacy skill acquisition is concerned. The chapter further discovered that librarians need to hone their teaching capabilities and apply pedagogical techniques’ to engage and acknowledge students different learning styles.

Chapter 3: Research Methodology

3.0 Introduction

Research methodology is a roadmap which gives the researcher a direction on how the study will be conducted to solve a problem at hand. As cited in Mungai (2014:41), Kothari (2004) added that research methodology serves to “map out processes, approaches, techniques, procedures and instruments that have been adopted by the researcher to answer the research questions along with the logic behind them”. This chapter communicates a research paradigm, research methodology, research design, and population, sampling method as well as data collection and analysis for the current study. Equally, arguments for validity and reliability of the study and ethical considerations are presented.

3.1 Paradigm

Every research has a matching philosophical stance to back-up the research objectives and aim of the study under investigation which is often reached through the perspective of a paradigm. Shannon-Baker (2016:321) defined a paradigm as a “system of beliefs and practices that influence how researchers select both the questions they study and methods that they use to study them”. In other words, the existence of a paradigm in research is important as it acts as a guiding tool the researcher should be acquainted with and use throughout the research process. This gives the researcher a concrete discretion to understand, express and make meaning out of the real world of research discoveries (Wisker, 2008:78).

According to Ngulube (2015) a paradigm influences and/or determines research methodology. He added that as far as research is concerned, social research lies in the heart of ontology and epistemology philosophical assumptions. Onwuchekwa (2017:69) breaks ontology into “what is knowledge? (reality), i.e. how individuals perceive reality” which is described as a number of philosophies of what is real. Whilst epistemology is “how we know it” (how do we know something?). Wahyuni (2012:69)

accentuated that ontologically the relativity of reality is “external and independent”, and this speaks to interpretivist as it serves to unpack how the selected study population perceive the prevailing phenomenon (reality) as social knowledge (Wahyuni, 2012:71). The study therefore was approached from the interpretivist paradigm point of view.

3.2 Interpretivist

According to Wahyuni, (2012:24) interpretivists derive from the collected data, knowledge that is constructed by interpreting and understanding other people’s views and perceptions on a phenomenon, situation or reality. Moreover, Willis (2007:4) asserted that “interpretivists believe an understanding of the background in which any form of research is conducted, is critical to the interpretation of results found” (Zvandasara, 2016:78). On the basis of this study, the researcher drew from the subject librarians and lectures’ perceptions on information literacy curriculum, delivery and assessment at NUL to construct knowledge based on their (librarians and lecturers) intentions, beliefs, values and reasoning, meaning making and self-understanding (Henning and Rensburg, 2004: 20). Thanh and Thanh (2015:26) have attested that interpretive paradigm, aims to serve the researchers’ purpose of gaining the “insights and in-depth information” on a particular phenomenon from the targeted participants. According to Willis, (2007:6) the environment also influences people’s behaviour hence interpretivist is known to favour qualitative research in order to capture some of the influences from the environment through studying in-depth, phenomena in their natural setting. Consequently, this study used qualitative approach wherein data was collected from participants in their natural setting.

3.3 Methodology

Research methodology is a systematic process of carrying out a research. According to Clough and Nutbrown (2002:22) methodology lies in the heart of justification, i.e., the researcher has to give reasons *why*; there has to be rationale for the decisions made and the implication is to provide reasons of using a certain research assumption over others. It is clear that methodology portrays the methods, tools and procedures employed in research under investigation (Vosloo, 2014:318). At this point,

methodology is the checks and balances for going about the research to find or solve the present problem. Vosloo further indicated that methodology reflects an approach adopted in the study to follow in gathering the qualitative or quantitative investigations as well as analyzing the collected data. To sum up, methodology is defined as “the best means for acquiring knowledge about the world” (Osborne, 2008:129). In addition Sarantakos (2013) as cited in Onwuchekwa (2017:74) alluded that the “underlying theoretical paradigm” influences the selection of methodology. On the basis of these arguments, the qualitative methodology was adopted on the basis of the interpretivist paradigm selected. After looking at the different methodologies, as suggested by Ngulube and Ngulube (2014:2), there was an argument that methodology plays a significant role to assist a researcher to ascertain the best method that would best answer the research questions of the study within the paradigm selected. Consequently, the current study took the qualitative methodological approach.

3.3.1 Qualitative approach

Qualitative approach grounds itself on the emphasis of reality and relative meaning, interpretation, particularity, “flexibility in studying a phenomenon or the aspect(s) of it that a researcher chooses to focus on at a given time” (Kimani, 2015: 64). With reference to this definition, it is believed that qualitative serves to draw some perceptions and insights to explore how much the phenomenon is known, thus being based on describing the facts and values of the real world around us. Qualitative research is valued due to its “intellectual goals” listed below:

1. understanding the meaning referred to as ‘participants’ perspectives’, on events, situations, experiences and actions that they are involved with or engage in;
2. understanding the particular contexts within which the participants act, and the influence that this context has on their actions;
3. understanding the process by which events and actions take place;
4. identifying unanticipated phenomena and influences, and generating new, ‘grounded’ theories about the latter; and
5. developing causal explanations (Ojo, 2016:47-48).

The study investigated information literacy curriculum, delivery and assessment at NUL, of which it draws from the aforementioned characteristics as per study investigations. This directs a researcher to make inquiries whereby “a researcher develops a complex, holistic picture, analyses words, reports detailed views of informants, and conducts the study in a natural setting” (Maree, 2007:257). In addition, it is emphasized that qualitative research is grounded into naturalistic, interpretive and critical genres and it is also pragmatic (Marshall and Rossman, 2006:2). Furthermore, Marshall and Rossman, (2006:3) highlighted characteristics of both qualitative research and qualitative researchers; the summary of which are presented in Table 6 below.

Table 7: Characteristics of qualitative research and qualitative researcher

Qualitative research	The qualitative researcher
Takes place in the natural world	Views social phenomenon holistically
Uses multiple methods that are interactive and humanistic	Systematically reflects on who she is in inquiry
Focuses on context	Is sensitive to her personal biography and how it shapes the study
Is emergent rather than tightly prefigured	Uses complex reasoning that is multifaceted and iterative
Is emergent rather than tightly prefigured	Uses complex reasoning that is multifaceted and iterative
Is fundamentally interpretive	

(Marshall and Rossman, 2006:3).

After establishing the paradigm, the methodology and overall approach, it was important to determine the research design for the study.

3.4 Research design

A research design is the “arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure.” (Kothari, 2004:31). Design serves as a guideline a researcher must follow to address a problem at hand. On the other hand, Punch (2014:114) is not against the above definition of research design, Punch just highlights that the researcher should benchmark (with) the listed ideas when planning a research.

- strategy
- conceptual framework
- question of who or what to be studied
- tools and procedures to be used

Thus for the epistemological underpinning of the research, the researcher should consider the key question of *what*, *who*, and *how* related to his/her study because these are fundamental to informing the decision for the research design which is likely to expose the researcher to the complete world of experiences and observations that are critical to the achievement of the objectives of the study. According to Punch, (2014:115) research design is a process that “connects research questions to data”; specifically data that will assist in addressing the research questions. The current study followed phenomenology research design.

3.5 Phenomenology

Phenomenology serves to understand people’s perceptions on a prevailing situation. In this case, “the phenomenon dictates the method (not vice-versa) including even the type of participants” (Groenewald, 2004:45). In addition, Rakotsoana and Rakotsoana (2007:34-35) have highlighted that phenomenology lies in the heart of human experience. In light of these arguments, for this study which sought to establish views, perceptions and experiences of NUL subject librarians and lecturers on key issues related to information literacy at NUL, its curriculum, delivery and assessment, phenomenology was considered as the appropriate research design. Rakotsoana and Rakotsoana (2007:34-35) further highlighted that in phenomenology:

“Experience is a valid, rich, and rewarding source of knowledge as well as the source of all knowing and the basis of behaviour. Our everyday world is a valuable source of knowledge, and that human beings can learn much about themselves and reap key insights in the nature of any event by analysing how it occurs in their daily lives.”

Additionally, phenomenology assists the researcher to ascertain and understand the “essence” and the “lived experiences” of people in relation to a phenomenon under investigation. This leads to the establishment of patterns and relationships of meaning (Creswell, 2003:15). In the process a strong phenomenological underpinning such as

interviews, anchors lines of inquiry (Creswell, 2013:14). Phenomenology design is found to be “describing the meaning people attach to a particular phenomenon, concept or idea” (Ritchie, et al, 2013:13). This communicates well to its purpose (phenomenological approach) as it is to “uncover the nature of experience, while at the same time maintaining the integrity of the individual’s perception” (Rakotsoana and Rakotosoana, 2007:35).

However, Cohen, Manion and Morrison (2007:22) perceive phenomenology from a theoretical point of view. They focus on the meaning of experience that is “taken for granted”. This is referred to as “transcendental phenomenology” which focuses on how “acts of consciousness” determine the meaning of experiences (Flick, von Kardoff and Steinke, 2004:68). Behaviour is another aspect of phenomenology theoretical point of view that is influenced by experience as a phenomenon not the “external, objective and physically described reality” becomes under scrutiny. This leads to the conclusion that phenomenologists differ in philosophical point of view and as such they tend to follow transcendental phenomenology of Edmond Husserl and existential phenomenology of Schutz (Cohen, Manion and Morrison, 2007:22).

Regardless of the different phenomenological assumptions, they have common distinguishing features which are “the belief in the importance, and in a sense the primacy, of subjective consciousness and an understanding of consciousness as active, as meaning bestowing.”

A claim that there are certain essential structures to consciousness of which we gain direct knowledge by certain kind of reflection: exactly what these structures are is a point about which phenomenologists have differed (Cohen, Manion and Morrison (2007:23). This speaks to NUL key subject librarians for collaborating and partnering with faculties to deliver information literacy.

3.6 Instruments

There are various data collection instruments used in research to gather information/data. These include questionnaires, interviews, observations and focus

groups among others. The study picked interviews and focus group discussions to collect primary data.

3.6.1 Interviews

The study is qualitative by design, and the anticipation was to conduct qualitative interviews whose purpose is to help generate ideas about the research problem and questions stipulated in chapter one and get implicit aspects of experiences [of NUL subject librarians and lecturers] to make them explicit (Oishi, 2003:173). Notably, Maree (2007:87) viewed qualitative interviews as a process whereby knowledge is constructed through the eyes of an interviewee. Rapley (2004:15) emphasised the benefit of interview as it is aimed to strain “thick descriptions” from interviewees and this being motivated by the questions asked. Therefore; structured face to face (FtF) interview was used to strain the assumed descriptions. This was drawn from NUL lecturers in a form of one-on-one interviews and from the subject librarians in a form of focus group discussions. The advantage of interviews in research is the immediate feedback as there is a direct interaction between an interviewer (researcher) and interviewee to build a rapport (Leedy and Ormrod, 2010:188).

3.6.2 Focus groups

Focus group discussions focus on a particular phenomenon collectively being done in a form of group interview (Cohen, Manion and Morrison, 2007:376). The purpose is to give the researcher a vast opportunity to gain collective insights from relevant groups which share common experiences, perspectives and opinions on a certain phenomenon (Kumar, 2005:124). Oish (2003:205) warned that the group should be sensibly selected.

The assumption is to draw insights and expressions collectively from the group which might not be gained from a one-on-one session. This implies that focus groups save time in a sense that a lot of data is collected at once within a very short period of time (Cohen, Manion and Morrison, 2007:376). However, the facilitator has to be skilled to moderate the discussions and avoid dominance of one member of the group over

others as well as be capable to facilitate discussions that help to yield consensus towards the questions posed.

3.7 Population

According to Babbie (2001: 100), population is a group of people whom the study wants to draw some conclusions through the use of a sample. This speaks to NUL subject librarians and lecturers. All subject librarians were selected to participate. This is well communicated by Leedy and Ormrod (2010: 213) that smaller population of less than 100 could be given the opportunity to participate in the study without sampling. The fact that the study involved only subject librarians was in itself interpreted as a judgemental sampling.

There are 14 subject librarians at NUL who serve the seven existing faculties and one institute in different subject areas as shown in the Table 8 below.

Table 8: Summary of subject librarians and their subject areas

Faculty	Subject area	Subject librarians
Agriculture	Agric economics, agric extension, animal science, soil science, home economics	1
Faculty of Health Sciences	Nursing science, environmental science, biology, pharmacy and nutrition	2
Faculty of Education	Education, science education, languages and social education and education foundations	2
Faculty of Humanities	African languages and literature, philosophy and public ethics, English, French, LIS, development studies, historical studies, pastoral care and counselling theology and religious studies	2
Faculty of Law	Private law, public law procedural and adjectival law	1
Faculty of science and Technology	Mathematics, computer science, science in statistics, biotechnology, chemical technology, electronics, computer systems and networks and physics	2
Faculty of Social Sciences	Commerce, economics, sociology, urban and regional planning, human geography, social work, public administration, political science and demography and statistics	3
Institute of Extra Mural Activities	Adult education, management, business and entrepreneurship and mass communication	1

TOTAL		14
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(Thomas Mofolo Library, 2017).

Only thirteen subject librarians were involved in the discussions; the 14th subject librarian was not accessible as she was on annual leave. This changed the subject librarians' sample size to 13. The initial plan was to get lecturers at NUL as part of the population of the study through librarians' recommendations. Out of 618 NUL lecturers, 28 lecturers participated in the study.

3.8 Sampling and procedure

A sample is defined as "part of a survey population selected to participate in the study" (Sarantakos, 1993: 152). Purposive sampling technique was used on lecturers. Teddlie and Yu (2007:77) indicate that purposive sampling techniques are "primarily used in qualitative studies and may be defined as selecting units based on specific purposes associated with answering research questions". In this study the population comprised of fourteen subject librarians as key informants due to their expertise in information literacy instruction. The anticipation was to get lecturers at NUL as part of population of the study through subject librarian's recommendations. Lecturers were selected based on their collaborative and partnership with the subject librarian so that they could inform the study in as far as identification of information skills' gap for NUL students is concerned. Whilst subject librarians would assist with information related to information literacy curriculum design, delivery and assessments. As indicated in section 1.1 that the researcher is a member staff of NUL library, she used her judgment in selecting extra lecturers who are regular library users. Thus snowballing within judgmental sampling was applied to the lecturers. According to Marshal (1996:523), judgmental sampling falls within purposive sampling in the sense that a judgmental sample gives the researcher the discretion to select the most productive sample to answer the research questions.

While sampling was not used on subject librarians, lecturers that participated in this study were purposefully chosen and targeted as key informants. Subject librarians were involved for their information literacy expertise and as instructors of information literacy and lectures were involvement was based on teaching experience and interaction with

the library. With non-probability sampling, the researcher has a control over the population as the researcher decides which elements to be included in population because of their knowledge and expertise on the subject (Tansey, 2007:14).

3.9 Data collection process

Data collection is an important component in research that leads to gathering information about a certain phenomenon to solve a problem at hand. For focus groups' schedule (**Appendix A**) with subject librarians, the questions were planned based on the main theme of the study and they addressed information literacy curriculum, its delivery and assessment at NUL. Four groups were formed comprised of four people, three people and two people. This was due to different times of availability among the subject librarians. As mentioned earlier, only thirteen subject librarians participated as the fourteenth one was on annual leave. The duration of the sessions also differed, it was the researcher observation that the bigger the group, the longer it lasted as more arguments were raised among subject librarians. The sessions lasted for 45 to 60 minutes. The discussions with the subject librarians commenced on the 1st November 2017 and ended on the 10th November 2017. Subject librarians were given codes based on the number of focus groups and these are shown in the table below:

Table 9: Illustration of Subject librarians' code used for data presentation

Focus group	Anonymity code
Focus group 1	FG1P1 to FGP1P4
Focus group 2	FG2P1 to FGP1P3
Focus group 3	FG3P1 to FG3P3
Focus group 4	FG4P1 to FG4P3

One - on - one interview schedule (**Appendix B**) for lecturers; the questions addressed items related to ACRL frames. It is issues such as demonstrating abilities to consult information sources, ethical use of information, establishing lines of inquiry, demonstrating ability to engage with news and unknown information as well as generation of new ideas. These questions meant to gain insights on the applicability of these frames among NUL students. For anonymity and confidentiality, every participant

was given a code that is used in chapter four when quoting their responses as testimonial data. The codes for the lecturers are shown in a table below:

Table 10: Anonymity codes for lecturers

Faculty	Code
Agric	FOAL1 to FOAL2
Education	FOE L1 to FOEL3
Health sciences	FOHSL1 to FOHSL2
Humanities	FOHL1 to FOHL3
Law	FOLL1 to FOLL2
Science and Technology	FOSTL1 to FOSTL2
Social Sciences	FOSSL1 to FOSSL3
Institute of Extra Mural Studies	IEMSL1 to IEMSL3

Data collection from the lectures started on the 3rd November, 2017 and ended on the 13th November 2017. Interviews lasted for about 20 to 40 forty minutes. Most of the sessions were audio taped while some of the lectures did not allow the session to be audio recorded.

3.10 Data analysis

Data analysis is a process of “bringing order, structure and meaning to the mass of collected data” (Vosloo, 2014:355). This process is said to be ‘getting your hands dirty on your data’ and Vosloo further purports data analysis is “messy, ambiguous and time-consuming, but also a creative and fascinating process”. The study is qualitative by nature and used two popular qualitative data collection methods namely; focus groups and interviews; and these were mostly audio recorded. As a result, data analysis started with transcription of audio recordings, followed by categorisation and coding of responses and ultimately identification of similarities and differences of responses to make it easy for the researcher to interpret that raw data to make meaning out of it; and this is interpreted as thematic analysis (Joffe, 2012).

Table 11: Data collection and data analysis summary

Population	Participants	Data collection	Data analysis
NUL subject librarians	13 out of 14	four focus groups of 2-4 Subject librarians using a voice recorder	thematic analysis
NUL lecturers	28 out of 618	interview sessions using a voice recorder and note taking	thematic analysis

(Adopted from Bitso, 2013:347)

3.10.1 Validity and reliability

Validity was seen as an important way to measure the “quality and acceptability” of the research (Zohrabi, 2013:258). According to Burton and Mazerolle, (2011:28) validity is needed to measure extent or level of which the instrument measured what was intended to measure. In essence, validity is a measuring scale of reliability and accuracy of an instrument in the process of data collection and analysis. It could be concluded that validity influences valid and acceptable data. The required validity depends on face, construct, content or criterion validity, continued Burton and Mazerolle (2011:28). Face validity focused on judging the facial expression (judging by its appearance) to measure what was intended to measure (Bordens and Abbot, 2011:133). On the other hand, Burton and Mazerolle (2011:28) have teamed face and content validity; for their validity is based on the experts in the subject which the instrument measured. This helped the researcher to refine the methods before being engaged in the actual data collection. Validity application aroused the researcher’s confidence that the instrument would serve the purpose of measuring what it was intended to measure.

According to Pickard (2013:21) trustworthiness in qualitative research is based on four measures of quality: credibility, transferability, dependability and confirmability. Credibility measures the accuracy of information as far as the participants are concerned to confirm the true value of the results.

3.10.2 Reliability of the research instruments

According to Golafshani (2003:598) reliability referred to “the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable”. In essence reliability serves as processes that test if the same results can be obtained more than once using the same tool and questions. That acts as a scale that determines the validity of results. Reliability is important in research to develop or modify the instrument in a case there is inappropriateness in the instrument.

For reliability of the instrument, the pre-test was done using two focus group discussions of five participants each, with non-subject NUL librarians who had assisted in one way or another with information literacy. The aim of the pre-test was to give views and understanding on the issues of question construction, clarity, order of questions, length of the instrument and the researcher’s ability to conduct focus group discussions. Similarly, three lecturers were approached for pre-testing.

3.11 Ethical consideration

Ethics were explained as “simple rules of good practice” (Healey, 2013:3). Ethical issues should be considered in any kind of research especially when dealing with human objects (Eisenhauer and Wynaden, 2001:93). Prior to data collection, application for ethics clearance was sought from and granted by the University of Cape Town (UCT), Library and Information Studies Centre where the researcher is registered as a Masters student. It was important for UCT to scrutinise the questions that were going to be posed to the participants and establish that they are not going to harm anyone. Permission was sought from the National University of Lesotho (place under investigation) to access the participants. Each participant was fully informed about the study when they were requested to participate thus giving them the opportunity to participate in the study with informed consent. Testimonies for ethics clearance is attached as **Appendix D and E**.

3.12 Chapter summary

Integration of ACRL framework in the study assisted the researcher to team up the perceptions from NUL lecturers and subject librarians in terms of information literacy skill sets acquisition against ACRL information literacy framework for higher education. This framework was used to design the research instrument. Interpretivism goes hand in hand with qualitative research employed by the study. Different stages of research were articulated which consisted of phenomenology design, selected participants that represented population, non-probability purposive sampling technique (judgemental) was used to include the subject librarians and lecturers as key informants of the study. The processes of data collection, instrument validity, data analysis and ethical clearance procedures were articulated.

Chapter 4: Data analysis and interpretations

4.0 Introduction

The previous chapter discussed the research paradigm, methodology and the process of collecting data. This chapter presents data collected using the research instruments attached in Appendices A and B. It starts with a description of the participants, followed by information literacy curriculum and its delivery, efforts and strategies for collaboration; possible information literacy skills' gaps among NUL students and ends by outlining recommendations that were suggested by the research participants with regards to information literacy delivery at NUL. As previously mentioned, data presented and interpreted in this chapter was collected from NUL subject librarians and lecturers herein after referred to as subject librarians and lecturers. This should not be interpreted as generalization, but as a strategic decision to reduce the dissertation's word count.

4.1 Participants' qualifications and work experience

The subject librarians were requested to indicate their qualification and work experience, while the lecturers were only asked to share their work experience. This section offers an analysis of data collected from question 1 of the Appendices A and B. Although this question, is not directly related to any of the research questions, it was imperative to consider participants' qualifications and work experience as they both have an impact on their authority to share responses worthy to be considered as data that adds value to the validity and reliability of research findings.

4.2 Subject librarians

In the interest of validity and reliability of the findings and relevance to the study that investigates information literacy curriculum, delivery and assessment; the researcher had to establish subject librarians' qualifications in Library and Information Studies and related disciplines. This was a significant factor given that in some developing African countries, libraries sometimes employ people without Library and Information Studies qualification and training. NUL in particular had in the past employed people without LIS qualification to serve as subject librarians because they had knowledge of the subject matter. It was envisaged that librarians with LIS qualification would understand and easily follow the discussions on information literacy.

Table 12 below presents subject librarians' qualifications and the year in which the qualifications were acquired.

Table 12: Subject librarians' qualifications

Qualification	Year of obtaining qualification							Total	(%)
	1986 - 1990	1991 - 1995	1996 - 2000	2001 - 2005	2006 - 2010	2011 - 2015	2016 - 2017		
BSc (Computer Science)					1			1	8%
BLIS					1			1	8%
Honours LIS						1		1	8%
MLIS			1	2	2			5	38%
MA Archive & Records Management	1							1	8%
MA Theology				1				1	8%
MSc Information Management		1						1	8%
MSc Information Science							1	1	8%
PhD in Library & Information Science							1	1	8%
Total	1	1	1	3	4	1	2	13	100%

From the table above, it is evident that 5/13 (38.5%) have Master's degree in Library and Information Studies (MLIS); followed by 1/13 (7.7%) librarian each with Bachelor's degree, honours and PhD in LIS, while 1/13 (7.7%) represented (MA in Archives & Records Management, MSc Information Management, Master of information Science as LIS related courses, other qualifications in different courses were represented by 1/13 (7.7%). Data demonstrates majority of NUL subject librarians that participated in the

study have the required qualification in LIS discipline. Moreover, it is encouraging to see that so many subject librarians have MLIS. This shows that people are caring about acquisition and competency skills in LIS discipline which is demonstration of specialization. With competency and qualification, one envisages that information literacy can be delivered with efficiency. Two subject librarians do not have LIS qualification, one has a Bachelor of Science degree and the other Masters in Theology but the researcher established that she is pursuing the second Masters' degree in Archives Management.

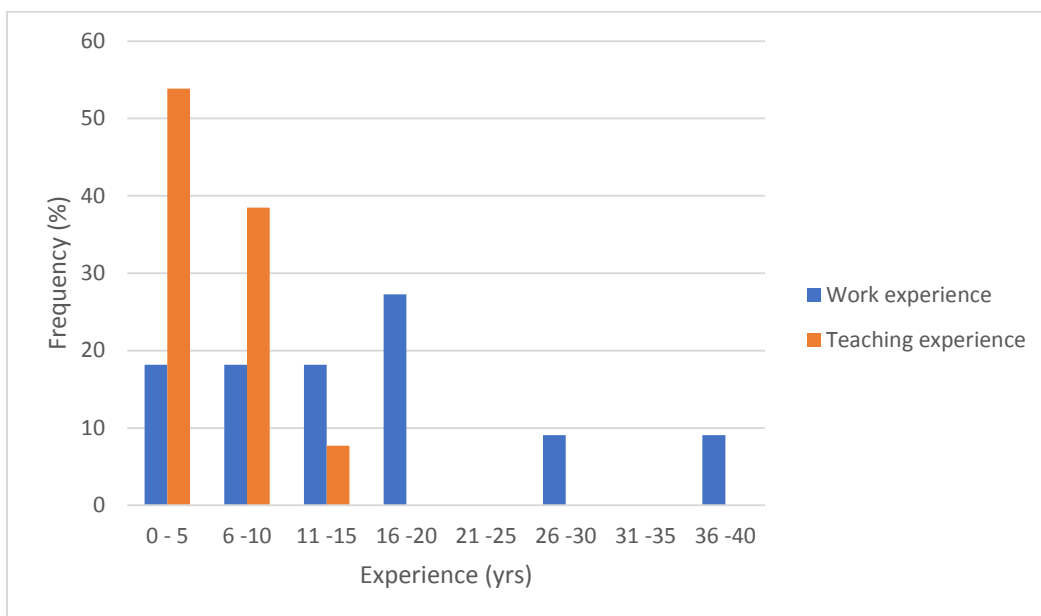
Table 12 further shows the years in which the subject librarians acquired their qualifications. Most subject librarians obtained their qualifications many years ago, given that only two graduated in the past two years. This indicates that they have long work experience which is a positive thing. On the other hand, if they have not been keeping up to date with the dynamics of the changing information landscape; they might lack key competencies for academic and research librarianship for the 21st century. Many librarians who have undergone training in recent years are likely to offer library and information services using the latest innovations since they had exposure to education and training in the digital era. This is because LIS discipline, being founded upon the data, information and knowledge pyramid, is constantly affected by technological advancements which demand that its profession to embrace change and be ready to assume new roles. It is crucial for librarians to understand and follow technological advancements as it impacts on accessibility, storage, findability and discoverability of data, information and knowledge.

4.2.1 Subject librarians' work experience

Closely related to maturity of qualification is work experience. This subsection presents data in terms of subject librarians' work experience in library environment and specifically in teaching information literacy. As indicated in the previous section, most of the subject librarians have long work experience which commensurate with date of

qualification. However, evident from Figure 1 is that the subject librarians that qualified recently, have some teaching experience while those that qualified more than 15 years ago do not have it. This is viewed in light of the fact that teaching and learning in LIS discipline and profession is a phenomenon that commenced in the 21st century when the criticality of information literacy became apparent as a result of the advancement of the internet and the Web that had apparently triggered high influx of information.

Figure 1: Subject librarians’ work and IL teaching experience



4.2.1 Subject librarians’ teaching experience

With reference to librarians’ work experience illustrated on the figure above, there is a feeling that subject librarians, who have served for a long time were not involved in information literacy instruction. This is so because teaching experience is highly represented in the 0 – 5 years of experience category.

The majority of the subject librarians have recent LIS related qualifications and it is anticipated that they will share the latest innovations and developments in the LIS

discipline. On the other hand, one may view this in terms of emphasis of academic library services which have been changing over the years.

In the past, libraries focused on library orientation and bibliographic instruction under the auspices of user education; these were not competency skills oriented when compared with information literacy. Although librarians have always been offering user education, they had neither pedagogical skills nor profound understanding of teaching approaches and learning styles; in the previous centuries, and bibliographic instruction methods were meeting the user needs because print media was still predominant. Library and information resources in general were available in fewer volumes and in limited media formats.

4.2.2 Lecturers

Data collected from NUL lecturers is presented based on faculty, teaching and research supervision experience. In the same vein, explained in section 4.2.1, the researcher established lecturers' qualifications and work experience in the interest of validity and reliability of the findings. Twenty-eight lecturers participated in this study; all seven NUL faculties and one institute were represented in the study. As shown in Table 4.2, the highest number of lecturers (9/28) that participated in the study came from the Faculty of Humanities. This is followed by Faculties of Education (4/28) and Social Sciences (4/28) and Institute of Extra Mural Studies (3/28). The high turn up from Humanities could be attributed to cordial working relations between this faculty and the library. The working relationship is natured by the Faculty's Department of Library and Information Studies whose programmes and course offerings are enriched by NUL librarians. In addition, this faculty also includes librarians in the delivery of their Communication Skills course that involves scholarly communication. Next in line of response rate are Faculties of Education and Social Sciences. While the former is closely associated with teaching and learning (a critical aspect of information literacy); in many instances, the latter is the home for the LIS discipline. At UCT, Faculties of Education, Social Sciences and Humanities merged around 2000 to form the Faculty of Humanities. There is a humanity and sociological aspect in education, humanities and social science which

resonate with LIS as a discipline and a service oriented profession. Faculties of Agriculture, Health Science, Law and Science and Technology each had equal response rate of (2/28).The Institute of Extra Mural-Studies response rate was 11% from its three departments.

Data is presented according to lecturers' teaching experience per faculty/institute. Table 12 shows that most lecturers' teaching experience falls in the range 6-10 years (25%). Often this teaching experience is associated with lecturers' maturity in their duties and responsibilities; they are conversant with their tasks and have built expertise. Generally, most lecturers that participated in the study were experienced. They were carefully selected to serve as key informants for the study based on the recommendations from the librarians. Snowballing coupled with judgmental sampling played well in this case. It was a data validation imperative to select lectures with longer work experience for their richer and deeper insights of students' challenges. The least experienced fall in the range 0-5 years (14.28%); the researcher attests to the fact that the four lecturers in this range all mentioned that they have four years teaching experience. Collectively, almost 85% (100%-14.28%) of the lecturers had six or more years of teaching experience.

Table: 13 Lecturers' teaching experience per faculty

Faculty/Institute	Lecturers' teaching experience (years)									Total	%
	0 - 5	6 – 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40			
Agriculture					2					2	7%
Education			2			2				4	14%
Health Sciences	1	1								2	7%
Humanities	2	2	1	4						9	32%
Institute of Extramural Studies	1	1			1					3	11%
Law		1			1					2	7%

Science and Technology			1	1					2	7%
Social Sciences		2				1		1	4	25%
Total	4	7	4	5	4	3		1	28	100%
(%)	14%	25%	14%	18%	14%	11%		4%	100%	

4.2.3 Lecturers' supervision experience

It is revealed that lecturers with two years' supervision experience dominate the rest of other years' supervision experience by 5/28 (17.9%). This is anticipated that most of the lecturers were involved in supervising at undergraduate level as compared to their teaching experience. NUL offers four year degree programmes, and in the fourth year students do research work which requires supervision. The researcher acknowledges the limitation of not inquiring the level or degree from which the supervision experience culminates as this could be at undergraduate, masters and/or PhD. Nonetheless, the interest in this study was research supervision and teaching experience so that data is collected from lecturers who have been in the service for quite some time to share their experiences and insights that will fully inform the research questions.

Table: 14 Lecturers' supervision experience per faculty

Faculty	Number of years of supervision								Total	(%)
	0 - 5	6 - 10	11 - 15	16 - 20	21 - 25	26 - 30	31 - 35	36 - 40		
Humanities	5	1	1	2					9	32.14%
Social Sciences	2					1		1	4	14.29%
Education	3				1				4	14.29%
Law	1				1				2	7.14%
Health Sciences			1	1					2	7.14%
Agriculture					2				2	7.14%
Science and Technology	2								2	7.14%
Institute of Extramural Studies			1		1	1			3	10.71%
Total	13	1	3	3	5	2		1	28	99.99%
(%)	46.43%	3.57%	10.71%	10.71%	17.86%	7.14%		3.57%	99.99%	

4.3 Information literacy Curriculum

This section presents data mainly collected from the subject librarians through focus group discussions.

4.3.1 Curriculum compliance with international standards

The data presented in this section informs research question 1 of the study and it was collected from subject librarians by posing questions 2.1 - 2.3 of the instrument in Appendix A. The subject librarians responded differently to the question related to adaption of international standards such ACRL information literacy framework for higher education and how the NUL information literacy curriculum compares with other

universities in the SADC region. There were three viewpoints raised during the focus group discussions. Some asserted that there is no information literacy curriculum at NUL hence there is no benchmarking against any international standards. They informed the researcher that they confirmed non-compliance with international standards when they undertook an educational excursion to the Central University of Technology in Bloemfontein. Herewith testimonial response:

FG1P4: You are reminding me of one thing - we once visited Central University of Technology, Free State they have subject librarians whose main duty is to concentrate on IL for their users; while we are just cataloguing and performing multiple roles. As a result, IL is almost like our third job; we are really overloaded. During the excursion, it became clear that we are not doing much about IL.

In tandem with the above view, were subject librarians who opined that NUL does not offer IL instead it is still offering traditional user education. The third viewpoint was that NUL has information literacy curriculum that was designed with the help of the consultant from the University of Zululand. The following statements serve as testimonial data for the above narrative. Subject librarians, from two different focus groups, raised these arguments to show that NUL does not have information literacy curriculum nor practice any benchmarking:

FG2P2: No our information literacy lessons are not in the university curriculum at all, therefore we don't benchmark

FG4P2: We don't even have formal curriculum to say, what each one of us is doing when conducting a session. E.g. let's say I take students through Opac, I don't know what other instructors are doing.

FG3P3: Because our information literacy is not fully established as yet, we have not benchmarked with any of the SADC universities, we are doing it our own way, we are not even practicing the standards per say of the IL.

While the statements below are subject librarians' arguing that NUL offers user education and not information literacy.

FG3P2: I am not taking it as information literacy; in my opinion, it is user education because we are trying to help all the students to familiarize them with the library not necessarily that

we go in-depth, normally students from English department don't make a mistake, they come here every year for other things that is why I call it user education.

FG4P1: *This is not really IL, it is just an introduction to the library.*

The statements above demonstrate subject librarians who are fully aware and knowledgeable about information literacy and its various aspects. They seem to have an understanding of introduction to the library, user education and information literacy.

Interestingly, one of the subject librarians revealed lack of knowledge about ACRL framework thus:

FG3P1: *I will not answer this question fully, because you have to tell us the standards and ACRL framework because what we might be teaching students and lectures sometimes it might be according to ACRL standards.*

This is an indication that some of the subject librarians are not keeping abreast with the latest developments related to information literacy. Coincidentally this respondent was one of those with longest work experience who acquired the LIS qualification in the 1990's. This confirms that professionals who do not keep abreast with developments in their field are left behind. The situation is dire for the LIS profession given the rapid pace of change of data, information and knowledge services.

Testimonial data for compliance with international standards and comparison with other universities in the SADC region is:

FG2P1: *Our curriculum is based on international standards and it compares with other universities because our course here when it was structured, a consultant was employed from the university of Zululand, which is in the SADC region.*

Subject librarians were asked if the information literacy curriculum offered at NUL incorporates other related literacies. Only one response from all focus group discussions continuously revealed incorporation of computer literacy.

FG2P1: *our curriculum incorporates computer literacy*

4.3.2 Application of international frameworks in IL curriculum

In response to whether NUL information literacy curriculum incorporates ACRL framework aspects, the subject librarians had conflicting ideas. The objective of articulating ACRL frames was to contextualize them and to help the subject librarians to easily identify these aspects.

On **information need context**, out of four focus groups, only two respondents were aware that they consider that component when they are teaching information literacy. Others kept on reminding the researcher that they had indicated earlier that what they teach they only offer introduction to the library or user education. For example:

FG4P2: *We have indicated earlier that our information literacy is just a general introduction*

FG2P1: *Because information literacy is all about need, our clients should know their information needs, therefore we include that aspect.*

On **research and forms of inquiry** related topics majority of the subject librarians mentioned that they do not include this frame while only two responded in affirmative to this question. On the **Search strategies** and literature searches frame, majority of the subject librarians concurred that this frame is evident in whatever training they are offering. This included even those who were adamant that they offer user education and introduction to the library. The general consensus was that this frame is considered in library training. This narrative is supported by the following statements:

FG1P1: *I think search strategies and literature searches we are aware of, I think we are kind of helping them with search strategies to some extent. When we are doing OPAC, we touch on search strategies because we tell them to use an author, use subject, title of the book, I think these are strategies we touch on them.*

As a follow up to the above response, the researcher wanted to know if subject librarians ever had hands on activities with students, the response was:

FG1P3: *I go back to search strategies, I think that is why students come for one on one session to explain what they did not understand during the session, I even do the advanced search with them. Yes we do consider it because we always take them to Opac, even how to use Boolean search operators.*

Other than intellectual property, subject librarians negated they include frames such as information creation and use, ethical use of information and reference styles, information evaluation, scholarly communication and value of information. This raises suspicions of statements that NUL information literacy curriculum compares with other universities in the SADC region and considers international standards such as ACRL framework. It is a concern that in this era, the information literacy curriculum does not include ethical use of information and referencing. Many students struggle with referencing; consequently, it is an imperative that must feature quite strongly in all information literacy programmes and must be introduced to learners as early as possible in their education journey.

4.3.3 Curriculum delivery

In an attempt to address RQ, subject librarians were asked questions 2.4 – 2.7 of the instrument forming Appendix A. Responding to question 2.4 which sought subject librarians' opinion on teaching method for information literacy delivery in comparison with literature, international standards and other universities in the SADC region, the subject librarians responses were:

FG4P1: *Based on the fact that there is no curriculum it really doesn't. We only teach what we think is important like the basic searches as one of the ways of finding information.*

FG2P2: *It does not because it is not graded, we are just doing it*

FG2P1: *It should be practical, not theory because information literacy is all about practice*

FG2P3: *I don't know what other universities are doing*

FG3P3: *Because our information literacy programme is not fully established as yet, we have not benchmarked with any SADC university, we are doing it our own way. We are not even practicing the standards per say of the information literacy*

FG1P2: *We are doing it verbally and are also demonstrating, so I don't know if it compares with any institutions.*

FG1P3: *we are just showing them library thing resources and services*

There is no indication that the librarians refer to literature, international standards or even make an effort to compare with other institutions in the SADC Region when planning delivery of their training whether it is introduction to the library, user education or information literacy that they have alluded to.

In light of the above responses to question 2.4 of the instrument, it was clear during focus group discussion that librarians were not considering that students have different learning style. Although question 2.5 of Appendix A which inquired about strategies used to accommodate students with different learning styles was asked for confirmation, all subject librarians' indicated that they merely deliver what they have planned unconscious of diversity. From these responses, one establishes that in the process of information literacy training, there are 'pockets' of accommodating students with different learning styles.

FG4P1: basically is verbal and seeing

FG4P2: we only demonstrate when it comes to doing.

FG2P1: We do them all because we include hands-on activities

FG2P2: We use the video and take them around the library, sometimes we take them in the internet café to do their practical

FG2P3: When I teach them, I let them use computers and hands on, then explain things verbally.

FG3P3: We incorporate all of the learning styles because our classes are practical, some are visual and some portion of that we give instruction like take them around the library to show them what we have been teaching them then they do it practically.

FGP1P4: we use mixed methods, talking and demonstration.

Responding to question 2.6 of Appendix A about information resources and information technologies often used, subject librarians indicated that they use computers, library print and e-resources, books, journals to name a few. Testimonial statements:

FG4P1: we use both print and e-resources; we use print resources and computers

FG2P2: we use internet...we use computers, projectors as well as print resources

FG2P3: *we use computers, a projector, computers and books*

FG1P4: *We demonstrate how to access journal articles using a projector, we also make examples using books and reference material, so I believe we are using both electronics and books.*

Collaboration with faculties is one of predominant strategies in delivering information literacy in higher education institutions which constitute RQ3 of this study, answering question 2.7 on this matter, subject librarians' statements were quite elaborate and they are presented in the subsequent paragraphs.

FG4P1: *Lecturers just accompany students to session that's all. But it is not all the lecturers who come with students. ...We communicate with lecturers to bring the students during their slots, for example I am dealing with the 3rd Years, those who are starting their projects from the Faculty of Agriculture.*

FG2P2: *We normally liaise with faculties and tell them when we have new information sources so that they can send students.*

FG3P3: *I don't know if I can say lecturers are helping students with information literacy, but the subject matter is we do it in collaboration with lecturers from various departments in different faculties. We do it with the 1st Years, the course we are taking through Communication Skills, and there are certain questions that they are asked during the exam that derive from information literacy sessions.*

FG1P1: *I don't think the collaboration we are doing is enough because we don't discuss with them what we are doing or what they want us to emphasise on, it is like they just send students to the library. There was once a lecturer who gave students a quiz on reference sources. To me it was wonderful because students came back to seek explanation on what they did not understand. If we collaborate with lecturers to the extent that students get quizzed on what we taught them, I think our information literacy would have value.*

FG1P3: *We just teach students, lecturers don't even need feedback of what we taught the students.*

FG1P2: *You know what, sometimes when these lectures want to do their private or individual stuff outside the campus, they just bring students here unexpected, they are taking information literacy as a cover, and they are making us baby sitters.*

FG1P4: *But some accompany students to the information literacy session and sit throughout.*

The statements above indicate that there is communication and collaboration by subject librarians with the lecturers; the only challenge is the degree of its efficiency in view of increasing students' information literacy skills. One gathers mixed feelings among the

librarians, there is a positive view of lecturers who send students to the library for training; and there negative view that lecturers do this when they are lazy to teach students. There is an indication that the activity is not well planned and coordinated. There has to be a proper planning of the information literacy programme at NUL. From curriculum design, delivery and assessment; if delivery requires students to come to the library from different departments, this should be properly planned and delivered according to a well-known calendar of events that is designed to attain clearly defined learning outcomes.

4.3.4 IL training assessment

Assessment is a critical component of content delivery; any training or intervention offered needs to be followed by a form of assessment to determine if it made any impact, positive or negative. It is equally important to determine the mode of assessments used by NUL librarians for their information literacy training. This aspect was addressed by posing questions 2.8 -2.9 of the instrument – Appendix A. Responding to these questions, related international standards, literature or the SADC region as well as their predominant techniques, some subject librarians categorically indicated that they do not assess their information literacy training, library introduction or user education. Testimonial statements with a bit of tone of irritation:

FG1P3: *We said there are no assessments, so the question is not applicable.*

FG2P2: *We don't assess, information literacy, it is assessed in the Faculty of Humanities.*

FG4P1: *There are no assessments. But in my opinion, these students come individually, so if they don't come, I assume that leaning has occurred.*

FG3P3: *Sometimes we give them some practical exercises to do, though we don't do that quiet often, especially with reference section to make sure they understand what they have been taught.*

When done professionally and properly, assessments constitute good indicators for teaching and learning effectiveness. They help to determine if adequate teaching and learning has occurred and students have acquired the knowledge and skills; and if learning objectives have been achieved. In the midst of diminishing resources and

budget cuts, librarians have to demonstrate their value to their parent institutions, and clearly in as far as information literacy is concerned at NUL library, the subject librarians are not making much effort to demonstrate their value. Information literacy assessments help to create useful data that can be part of institutional big data.

4.3.5 Information literacy recommendations from subject librarians

Considering that this study was conducted to investigate the status of information literacy delivery at NUL to identify areas for improvement, the researcher solicited subject librarians' recommendations by posing questions 3.1-3.2 of Appendix A. For information literacy models, subject librarians responded as follows:

FG4P1: *Information literacy should be a full credited course and should be assessed like in other courses as done in other universities. At the University of Dar es Salaam, if you have not done information literacy course, you don't proceed.*

FG4P2: *Through experience, what we are currently doing here I don't know what it is called, imagine just taking students for two hours maximum, students cannot learn anything in two hours, I also prefer full credit model and assess I think students will gain more from the program.*

FG2P1: *Full credit. If not full credit, students might not all attend; so full credit forces them to attend?*

FGP2P2: *Full credit model. It should be a must, every student should do information literacy like in other universities, and it is a core course.*

FG2P3: *Full credit model. Because I see a problem that many students really need information literacy. I see how they use information sources, others plagiarise, others do not know how to reference, so I think really it is better that they have full credit information literacy course.*

FGP3P3: *Maybe we should have an information literacy that is credited, and that method would work because every student will take information literacy lessons as important, because students always associate the importance of any course that they are given with the fact that it is credited. If they are not supposed to write the exam, or any test or get any credit or if does not impact in terms of credits on their passing, then they don't consider it to be helpful. But if the course is credited, it means they will take it seriously and they will want to learn and understand it and also practice it.*

FG1P1: *Full credit, students will get to know everything in details.*

FG3P4: *Students will not take it for granted as they know that the will be credited and they will pay more attention, for now they don't value these sessions because they know that they are not going to get marks.*

All the above responses were analytical and worth considering for improved information literacy education and training at NUL library. Majority of the subject librarians recommended that information literacy should be offered as a fully accredited core course that should be done and passed by all students. From all focus groups conducted, it was clear that these librarians want information literacy to be delivered as a full time course; the big question is what efforts are they doing to realise this strategy?

For stakeholders' involvement in the delivery of information literacy at NUL, subject librarians mentioned:

FG4P1: stakeholders would be us librarians and lecturers because they would know information needs of students.

FG4P2: I think we should develop a standard curriculum in consultation with the lecturers and look at the programmes students are taking, so that we know their needs and backgrounds.

The above statement gives an implication that the subject librarians need to work closely with the lecturers who will inform them about the information needs of the students. This gives an implication that the librarians do not go out of their way to investigate the information needs of students. One thinks that with agile academic support librarianship, subject librarians would be making an effort to establish the information needs of their students.

FG2P1: Both students and lectures because concern here is, if what we are teaching is not credited. I think the Lesotho Library Association should push to include information literacy into the university curriculum. I suggest this association because it is through their efforts that LIS programme was introduced at NUL at diploma level, and it is through the Association that the programme is going to be offered at degree level very soon.

From the above statement, one deduces that NUL librarians do not think that the top management takes their concerns and suggestions seriously hence they request the Lesotho Library Association to intervene on their behalf. Another interpretation is that NUL top management abide to the Lesotho Library Association requests for programmes because such requests are an indication of market for the programmes as the university does not want to embark on a programme that is not on demand.

FG2P2: Stakeholders would be faculties, management, library management and librarians. Stakeholders would be engaged through workshops, Lesotho Library Association should conduct workshops to faculties, lecturer's and even top management because sometimes we are told that we waste money

when we buy e-resources, sometimes they don't even know what they are, I suggest continuous workshops.

The above response implies lack of understanding about e-resources and their hidden value at NUL; it means that NUL Library is not demonstrating its value particularly showing data that correlates utilisation of e-resources to research output and academic performance of students. In many instances, in the midst of budget constraints, when libraries do not demonstrate the value of their resource and services; they will be perceived negatively. Nonetheless, one does not dispute the possibility that top university management does not use library e-resources and therefore end up thinking that they are a waste of money.

FG2P3: I am not sure about the stakeholders, but I think librarians and lecturers should work together. And some of us do not know much about information literacy, because we don't remember having a course about information literacy as it looks like it is for me a librarian who should say more.

It is a serious concern that a subject librarian in an academic institution does not know much about information literacy. This means that not only top management needs workshops, but some subject librarians also need short courses to either refresh themselves to acquire new competencies and skills for the 21st century librarianship.

FG3P1: Librarians and lecturers

FG3P3: If we co-design the curriculum, then both lecturers and librarians would be in a position to own that curriculum and would be understanding the curriculum, how it works and both would be helping in the deliverance of the curriculum, because we would be co-teaching the information literacy programme. Librarians would be doing a certain part even with the assessments that means we would be doing assessments.

Striving for partnership and collaboration with academic staff by librarians is quite important as certain aspects of information literacy curriculum require both parties to join forces for the benefit of the student. These kinds of partnerships are an imperative for academic support and enhanced student user experience. When librarians and academic staff do not work together on information literacy, the delivery of information literacy runs parallel and it is highly likely to cause confusion, inconsistencies and

repetitions. Understandably, subject librarians would require lecturers for assistance with pedagogy epistemologies as well as principles of teaching and learning.

FG1P3: Stakeholders should be faculties and us Librarians, and we should work together including Centre for Teaching and Learning Unit, its support of the programmes is quite important.

FG1P2: I think we should plan and design together, if we design together, we will own it. For example; with communication skills course, we are only involved when students come to the library. We do not know what topics to cover, it is like our information literacy is taken for granted.

It was paramount to establish information skills' gap among NUL students to identify areas that need to be included in their information literacy curriculum. Considering that lecturers regularly interact with students, data for students' information skills gap was sourced from them. From here on, the dissertation shares data collected from the interviews with the lecturers and it is presented as Appendix C. The Appendix includes voices of 20 lecturers instead of the 28 overall respondents. Some voices were left out because the responses were similar, to avoid the duplication of data, the researcher applied "a last in first out strategy" to include data in the study. The narrative in the subsequent sections is supported by a selection of lecturers' responses presented in Appendix C.

4.4 Information skills' gap among NUL students

To address RQ 4, it was imperative to establish information skills gap among NUL students, and it was envisaged that lecturers, knowing students, would be best suited for this data. Section 4.4 presents data from NUL lecturers that participated in this study to provide context to RQ4 and ideas for critical areas in the improvement of information curriculum design, delivery and assessment.

4.4.1 Consultation of variety of information sources

To solicit data for this aspect of skills' gap, lecturers were asked to share their opinions on whether students demonstrate ability to search variety of information sources based on their reference lists on projects and assignments. Another question sought to establish if indeed students consult variety of information sources. Questions 2.1 - 2.2 of the lecturers' interview schedule were posed with triangulation in mind hence they

appear to be a bit similar. Although data for responses is presented as Appendix C, to aid easy reading and attain a meaningful discussion below are extracts of response that reveal NUL students not only struggle with searching but also with consultation of variety of information sources. This could be because of inundation with course work, information overload, and inability to formulate appropriate search strategies or general permissiveness of students to apply least effort in their studies.

Testimonial data regarding ability to search for variety of information sources from different faculties and institutes:

Students are not able to search for information; even if you tell them how to do it. They simply cannot do it easily unless you guide them; and sometimes you help them to look into specific sources of information. [FSTL1]

No, I can say it is very limited because I have given assignment that requires them to give supporting information from journal articles, but it seems they don't know their way around that [FSTL2]

They do when you have directed them to relevant sources. I always direct 4th years to JSTOR and EBSCO Host and they give me feedback that they got relevant information. Being directed they are able to ... on their own it is problematic! [FOEL2]

Little ability; they do not have culture of reading and using information sources and putting that into practice [IEMSL1]

Evidence of students' limited consultation of variety of information sources and over dependency on Google and Internet source from lecturers in Faculties of Law, Health Science and Education:

Internet. In law the problem is that information most of Lesotho cases are not available on the internet. They use information from other jurisdiction that they think might apply to Lesotho and they are wrong [FOLL2]

They use Wikipedia [FHSL2]

They consult Google [FOEL3]

4.4.2 Ethical use of information

Data for this critical aspect of skills' gap in the digital landscape where piracy and plagiarism are at rife, was determined by posing questions about reference style, awareness of referencing among students, their ability to reference accurately, plagiarism detection, prevalence of plagiarism among students and how it is dealt with by the faculties. These issues were posed as questions 3.1-3.4 of Appendix B.

Addressing the question on referencing style (3.1), this Faculty of Law lecturer states that:

FOL L 2: Yes there is a reference style. Unless it is brought to their attention, they are not aware of the style. Faculty has a course that specifically introduces students to research method required by the faculty. Students are recommended to use the style used in the faculty journal. They are introduced to different referencing styles, they are expected to be aware of them, and whether they take it seriously is a different pot of fish.

On the other hand, a lecturer in the Faculty of Humanities responded thus:

HUM L4: I don't know of any standard, in the faculty not even in the department. I require students to follow the ethical procedure known to me. In the department we don't have a standard style. About referencing, my impression is that students in the undergraduate at the beginning I introduced them different styles so they got confused, I settled to get them used to one style, when they start mastering it, then I started introducing them to another. I am quite aware that they have a course communication skills at the 1st year which is supposed to cater for that, my impression is they always come out of it unprepared, because every time you give them an assignment in the 2nd and 3^d year levels, they always make the same mistakes, you are not even sure whether they do it because they have to do it.

The above statement carries with it the connotation that there is no referencing style in the Faculty of Humanities, there is an indication that students are subjected to different styles that end up creating confusion. They are also expected to acquire referencing skills from the Communication Skills course that they do at First year, but seemingly they show signs of inadequacy as a result of preparedness from the course.

One gathers that while some faculties have reference styles that they adhere to such as Law Faculty, others such as Humanities have not settled for one reference style and this poses a challenge to students.

Discussing students' awareness of referencing style (Question 3.2 of Appendix B), the lecturers' in different faculties alluded to the fact that some students are not aware, while others said students are aware or should be aware of different referencing styles because they are taught them in Communication Skills course at First year or introduced to them at the time of writing assignments. Here one also suspects poor retention of referencing technique among students who took the course Communication Skills. Herewith evidence from lecturers to support the above narrative:

They are not aware of the style; they don't even take initiative [FOAL1]

They are introduced to different referencing styles, they are expected to be aware of them, and whether they take it seriously is a different pot of fish. [FOLL1]

They are aware, but they violate it so much. [IEMSL3]

They are not; but we teach them before we give them assignments and/or before writing their proposal, we take them through referencing. [FHSL2]

Ethical use of information is done through appropriate citation and reference, the lecturers' response to the question on students' accuracy in citation and referencing (Question 3.3 in Appendix B) were signalling serious incompetency, limitations among the students on citation and referencing and confusion of different styles.

They try to do that after they have been properly guided [FSTL1]

They are inconsistent; the degree of inconsistency is marvellous may be because some of the content and teaching subjects are in humanities where they are using historical methods or numerical. So they tend to mix Harvard, APA as well as Chicago. [FOEL3]

Not in our cases, they don't take their time. In text citation, they do it haphazardly. [FSSL2]

No, but they are encouraged to do it. They don't do it correctly; a lot of work has to be done to make them do it correctly. Most of them are part time; so they do not have chance to ensure that they do it correctly as we are mostly we are offering Diploma course which does not require to do cross writing hence they do not get enough chance to compare, appreciate the differences in referencing systems [IEMSL1].

The last but one question on ethical use information (question 3.4) sought to establish if students plagiarise particularly which systems are used to detect plagiarism. NUL does not have a system in place but lecturers have devised means of detecting plagiarism.

So far none; we just copy and paste a paragraph on Google to determine plagiarism [IEMSL3]

Unfortunately you use your own practice; I just saw a software two weeks ago, that we are going to use. But before then, we did not have any. [FSSL3]

We have a policy which the university has come up with but effectively is not yet implemented of which we hope it will bring the software. So we don't have the software to detect plagiarism.

Right now it is up to lecture to detect plagiarism like Google it; but you need a software to make it easy [FOHL3]

The last question related to ethical use of information sought to determine disciplinary measures taken upon detection of plagiarism. Here lectures had said:

We have come across that a lot, when we find that a student has plagiarised we award a zero for that part because an assignment has different criteria when it comes to referencing regardless of good information they have, if they don't acknowledge they get a zero. [FSTL1]

Most of them I nullify their work because I would have shown them that to start with as a lecturer you know your students. It is part of mysterious knowledge where by you can tell if this is your student writing or not. For instance, when they plagiarise, they often include irrelevant information; they copy everything and paste it. [FOHL2]

4.4.3 Establishing lines of inquiry

To establish if students have established lines of inquiry which attest to critical thinking and reasoning, challenging questioning, not taking things at face value and critical inquiry; lecturers were asked three questions 4.1-4.3 of Appendix B. Asked to comment to shed light on students as passive consumers of information, a few lecturers responded as follows:

More often than not they are passive; it is something I have been struggling with, how I balance the need to cover the syllabus and the need to allow students to reflect on certain topics. For the 1st years it is hard

because they are meeting me for the first time. Your style of teaching, the so called student centred learning, to ask students to reflect on a certain topic can take longer particularly in larger classes. [FOHL1]

I have a different style of teaching; I don't just stand there for 50 minutes and go. I make the class to participate in every way, I force them leave. I even tell them what we are going to learn in the next class, I even pick them because I want them to participate. [FOSTL2]

They are not passive consumers; they engage in discussions, interrogate and question some of the issues. [FOSSL3]

The second question on this aspect was seeking to establish if students raise challenging debates and issues for further inquiry; and responses were:

Yes, you find that there are some few individuals that they are like that, like 3rd years grammar cause there were one or two who are very active, and they would always ask questions even bring something new you were not researched on, that would trigger debate, I even ask them to go and do further research. [FOHL3]

Since they don't want to ask questions, they won't even debate, we encourage them to talk amongst themselves, and we put them into groups. [FOSSL3]

Students of law, typical of them, they are very argumentative. All in all they do, they even challenge your content, and they would say this kind of thinking is old mentality. [FOLL2]

The third question in this cadre requested information about students' critical thinking effort:

They become critical when they cannot grasp a theory and have a fear of failing. I cannot say it is a critical analysis of a phenomenon; it is just that they want to understand the issue for the purpose of passing, not because he/she is questioning the applicability of that or the meaning behind that. [FOEL2]

It depends on the question which they are addressing; but you find that this is a skill which proves to be very difficult for majority of our students. Even when the question requires them to critically to deal with or requires them to assess something most of them just narrate. That skill seems to be difficult, but the brilliant ones and good ones will do that [FOHL3]

4.4.4 Engagement with current affairs and generation of new ideas

As part of investigating information literacy skills and competencies among NUL students, lectures were asked to comment on current affairs and generation of new

ideas to determine creativity and innovation. The first set of quotations is responses to the question on engagement with current affairs:

Yes, they reflect but not often, probably because they are still on traditional way of living. We don't have opportunity to this interactive means of teaching and learning. We don't even have any of these infrastructures to allow that interaction. [FOAL1]

They do but not much, maybe it is because of the generation we have now, I don't know if they are following news that much because there are a lot of things that are entertaining them like social media, WhatsApp and Facebook. You find that they are mainly focusing on communicating, interacting and socializing yet these news and current affairs is important area for learners and you find that most of them do not take them into account. [FOHL3]

The second set of quotations is lecturers' opinions about students' ability to generate new ideas in assignments and class discussions:

More often than not, students regurgitate the information. It is very rare that you come across innovative students. Let me give you an example of an assignment. One of the students was presenting about a mother who had twins and one of the twins was living with albinism and the other one without it. As a classroom supervisor you would not believe that all students used that example. I was literally shocked to what an extent would you say such people think. They can't look for similar scenarios even if it is not exactly the same. [FOEL1]

It depends with students, some do some raise new ideas, some are interested in observations, they are two groups or two calibres of students, some are active and they bring new ideas but some are not really active. [FOHL3]

4.4.5 Information evaluation

Data for this subsection was collected by posing questions 6.1 – 6.4 of Appendix B which mainly focused on seeking lecturers' views on NUL students' effort to evaluate information accuracy, relevancy, authority and authenticity before application.

In the first instance, the views on students' effort to assess information accuracy are:

Not current information, except for the information they take from internet, even when emphasis that it is not everything that is being on the internet that is credible, you must look for journal articles, things that authentic in terms of knowledge they just don't do that. They don't even read newspapers. For example; I have a current newspaper, there is a related article for their course, I said they must analyse and use it

as a basis for their assignment on relevance of curriculum on accounting in this country, it was autumn to them. [FOEL2]

I have never seen that interest. I don't know whether it is because they lack interest or waiting for direction from a lecturer to direct them to go and find something. It is rare, a minimal percentage or those who are brilliant go and find, but in general they don't. [FOLL1]

In the second instance, the views on students' effort to assess information relevancy:

A good number are able to, the weak ones can't do you will see that this information is taken from the internet, but is not even relevant to what a student is writing, they just take it with referencing just to fill the page, you start wondering the relevance. [FOHL3]

Some of them yes, some cut and paste certain irrelevant information from internet. Others will be especially in respect of problem questions they tend to use information we have in the country and apply new information they come across. They show interest and dedication in the analysis of such judgements. [FOLL2]

The third instance, seeks views on students' effort to assess information authority:

They take authority but never challenged it. Not quite really can they detect if information is from an expert. [IEMSL2]

To them authority is anybody who has penned down information, and they are not able to detect if information is from expert. [FOSSL1]

The fourth instance, seeks views on students' effort to assess information authenticity:

I think they do. At BSc level they follow the principle and they don't know whether it is the right. Students are not able to detect information authenticity [FOAL1]

I cannot say, as accuracy is something else. Majority of students do not go for accuracy they go for relevancy. Sometimes they consider a particular issue relevant and not accurate, they bring it in because in their view is relevant to what they are doing. I don't think in most cases they do that except final years I suspect they are supervised and guided. Junior students are largely concerned with relevance not accuracy and authenticity. [FOLL2]

4.4.6 Lecturers' views on information literacy collaboration

Question 7.1 of Appendix B was posed to help collect data to address RQ3 of the study.

It is imperative to establish, from lecturers, how they would like the collaboration with librarians to be rolled out and facilitated.

As a lecturer it is difficult because we have been told that there is a subject specialist at the library, you come up with something, you don't find help. As part of administration, there was one time I was a pre-entry coordinator, I would invite the library to come to talk to students about the library and what type of information they will get. When it comes to subject specific matters they are not up to scratch. [FOSTL1]

The above statement implies that there has been some collaboration in the past and possible an interest from the lecturers to invite librarians to address the students; however, the concern raised by this Faculty of Science and Technology is that the subject librarians lack knowledge of specific subject matter. This is probably an indication of subject librarians serving in subject areas they are not conversant with or who never made an effort to keep up to date in their subject areas. During the interview, the researcher sensed a feeling of frustration from this lecturer. Despite the sense of frustration, the lecturer had a suggestion on how the faculty could collaborate with the library for the delivery of information literacy that is worth implementing:

The library should either employ discipline specialist or alternatively they should involve 1 or 2 lecturers from every discipline to collaborate very closely with the library so as to form an interface so that even if it is because of the finances they don't have chemistry specialist but have chemistry lecturer interested in chemistry literacy who is responsible to make sure that the department has acceptable literacy skills and should be working in conjunction with library staff or somebody like a tutor. [FOSTL1]

Another lecturer from the Institute of Extra Mural Studies suggested information packaging for students that they can deliver to students.

Library should make some packages in terms of information accessibility and use so that we dispense such information to students. [IEMSL1]

While the Faculty of Social Sciences lecturer suggested proper consultation through heads of departments when library purchase books and also suggested stock up date.

The library should start updating their books. Also when they buy new books they should go through our heads of departments or on one on one they should ask for books that are quite essential so that they can stock them then we can refer students to them, deliberately students can now be supported. [FOSSL2]

4.4.7 Lecturers' views on library support

Ultimately, this study aims to make recommendations on how to improve information literacy education and training at NUL. Therefore, it was significant to establish from the lecturers how they would like the library to support them in delivering their core mandate to the university particularly in view of improving students' information literacy. A few quotations from the data are:

There should be orientations and probably should be done subject by subject not this wholesome orientation. Once students are registered, they should be called to the library according to their subjects of major and be shown to look for information in their subject areas, because now of late we have too many students. With reference to your topic of your study, I feel that literacy is wanting, it is very much wanting, probably because we don't do enough we don't teach our students how to use the library, classification of information is problematic. In an academic library, this should be an important component of that which we have to be conversant with its use, structure and everything. [FOEL3]

From the above quotation, this Faculty of Education lecturer suggests subject specific training on information searching and not a general orientation so that deeper understanding of information and knowledge organization structure in specific subject domains is fully understood by students. Clearly this will require formulation of subject specific information literacy curriculum, delivery and assessment which librarians can work out in consultation with the lecturers. Affirming the notion of working together with librarians is the Faculty of Humanities lecturer by suggesting a need for librarians to enrich Communication Study skills.

We should work together with the library, I think there were some attempts we made in the past to that effect, but I am not sure how far it has gone to integrate the library and information skills into Communication Study skills course so that the librarians will help us with the certain portion for teaching them even having practical's with them on searching for information so that it would directly contribute towards final assessment for our course. I think we still need that integration; we have to put them together so that our course will become very useful for students. [FOHL3]

4.5 Chapter summary

This chapter has presented the data collected from NUL subject librarians and lecturers. Being a qualitative study within interpretive paradigm, the voices of the participants

formed the data for the interpretative narrative that links the responses to the questions posed in the research instruments and the research questions. Every effort was made to present data for each question posed in the research instruments. During data analysis and interpretation, a few limitations were noted such as not asking lecturers their supervision level in terms of degree (e.g. whether it was at undergraduate, Masters or PhD level). Although the initial plan was to collect data for RQ5 about librarians' competencies and skills from the literature, it would have added value to solicit NUL subject librarians and possibly lecturers on this matter. Nonetheless, the chapter is a demonstration that the researcher collected valuable data that helped to address the research questions and for making not only meaningful, but also significant recommendations.

Chapter 5: Findings, Conclusions and Recommendations

5.0 Introduction

The chapter presents major findings of the study. Findings are discussed in this chapter as presented in chapter four; conclusions and recommendations will be drawn thereafter. After a deep consideration of the views of NUL lecturers and librarians, recommendations have been constructed to understand and to improve information literacy curriculum, its delivery and assessment at NUL. The main aim of the study was to establish to what extent the NUL information literacy programme complied with ACRL frames. The research questions and some discussions from the theoretical framework are addressed based on the findings.

5.1 Discussion of findings to address the research questions

The section presents the findings based on the analysis and interpretations of the study in relation to interview discussions with NUL lecturers and focus groups with NUL subject librarians. Conclusions and recommendations are drawn based on the following research questions that inform the study.

5.1.1 To what extent does the present information literacy curriculum at NUL incorporated ACRL frames?

The purpose of the question was to ascertain the level of adoption and application of ACRL frames in terms of curriculum, instruction and assessment by NUL subject librarians. The ACRL frames are informed by knowledge practices that students should be able to undertake and the dispositions for how students reflect what they are doing to achieve their expected output.

Data revealed that there is no information literacy curriculum at NUL; as a result there is no benchmarking. In essence, subject librarians seem to understand what curriculum is. With reference to section **2.2.1**, definition of curriculum as compared to what NUL subject librarians are doing as information literacy curriculum, they have attested that they are conducting information literacy without a curriculum . Goals for students

learning are not considered as subjects librarians are not guided by international standards, every individual subject librarian contextualizes information literacy according to how one perceives and understands it and how it should be done. This issue was supported by the point raised about a trip to the Central University of Technology, where the subject librarians themselves recognized that what they are doing is far from what other universities are doing. Based on the statement, there is no information literacy curriculum and non-compliance with any international or regional standard at NUL.

On the contrary, one subject librarian argued that there is information literacy curriculum at NUL that compares with other universities in the SADC region as there was a consultant from the University of Zululand to assist with design of information literacy and how these two universities compared on their information literacy programmes. The anticipation is that the person who invited UNIZULU library to NUL realized or was aware of information literacy curriculum gaps at NUL and wanted to find out how other universities conduct their information literacy, UNIZULU library was chosen to assist NUL to improve or compare its information literacy curriculum, delivery and assessments. According to UNIZULU library information services (2017), information librarians offer library orientation and library tours to First year students and back it up with continuous training workshops on different skillsets recommended by ACRL frames for both undergraduates and postgraduates (University of Zululand Library, 2017). The whole information literacy process at UNIZULU, is known to be user education which is far from what some subject librarians at NUL consider as user education.

In essence, NUL subject librarians are conducting a once off orientation to first year students. Orientation is a programme that is offered to first year students as an introduction to the library's resources, as well as information about study skills and academic integrity to make their first year experience successful (Thomas, 2013). Literature warns that academic librarians planning instructional sessions should be more cautious about offering one-shot sessions where students are expected to learn everything at once. The NUL subject librarians believe that users capture what is taught

once and utilise it for the future, ignoring the fact that taking new instruction and learning are processes that take time.

In view of what information literacy is, it is learned that very few subject librarians differentiate information literacy with what others consider as user education or just library instruction. It is presumed that the term information literacy is well understood by few individuals as they have indicated that they do not go in-depth in information literacy teaching and learning with students, they are just familiarizing students with the library. The issue of user education has been critiqued by Lebotsa as long ago as 1980. Lebotsa (1980:82) critiqued the situation at NUL Main Library called Thomas Mofolo Library by referring to these information literacy teaching and learning sessions as “user education” and suggested that these

“programmes must be planned in such a way as to meet the individual requirements of user groups at different levels. The fact that NUL through, TML, has a user education which is confined to one week only at the beginning of the academic year for new students, it is far from satisfactory from the point of view of students”.

It is evident NUL has not completely revised information literacy teaching and learning strategies and curriculum to meet the demand of current information landscape.

Data revealed that subject librarians are involved in Communication Skills Course, and some of the examination questions derive from library sessions, the statement brings a series of questions as data further exposed that academics just send students to the library sessions without informing the subject librarians their expectations. In this case;

1. Are the academics comfortable with what the library is teaching the students?
2. Is what the library teaching student’s part of what the academics wanted to be covered? And
3. How do subject librarians know if what they taught students has taken place and meet the students goals as they (subject librarians) have attested that they do not assess what they have taught?

Information literacy encompasses a set of other literacies, of which NUL subject librarians are failing to incorporate such literacies into their information literacy sessions. Data revealed that they incorporate computer literacy on very rare cases. This leaves some questions hanging as to when do they teach computer literacy and why is it not taught in every session, if it is practiced by all subject librarians. The fact that subject librarians indicated that they take students on part time basis specifies that subject librarians are conducting information literacy on a limited and narrowed manner.

The following study “Integrating Information Literacy into Academic Curricula: A Professional Development Programme for Librarians at the University of Auckland” has identified challenges faced by librarians in many academic libraries to integrate information literacy into curriculum, and NUL is not an exception. Some of the identified challenges were:

- They had a good understanding of IL in their own context
- Many subject librarians saw both the policy and the need for integration as being idealistic
- Few of them could think of practical ways that integration could be achieved, often citing academic work load, overcrowded curriculum, academics' lack of understanding of IL, and disciplinary differences as reasons why integration could not be easily achieved
- many librarians did not understand the difference between course-related IL (add-on classes or activities developed to complement a specific subject area, course or assignment) and integration of IL.
- librarians mentioned a number of barriers which they felt prevented them from approaching academics — some were related to lack of confidence, lack of knowledge of the curriculum and awareness that academics did not really know what subject librarians could do to help them.
- librarians thought it was the role of the manager to initiate discussions about IL

- many librarians had no formal teaching plan outlining learning outcomes and assessment tasks. This was particularly so in one-shot sessions (Moselen, and Wang, 2014:118-119).

5.1.2 How do information literacy teaching and learning sessions accommodate students with different learning styles?

The study aimed to unpack the teaching approaches NUL subject librarians use to cater for all students preferences. Teaching and learning requires information literacy instructors to use a variety of methods and approaches so as to consider students interests, preferences, aptitudes and the vibrant individualities of every student.

In their testimonies, it is revealed that NUL subject librarians are initiating to improvise; they use limited different possible approaches for information literacy teaching and learning. They have confirmed that they use PowerPoint presentations. That indicates that they observe visual learners who learn best by visual representations. The statement is verified in section 2. 3.1.

It is further identified that NUL subject librarians are trying their best not to practice a “one size fits all” teaching approach. According to Bitso (2016), students’ learning styles are divided into perception, input modality, organization, processing and understanding dimensions. All the mentioned dimensions, encompass “sensing, intuitive, visual, verbal, inductive, deductive, active, reflective, sequential and global” learners respectfully, of which NUL subject librarians are aware of some of these dimensions as they have clearly indicated that they use verbal, seeing, demonstrate, they use video and give students hands on practical in the internet café accordingly.

5.1.3 How do librarians collaborate and partner with lecturers to embed information literacy in their courses?

The objective was to establish the collaborative and partnership between NUL subject librarians and lecturers to embed information literacy into different courses. Library services need to be valued by academics in different faculties of the institutes of higher

learning, particularly information literacy teaching. The implication is academics/faculty should work closely with the librarians as their peers.

NUL subject librarians lamented that the academics treat them like “baby seaters”; they do not see the value of subject librarians when it comes to information literacy teaching and learning. Data indicated that academics take librarians for granted as they just send students to the library for “library tour”; they think that is the only thing the librarians can do, even sending students to library without notifying the librarians. In this vein, it is clear that there is no established collaboration between the two when it comes to information literacy teaching and learning.

Subsequently; one can deduce that there is collaboration and communication between faculties and librarians, the statement was uncovered by different librarians pointing that there is liaison and communication with academics on different counts as far as information literacy is concerned. With reference to section 2.4 last paragraph, on the issue of true collaboration, subject librarians boldly indicated they are even engaged in setting questions for student’s examination, but they do not assess what they examined. It is therefore revealed that collaboration at NUL is not fully established, the reason could be there are uncertainties the academics have about the subject librarians. This study “Demonstrating academic library impact to faculty: a case study” valued collaboration and some factors that contribute to the failure of complete collaboration were identified. The study revealed, “the library is increasingly recognized as integral to advancing the academic success of students at higher education institutions” vis a vis;

- academics who do not see the necessity for the involvement of librarians, despite awareness of a lack of required basic research skills in their students;
- Academics who often see librarians as service professionals doing different things from them.
- The greater the trust and support the library receives from faculty, the more the students will use the library.
- Faculty members are generally more visible to students than librarians having more influence over students than librarians (Yamaguchi and Richardson, 2017).

In conclusion, it is unveiled that there should be an information literacy policy at NUL to full establish planned collaboration between library and the faculty for a proper information literacy programme.

5.1.4 Which information literacy skills gaps exist among NUL students?

The purpose of the question was to find out from the lecturers the deficiencies students demonstrate in terms of consulting different information sources, ethical use of information, establishing lines of inquiries, engagement with current affairs and generation of new ideas and information evaluation, so that the pitfalls can be attended to or eradicated with effective information literacy teaching and learning.

In consulting different information sources skill gap, data revealed that students struggle to search for information; they are even unable to consult variety of information sources. It is revealed that they depend on Google and Wikipedia. This gives an impression that students might not be aware of the variety of information sources and the fact that information sources come in content types, media types and carriers. This might be influenced by fact that students assume that they are restricted to the recommended sources on their course outline.

In their study, Rehman and Ramzy (2004:150) have cited different authors who showed the results from different universities that students were not aware of the some electronic services offered by libraries and among other constraints they indicated:(1) inconvenience of location; (2) insufficient time to use the service; and (3) lack of computer training to use online services. In addition; this study “Towards an investigation of information literacy in South African students” revealed that students were not aware of information sources like “newspapers, films, videos, the telephone, yellow pages and other people” as a result, students had limited knowledge on the resources library offered (Sayed and De Jager, 2014:9). Testimony on student’s deepest trust on google over library resources, students praised google by saying; “Google is very straight forward. You put in your word and it searches.... Bright, eye-catching—simple. Not confusing” (Perruso, 2015:615). It is therefore found that NUL

students rely on familiar resources like Wiki, Google and text books. There is still a need for intervention to assist students to be conversant with the scholarly information cycle.

The notion of Google dependency is associated with information evaluation; this raises questions around information credibility, accuracy, authenticity, authority, currency and relevance. Findings show that students level of information evaluation is very low, rather; they regurgitate any form of information they come across. “Learning from faculty voices on information literacy: opportunities and challenges for undergraduate information literacy education” has identified information literacy critical thinking and evaluation of the information sources as the dominating concern for the faculties (Bury, 2016:246).

On ethical use of information skills gap, it was sought to establish if students are aware of referencing style in their different faculties and institute, the issue required to establish students ‘ability to reference accurately even students’ accuracy in citation and referencing and the extent students plagiarize.

Consistent findings indicate that students at NUL demonstrate confusion in the awareness of referencing style. It was established that there is no standard referencing at NUL; as a result, students show inadequacy in referencing even though they took referencing in the compulsory Communication Skills course at 1st year.

Meticulous and proper referencing shows full acknowledgement of the sources used in research writing including accurate citation. Failure to do this leads to plagiarism. The following study “Cultural Constructions of Plagiarism in Student Writing: Teachers’ Perceptions and Responses” picked “language problems and skill deficiencies are the most obvious issues” (Chien, 2014:138). Nonetheless, NUL students demonstrate poor retention of referencing technique. One would like to point out the fact that NUL students could be confused by exposure to several referencing styles; participants revealed that the faculties use different referencing styles. The University needs to adopt a policy on the referencing style that must be followed at NUL.

Establishing lines of inquiries skills gap; this aimed to ascertain the extent of student's passiveness or activeness either in class or in assignment writing and the level of establishing and posing challenging questions as a sign of critical thinking. Findings show negative and positive skills. Data unfolds two sides of the coin. It was revealed that level of education and the nature of a course are the determinants of passiveness, critical thinking and ability to challenge any learning subject. At senior level i.e; from third year upwards, students demonstrate ability to ask and think critically. Students are forced to be engaged in such abilities. It is revealed that student's passiveness is influenced by "the traditional old fashioned teaching method" and the "weak educational management system which is not strong enough to monitor staff activities" (Tuyét, 2013:81). Data collected revealed that lecturers can engage students and probe them until they are socialised to think critically; those who make an effort ultimately may achieve inculcating critical thinking. But if no effort is made, then nothing will be achieved.

5.1.5 What are the competencies and knowledge skills essential for effective delivery on information literacy based on ACRL information literacy framework for higher education?

The advent of technology necessitates information instructors to demonstrate competencies and skills for the effective and efficient information literacy delivery, in accordance with ACRL framework. As indicated in 2.6; it is suggested that librarians should transit from traditional information organizers, to be "information teachers", according to Mitchell-Kamalie (2011:66) librarian's need a competency to 'teach information literacy'. For effective information literacy teaching and learning, an instructor should have a proper lesson plan, must give students time to reflect, and must engage every student in active participation in class, NUL subject librarians are incompetent in the aforementioned factors. Mitchell-Kamalie, pointed the following as the essential competencies and skills needed for effective information literacy:

- 1). Responsive facilitation to maintain a balance between observation, listening and responding to students.
- 2). Librarian should be vigilant to rephrase than simply repeating what was said in a case where students did understand and to demonstrate with examples and give exercise.

NUL subject librarians are able to improvise in a case where students did not understand in information literacy instruction, but they are incompetent to give students class activities/exercises.

According to Michelle-Kamalie (2011: 67) effective information literacy teaching and learning instructional librarians should stimulate motivation; it should include active learning strategies to enhance students' participation; librarians should be able to build information literacy concepts into the system. In essence, NUL subject librarians lack knowledge of the educational theories and methodologies that can be applied to information literacy instruction, as accentuated Michelle-Kamalie (2011: 78).

5.2 Discussion of findings based on theoretical framework

ACRL information literacy framework for higher education underpins the study. Through its thresholds concepts, has its own practices determined by knowledge practices and dispositions; the following were revealed by data collected.

As indicated on Appendix B question 6.1 - 6.4 involves information evaluation, this sought to establish the level of students ability to evaluate information based on currency, relevancy, authority and accuracy.

In information accuracy aspect, findings indicated that students demonstrate deficiency; they struggle to find accurate information on their own, only few shows such interest under guidance of the lecturer.

To assess information relevancy aspect, it is unveiled that majority of NUL students are competent to judge relevant information. This makes it easy for them to construct new knowledge.

To assess information authority notion, findings indicate that students are not aware of the information authority and they cannot even differentiate if information is from an expert; students seem to be concerned with information that can quickly address their information needs related to tests, assignments and exams.

Assessing information authenticity, findings indicate the mixed feelings on the matter; it is revealed that the skillset depends on the level of education. The fourth year students, who are involved in projects writing, demonstrate such competency through guidance, with junior students, to them authenticity is something else.

In the light of this threshold, Fullard (2016) confirmed that undergraduate “rarely understand that knowledge is dialogic, that it is negotiated in the discussions, disputes and disagreements of specialists”. The author goes on to explain that the ability to “seek, discern, use and apply information” is fundamental attributes as far as scholarship as a conversation is concerned.

Research as an inquiry

In teaching and learning, students are expected to challenge everything they come across as a way of inquiry based learning, they can either inquire from lecturers, peers and to manipulate different information sources. It can be gathered students show inconsistency in inquiry based learning.

Information has value

The notion of value was displayed in Question 3.1 to 3.5 of Appendix B. The aim was to ascertain the applicability of the reference style prescribed by NUL, thus accurate referencing, plagiarism detection and the measures taken against plagiarized students. Mastery of these issues lead to escape plagiarism especially digital information circles. Basest on the data collected, it is shown that students at NUL, especially in the Faculty of Law, there is a reference style they should follow, whether they are aware of, data reveals that it is something else. The statement gives one the impression that students show poor retention of referencing especially at the lower levels of study, even though students have undertaken these aspects in the Communication Skills Course.

5.3 Conclusion

The chapter dealt with the findings, conclusions and recommendations of the study.

Major findings of the study were presented based on the research questions and theoretical framework that underpin the study. The findings showed the positive and negative discoveries in favour of NUL subject librarians as well as the discoveries that generalize academics and the entire NUL. Findings specified that there is no information literacy curriculum at NUL. Communication Skills course partially intertwined the academics and subject librarians as subject librarians are not involved wholesome in information literacy curriculum, and assessment.

5.4 Recommendation

Findings of the study point in the direction of no information literacy curriculum/ programme, traditional information literacy delivery and assessment at NUL. Findings further point towards the gaps between faculties – librarian collaboration, which affect student's information literacy skills acquisition.

5.4.1 Study's recommendations

Findings demonstrated that there is no information literacy curriculum at NUL; in that case there is no information literacy benchmarking. Subject librarian's qualifications status showed they have a relevant and current qualification to adapt to the current information literacy curriculum, delivery and assessment based on ACRL framework. To cultivate on the issue, the study recommends that NUL subject librarians to adapt to the illustrated information literacy curriculum. Thus this study recommends NUL library to establish a clear information literacy training programme that is delivered in collaboration with academic staff.

Table 15: Learning outcomes (based on the ACRL framework for information literacy) adapted from University of the Western Cape Library (2018)

ACRL framework	Students learning outcomes
Authority is Constructed and Contextual	<ul style="list-style-type: none"> • Use various research tools to locate resources in a range of formats • Identify different types of authority • Evaluate resources using appropriate criteria
Information Creation as a Process	<ul style="list-style-type: none"> • Identify steps in the information creation process • Articulate how information is perceived and valued differently based on its format
Information Has Value	<ul style="list-style-type: none"> • Form questions based on self-identified gaps in their knowledge • Follow ethical and legal guidelines in gathering and using information
Scholarship as Conversation	<ul style="list-style-type: none"> • Seek out the larger scholarly context for a particular piece of information • Identify the barriers to entering scholarly conversations in various venues
Searching as Strategic Exploration	<ul style="list-style-type: none"> • Determine the scope of their information need • Use different search strategies effectively
Research as Inquiry	<ul style="list-style-type: none"> • Form questions based on self-identified gaps in their knowledge • Synthesize information from a variety of sources

Findings reveal that there is a '*blind spot*' between academics and the library in terms of information literacy and its needs. Therefore, the study recommends that NUL should develop a clear information literacy policy which will mandate the academics and the library to develop clear and demarcated lines of responsibilities and expertise for efficient information literacy delivery and acquisition.

It is further found that NUL subject librarians take initiative to improvise information literacy content and they use lecture mode and library tours as their predominant mode of information literacy teaching and learning, it is therefore recommended that NUL subject librarians should use a variety of instructional modes to meet the current digital information dispensation.

It was revealed that subject librarians seemed to be not acquainted to ACRL framework and other related standards. Study recommends that NUL should develop/train

information literacy instructional librarians to hone their skills to apply pedagogical methodologies and theories for efficient teaching and learning.

5.4.2 Recommendations for future research

This study revealed that there is no information literacy programme in place hence there is no specific curriculum at NUL, as a result a further research is needed on the same topic to determine whether a planned information literacy programme is executed to improve student's information literacy skillsets for them to be able to consult different information sources, evaluate information, identify different types of authority, form questions based on self-identified gaps in their knowledge and use different search strategies effectively. Questions raised in section 5.2.1 are also worth pursuing for further research.

Lastly, based on the research questions, objectives and statement of the problem, the study unveiled that there is no information literacy curriculum at TML and that there is non-compliance with any international or regional standard hence subject librarians are still holding on one-shot instruction. There is also a notion of a gap between subject librarians and faculties' collaboration; this hinders students' proper information literacy skills acquisition as it is not certain that librarians are delivering what the lecturers are expecting to achieve students expected goals. It is therefore recommended that NUL subject librarians should establish a clear information literacy training programme, based on ACRL frames that is delivered in collaboration with academic staff.

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Appendix A: Consent and interview schedule for librarians

Title of dissertation

Analysis of information literacy training at the National University of Lesotho

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Research description

This study is conducted as part of my master's degree in Library and Information Studies at the Library and Information Studies Centre, University of Cape Town. It investigates information literacy curriculum, delivery and assessment at the National University of Lesotho.

The American Library Association defines information literacy as a set of abilities empowering people to recognise when information is needed and to be able to search variety of information sources, to locate the required information, evaluate it and use it effectively to address their information needs. Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames.

Participation in the study

I kindly request you to participate in the study through an interview that will take approximately 10-15 minutes. The questions seek the librarians' views on information literacy curriculum, delivery and assessment at the National University of Lesotho

Costs of benefits

There are no direct benefits to you for participating in this study. Nonetheless, it is envisaged that your responses might help to bring to the attention of the NUL library insights on how to improve the current information literacy programme.

Confidentiality

Be assured that any information obtained in this study will be treated with confidentiality. Furthermore, your responses will be coded as A, B, C for anonymity and the data will be used in the masters' dissertation and publications therefrom.

Voluntary participation and withdrawal

Please note that your participation in this study is voluntary. You may also withdraw from the study at any time and nothing will be held against you. You are also not obliged to answer all the questions, especially those that make you feel uncomfortable. With your permission, the interview session will be recorded.

Queries and ethical concerns

Any queries or ethical concerns related to the study may be forwarded to the researcher or the supervisor.

Please indicate your consent by circling 'Yes' or 'No' to the statement below:

- | | |
|--|-----|
| I agree to participate in the study conducted by Ms Limakatso Lefalatsa | Yes |
| | No |
| I agree that this interview can be audio-recorded | Yes |
| | No |
| I have been informed about the study and I understand the information provided | Yes |
| | No |
| I have been assured that I will be given an opportunity to ask questions | Yes |
| | No |
| I understand that I am participating voluntarily and may withdraw at any time | Yes |
| | No |
| I understand that I am not obliged to answer all the questions | Yes |
| | No |

_____	_____	_____
Name of a participant	Date	signature

_____	_____	_____
Name of the researcher	Date	Signature

Interview schedule

1. Librarian's work experience and qualifications

What is your highest LIS qualification?

When did you obtain your LIS qualification?

How long have you been working in the library as a librarian?

How long have you been teaching information literacy?

2. Information literacy curriculum, its delivery and assessment

Curriculum

2.1 In your opinion, is the information literacy curriculum based on any international standards such as ACRL information literacy framework for higher education?

How does it compare with other universities in the SADC region?

2.2 Does your information literacy curriculum incorporate aspects of other key literacies related to information literacy such as computer literacy, media literacy etc?

2.3 In your opinion, to what extent does the information literacy curriculum incorporate the following aspects?

- Information need context
- Research and forms of inquiry related topics
- Search strategies and literature searches
- Information creation and use
- Ethical use of information and reference styles
- Information evaluation in terms of accuracy, authenticity, authority, currency and relevance.
- Scholarly communication, intellectual property and the value of information

Delivery

- 2.4 In your opinion, to what extent is the method of information literacy delivery informed by literature; based on international information literacy methods of delivery; and compares with other universities in the SADC region?
- 2.5 How do you accommodate students with different learning styles?
- 2.6 Which information resources and technologies do you often use for information literacy?
- 2.7 How do you collaborate with the lecturers to assist students with information literacy?

Assessment

- 2.8 In your opinion, to what extent are the information literacy assessments based on international standards? How do they compare with other universities in the SADC region?
- 2.9 How do you conduct your assessments to determine if students have acquired knowledge and understanding of content that was taught? Are your assessments helpful in reflecting students' understanding and learning progress?

3. Information literacy recommendation

- 3.1 Which model of information literacy do you think NUL should adopt; the full credit information literacy course or embedding information literacy in different courses? Would you please share reasons for your choice of model?
- 3.2 Considering the model you are recommending for information literacy at NUL, who would be key stakeholders? How should the librarians engage the stakeholders in the curriculum design, delivery and assessment?

Thank You.

Appendix B: Consent and interview schedule for lecturers

Title of dissertation

Analysis of information literacy training at the National University of Lesotho.

Researcher

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Supervisor

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Research description:

This study is conducted as part of my master's degree in Library and Information Studies at the Library and Information Studies Centre, University of Cape Town. It investigates information literacy curriculum, delivery and assessment at the National University of Lesotho.

The American Library Association defines information literacy as a set of abilities empowering people to recognise when information is needed and to be able to search variety of information sources, to locate the required information, evaluate it and use it effectively to address their information needs. Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames.

Participation in the study

I kindly request you to participate in the study through an interview that will take approximately 45 minutes. The questions seek the librarians' views on information literacy curriculum, delivery and assessment at the National University of Lesotho

Costs of benefits

There are no direct benefits to you for participating in this study. Nonetheless, it is envisaged that your responses might help to bring to the attention of the NUL library insights on how to the current information literacy programme.

Confidentiality

Be assured that any information obtained in this study will be treated with confidentiality. Furthermore, your responses will be coded as L1, L2, L3, etc for anonymity and the data will be used in the masters' dissertation and publications therefrom.

Voluntary participation and withdrawal

Please note that your participation in this study is voluntary. You may also withdraw from the study at any time and nothing will be held against you. You are also not obliged to answer all the questions, especially those that make you feel uncomfortable. With your permission, the interview session will be recorded.

Queries and ethical concerns

Any queries or ethical concerns related to the study may be forwarded to the researcher or the supervisor.

Please indicate your consent by circling 'Yes' or 'No' to the statement below

I agree to participate in the study conducted by Ms Limakatso Lefalatsa	Yes	No
I agree that this interview can be audio-recorded	Yes	No
I have been informed about the study and I understand the information provided	Yes	No
I have been assured that I will be given an opportunity to ask questions	Yes	No
I understand that I am participating voluntarily and may withdraw at any time	Yes	No
I understand that I am not obliged to answer all the questions	Yes	No

Name of a participant Date signature

Name of the researcher Date Signature

Interview Schedule

Thank you for your time once again and for your participation in this study.

1. Lecturer's work experience

How long have you been teaching at NUL?

How long have you been supervising research students at NUL?

2. Demonstrating abilities to consult different information sources.

2.1 Based on the assignments and projects, in your opinion do students at NUL demonstrate ability to search variety of information sources?

2.2 Based on reference lists on their assignments, which information sources do students often consult?

3. Ethical use of information.

3.1 Is there a reference style that students in your faculty are expected to use? If so,

3.2 Are the students aware of the reference style that they are expected to use?

3.3 In your opinion, do students demonstrate accurate citation and referencing based on the prescribed reference style?

3.4 Which systems do you use to determine plagiarism?

3.5 Have you come across students who do not know how to reference or who have plagiarised? If so, what do you do in such situations?

4. Establishing lines of inquiry

4.1 How often are students passive consumers of information in class?

4.2 Do students ever challenge you or each other or debate on issues that trigger further inquiry?

4.3 How often do students ask critical questions or demonstrate critical thinking in class and in their assignments?

5. Demonstrating ability to engage with news and generation of new ideas

5.1 In your opinion, do students reflect on news and current affairs (local, international and global events) that relate to them or society in general when they are writing their assignments or through discussions in class?

5.2 How often students bring new ideas in their assignments and class discussions?

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5.2 How often students bring new ideas in their assignments and class discussions?

6. Demonstrating competency in information evaluation

- 6.1 Do you think students are ever concerned with finding information that is current for their assignments/projects? How often do they cite current information in their assignments?
- 6.2 Do you think students are ever concerned with finding information that is relevant for their assignments/projects? In your opinion, are the students able to judge if information is relevant to their assignments?
- 6.3 Do you think students are ever concerned with finding information that is from an authority source (e.g. expert in the field) in the area related to their assignments/projects? In your opinion, are the students able to detect if information is from an expert in the field?
- 6.4 Do you think students are ever concerned with finding information that is accurate? In your opinion, are the students able to detect if information is authentic?

7. Information literacy collaboration

- 7.1 How do you collaborate with the librarians to assist students to improve their information literacy skills or information related competencies?
- 7.2 How do you think the library should support lecturers to develop the information literacy skills of students?

Thank you

Appendix C: Lecturers responses

2.1 Demonstrating ability to search variety of information sources

Fac/Ins	Responses		
Agric.	Initially they struggle but guidance; they start finding their way [FOAL1]	These days with internet they find it a lot easier [FOAL2]	
Edu	To a certain extent they manage, most of the cited books will be ones you refer them to as you are lecturing. Lately they consult Google [FOE L1]	They do when you have directed them to relevant sources. I always direct 4 th years to JSTOR and EBSCO Host and they give me feedback that they got relevant information. Being directed they are able to ... on their own it is problematic! [FOEL2]	They don't [FOEL3]
HS	Moderately and others don't [FHSL1]	No	
Hum	The lack the skill to search info; our students are very deficient in citing sources because they seem to depend solely on lecturers' notes [FOHL1]	They don't [FOHL2] from 4 th years up to PhD, you have to tell them what is available in the library [FOHL2]	No,
Law	No [FOLL1]	The traditional ones had the competency to go around and come up with information and sometimes they would be bringing information that you as the supervisor might not be aware of. In the era of internet, students are becoming more lazy to go and look for information on their own. Sometimes when the internet does not have information or is down they don't know where to go. The igeneration have a problem with locating issues that are not covered by technology. [FOLL2]	
S & T	Students are not able to search for information; even if you tell them how to do it. They simply	No, I can say it is very limited because I have given assignment that requires them to give supporting information from journal	

	cannot do it easily unless you guide them; and sometimes you help them to look into specific sources of information. [FSTL1]	articles, but it seems they don't know their way around that [FSTL2]	
SS	In the past, they were able to and we encouraged them to. In the e-age, reading is a rare skill. Even if you put resources on the e-shelf they do not utilise that; the problem is that they expect you to write notes. They not show additional readings. What makes it worse is that we upload notes on Thuto which I am against as that is for ODL mode of teaching as students do not come to classes. [FSSL1]	I think they do; and they like copying from researched work [FSSL2]	Sometimes you have to force them [FSSL3]
IEMS	Little ability; they do not have culture of reading and using information sources and putting that into practice [IEMSL1]	Yes they do [IEMSL2]	Very minimal, because in most cases they just copy from one another; they give you what they have google [IEMSL3]

2.2 Consulting variety of information sources

Fac/Ins	Responses		
Agric.	Google [FOAL1]	Mostly internet [FOAL2]	
Edu	They find references on internet [FOEL1]	Library books and internet (Google) FOEL2]	They consult Google [FOEL3]
HS	They consult eResources; they do not vary information [FHSL1]	They use Wikipedia [FHSL2]	

Hum		The consult sources from the internet mostly [FOHL2]	Most of the time they consult Google [FOH L3]
Law	They only use the sources on the course outline, they don't expand [FOL L1]	Internet. In law the problem is that information most of Lesotho cases are not available on the internet. They use information from other jurisdiction that they think might apply to Lesotho and they are wrong [FOLL2]	
S & T	They depend on Google; they don't know that Google is written anonymously, sources there cannot be trusted because anyone can write anything [FSTL1]	Most of the references they provide are websites instead of well researched and published articles [FSTL2]	
SS	They do not; it is difficult to monitor their reading [FSSL1]	They just get references and link them. if they do not do that they go to the internet and search terms that are synonymous to what they are doing and use them as references [FSSL2]	Sometimes they consult journals but they like Wikipedia [FSSL3]
IEMS	Short supply of library resources in terms of hard copy; they rely on any online sources such as social media without necessarily citing the relevant academic sources. [IEMS L1]	Books mostly and not internet [IEMSL2]	Normally Google with text books [IEMSL3]

3.1 Existence of reference style

Fac/Ins	Responses		
Agric.	They have a handbook and it is given to the third years [FOAL1]	They have a manual, so they is a format they should follow [FOAL2]	
Edu	The entire university does not have its style; but education prefers APA and the tendency is to use Harvard [FOEL1]	Not to my knowledge, I am comfortable with Harvard and APA. I do not know if the FOE has a policy. I picked Harvard, in the first year communication skills course, they were exposed to Harvard	Yes, we are using APA and it is problematic because they mix with Harvard in most cases. I don't know if they

		and APA. [FOEL2]	are not well oriented into that. When they do Communication Skills course, but I normally teach them myself so that they become conversant. [FOEL3]
HS	No reference style [FHSL1]	We have adopted Harvard style [FHSL2]	
Hum	No, I don't know of any standard in the Faculty, not even in the Dept [FOHL1]	Yes [FOHL2]	We recommend Harvard and MLA and sometimes APA, but for this faculty we recommend Harvard. [FOHL3]
Law	If it is not empirical study, no [FOLL1]	Yes there is a reference style. Unless it is brought to their attention, they are not aware of the style. Faculty has a course that specifically introduces students to research method required by the faculty. Students are recommended to use the style used in the faculty journal. [FOLL2]	
S & T	For chemistry specifically we have a variety of referencing styles like the American Chemical Society; Royal Society of Chemistry and Maryland European sources of referencing. [FSTL1]	We expose them to Harvard, [FSTL2]	
SS	No, but we are expected to use Harvard. [FOSSL1]	I think Harvard style. FOSSL2]	Department uses Harvard. [FOSSL3]
IEMS	The university does not have a recommended style. They differ from department to department, so every lecturer has their own	APA [IEMSL2]	APA style [IEMSL3]

	style and vary as per faculty. [IEMSL1]		
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3.2 Students awareness of reference style

Fac/Ins	Responses		
Agric.	They are not aware of the style; they don't even take initiative [FOEL1]	They aware [FOAL2]	
Edu	... and they are aware [FOEL1]	No because undergraduates do not know how to reference, of which I wonder if some lecturers do insist of referencing. you find that students just write author and title without place and publisher; they leave all the necessary information and the details depending on the reference style they are using [FOEL2]	Relative aware because they still make mistakes; even with the fourth years; so they are relatively aware because they are not precise [FOEL3]
HS	They are not aware [FHSL1]	They are not; but we teach them before we give them assignments and/or before writing their proposal, we take them through referencing. [FHSL2]	Yes, we teach them at first year, the details appear in our Communication Skills books, of which they are recommended to but that book and use through the year. We also expect them to

			consult it when they are doing assignments, even for other courses in their different faculties. Unfortunately, a good number of them are not able to apply it; they just think it is something for communication skills. Once they are out, they forget about; some are making use of it. [FOHL3]
Hum	Yes, I have introduced them to different styles [FOHL1]	Yes, they are aware [FOHL2]	
Law	I have not met any student, subjected to referencing, so therefore, I am not sure if the students are aware of the reference style. Mostly in Law, we deal mostly with desktop research. [FOLL1]	They are introduced to different referencing styles, they are expected to be aware of them, and whether they take it seriously is a different pot of fish. [FOLL1]	
S & T	When we give them assignment, we inform them which one to follow [FSTL1]	Yes, for fourth years we discuss with them what way with the format because they are not aware. So it has become our norm to brief them on the style.	

SS	I give reference style with course outline for 2 nd years [FSSL1]	They are very much aware, as a dept., we have a research manual which we give to them and they should follow [FSSL2}	Yes, we have a format [FSSL3]
IEMS	APA and Harvard [IEMSL1]	Not quite, they just copy what others have done [IEMSL2]	They are aware, but they violate it so much. [IEMSL3]

3.3 Accuracy in citation and referencing

Fac/Ins	Responses		
Agric.	They are trying [FOA L1]	Most of them do, a few struggle initially; then later on they come to know [FOAL2]	
Edu	They try [FOEL1]	Their in-text citation is not in order [FOEL2]	They are inconsistent; the degree of inconsistency is marvellous may be because some of the content and teaching subjects are in humanities where they are using historical methods or numerical. So they tend to mix Harvard, APA as well as Chicago. [FOEL3]
HS	Not accurate [FHSL1]	They struggle at the beginning; so I ended coming up with guidelines to show them the menu [FHSL2]	
Hum	It is hard to say, all in all, our students, their purpose of learning is different from our purpose for teaching. all they are interested is the	No, they don't [FOHL2]	They try, but not to the standard when we teach them at first. at the end a good

	qualification and less concerned about acquisition of knowledge.		number, demonstrate that they are able. But I don't know what happens throughout the years now because at some point, lecturers from other departments complained to us – what did you teach them at first year. The problem of failing to apply, I think is the main issue. [FOHL3]
Law	Yes [FOLL1]	Not always, sometimes they mention a name they assume you know and they do not do it as religiously as they would be otherwise be expected to. [FOLL2]	
S & T	They try to do that after they have been properly guided[FSTL1]	4 th years because we have a way of discussing, we brief them about the research layout until the reference. They become conversant with that. But looking at the lower class like 3 rd years, you give an assignment and they get their material from other sources; the way they reference shows that we need that preliminary skill [FSTL2]	
SS	They don't practice it I am sure	Not in our cases, they don't take their time. In text citation, they do it haphazardly. [FSSL2]	Yes, that is what we encourage them to do [FSSL3]
IEMS	No, but they are encouraged to do it. They don't do it correctly. a lot of work has to be done to make them do it correctly. Most of them are part time; so they do not have chance to ensure that they do it correctly as we are mostly we are offering Diploma course which does not require to do cross writing hence they do not get enough chance to compare, appreciate the differences in	Yes, in their Communication Skills course in first year, they are taught how to reference and to cite books [IEMSL2]	No, they don't [IEMSL3]

	referencing systems [IEMSL1].		
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3.4 Plagiarism detection system

Fac/Ins	Responses		
Agric.	There is no system [FOEL1]	I have not used any [FOA L2]	
Edu	I expose a sentence or a paragraph on Google; but the University does not have one [FOEL1]	I don't use any systems in terms of software. I place a statement or phrase on Google [FOEL2]	The university unfortunately does not have any system or software. You just detect plagiarism because you know the calibre of students and often they cut and paste [FOEL3]
HS	No software[FHSL1]	None actually [FHSL2]	
Hum	There is no system [FOHL1]	It is not this month when the plagiarism detection software was given to us; not even given, we were made to sign those who want to use it. [FOHL2]	We have a policy which the university has come up with but effectively is not yet implemented of which we hope it will bring the software. So we don't have the software to detect plagiarism. right now it is up to lecture to detect plagiarism like Google it; but you need a software to make it easy [FOHL3]
Law	We don't have a system honestly [FOLL1]	This is a challenging question, the university does not have a system in place to detect plagiarism. I am aware the library is introducing a system or a facility to use if you apply to this facility, it will help you to detect plagiarism. in the past students would just	

		plagiarise unless the examiners will be conversant with the matter. [FOLL2]	
S & T	We did not have any system, but about a month ago, we received from the library they have acquired a system called UrKund Plagiarism Software. Other than that the only way was to look at the content that they have written to see if they are the ones that wrote because we know the capabilities of our students [FSTL1]	I cannot say is a system [FSTL2]	
SS	There is no system, I use my own discretion [FSSL1]	Unfortunately we don't have one, it just that case that as a lecturer, you read here and there; in most cases the flow will not be there, so you read it and get a sense of plagiarism since text will be thrown in a haphazardly. [FSSL2]	Unfortunately you use your own practice; I just saw a software two weeks ago, that we are going to use. But before then, we did not have any. [FSSL3]
IEMS	There is no system here, you have to work hard to detect that there is no plagiarism [IEMSL1]	There is no system at the moment, but we have heard about the software [IEMSL2]	So far none; we just copy and paste a paragraph on Google to determine plagiarism [IEMSL3]

3.5 Plagiarism disciplinary action

Fac/Ins	Responses		
Agric.	We force them to repeat their work [FOEL1]	Yes, I tell them that is unethical and return it and request they do it again [FOAL2]	
Edu	I take the student to disciplinary committee [FOEL1]	A lot of students. I simply write the web address and do not award marks in order to discourage copying [FOEL2]	Yes definitely, in most cases because they are 1st years, I talk to them and direct them to re-write. It is a sin on innocence because they are new to the university. But with 4 th years, I have not had that experience, but I feel if 4 th year can plagiarise, they deserve a zero because they have been in the system for the past three years. [FOEL3]
HS	I am surprised they have done research methodology course; but they are still struggling to reference and I make the repeat their work [FHSL1]	I sit them down; if it is a reference, they should do the assignment. [FHSL2]	
Hum	I have come across a number of students who have copied, I sit down with such students to account for this information, so we also make them re-do [FOHL1]	Most of them I nullify their work because I would have shown them that to start with as a lecturer you know your students. it is part of mysterious knowledge where by you can tell if this is your student writing or not. For instance, when they plagiarise, they often include irrelevant information; they copy everything and paste it. [FOHL2]	Yes, a lot especially at 1 st year because they are still learning how to do it. I discourage them from plagiarising and encourage the to do it the right way, to acknowledge, to paraphrase and not take everything all ta the time. Although it is a skill that needs time.

Law	Yes once. We do not award marks and consult students to do it. [FOLL1]	Yes, I have come across them. I punish them by giving them a zero and it depends on the degree of plagiarism in respect of a dissertation, we sit as Faculty, in terms of assignments students have to redo it. In respect of the dissertation the faculty would decide [FOLL2]	
S & T	We have come across that a lot, when we find that a student has plagiarised we award a zero for that part because an assignment has different criteria when it comes to referencing regardless of good information they have. if they don't acknowledge they get a zero.[FSTL1]	Yes, but I believe, they are not aware that it is allowed to take something from a source but should be acknowledged. I feel they are not informed about plagiarism. I sought of explain in class how to quote. [FSTL2]	
SS	I return the work back to students, but not in the assignments because there is no time. For projects, I simply return the work [FSSL1]	Many times, even in the examination, when you have given tests and you are marking; you can see there has been copying. I am telling you because they have their phones, you can see that there is copying. As lecturers we read widely we read a lot and are aware of the literature, then it becomes easy to determine plagiarism. [FSSL2]	Yes. a lot. You just return it so that they can paraphrase and cite the sources. [FSSL3]

IEMS	They do it quite a lot [IEMS L1], and I get back to them and make them correct their work. [IEMSL1]	Most of the do plagiarise as they copy and paste. So sometimes, I instruct them to re-write and they are aware that plagiarism is a serious academic crime. [IEMSL2]	We gather them together, show them how to paraphrase and make them re-do with some guidance and assistance.
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4.1 Passive consumption of information

Fac/Ins	Responses		
Agric.	To some extent when you pressurise them to read more, they begin to throw back new innovations [FOAL1]	They are generally passive [FOAL2]	
Edu	They are more often than passive, you will see by their actions. You enter in a classroom, you open your mouth, and they start writing that is how NUL students are. They don't ask questions, they rather take notes from what you are saying, they regurgitate when it comes to information unless your teaching style forces them to participate [FOEL1]	Every day they are passive and they get bored when you engage them. They are in a hurry to take verbatim what you are saying so that they can reproduce [FOEL2]	I am surprised to 4 th years are participatory; we spend most of the time talking. For 1 st years a relative small number, most of them are passive learners. The culture of a teacher is transmit information to them still prevails, they do not see learning and teaching as a two way process. Much as one can encourage them, they have a fear of to talk in great number

			[FOEL3]
HS	Three quarter of class are passive, they don't argue concept. [FOHL1]	Not that often, even though there will be an exception that you will find that their hands are up. [FOHL2]	
Hum	More often than not they are passive; it is something I have been struggling with, how I balance the need to cover the syllabus and the need to allow students to reflect on certain topics. For the 1 st years it is hard because they are meeting me for the first time. Your style of teaching, the so called student centred learning, to ask students to reflect on a certain topic can take longer particularly in larger classes. [FOHL1]	Many times, our students are passive. We always fight about that, they are never actively involved in learning process. [FOHL2]	It depends, in my case mostly I teach communications skills, I have grammar causes with senior students. With 1 st years, with communication skills we interact a lot, we take the tutorial approach where we have some discussions; you will find that they ask a lot of questions. But with senior students, you find that we use lecture approach, they sit there listening and taking notes. [FOHL3]
Law	Seventy percent of the times are passive. [FOLL1]	This question should be understood on the basis of resources available in this university. More often than not students are expecting to hear from the lectures, the reason being we do not have adequate research and library information sources. [FOLL2]	
S & T	Most of the time, I think it is because of their background and workload at the university, the system is in such a way that students are always in class, so they don't have a way of going out	I have a different style of teaching; I don't just stand there for 50 minutes and go. I make the class to participate in every way, I force then leave. I even tell them what we are going to learn in the next class, I even pick them because I want them to	

	looking for information. [FOSTL1]	participate.	
SS	Very often students don't read they take everything verbatim. [FOSSL1]	All the time they don't even want to ask questions, they don't even comment, they are passive. [FOSSL2]	They are not passive consumers; they engage in discussions, interrogate and question some of the issues. [FOSSL3]
IEMS	They are active to some extent [IEMSL1]	They participate as most of them are adult learners with experience. Most of them participate voluntarily. [IEMSL2]	Almost 80% of them not passive [IEMSL3]

4.2 Challenging debates and issues for further inquiry

Fac/Ins	Responses		
Agric.	Yes they do [FOAL1]	Not really [FOAL2]	
Edu	It all depends on your teaching style. My teaching style, I will ask them to go and read about a particular concept the next thing I tell them to present. The course forces them to reflect. [FOEL1]	They are trying in some cases, but through your prompts as a lecturer to force them to talk. But the issue of challenging I give up because it does not mean that my word is final, especially because I am teaching a controversial issues on how to teach a subject, because also have their views of how to teach a subject. They have gone through schools, they have their own ideal teacher they can challenge what I can say but students just want to pass that is all. [FOEL2]	4 th years are wonderful, we debate and they challenge. 1 st years are not. [FOEL3]
HS	Yes they do sometimes, it happens when they do	Yes they do I normally give them group	

	presentations. [FOHSL1]	presentations. [FOHSL2]	
Hum	I am forcing them to that. Their ability to express themselves in English scares them away of challenging their teacher. There one or two who ask questions and can even voice something from what you are saying as a teacher. [FOHL1]	No you have to probe in order to bring it out, they don't do it voluntarily. [FOHL2]	Yes you find that there are some few individuals that they are like that, like 3 rd years grammar cause there were one or two who are very active, and they would always ask questions even bring something new you were not researched on, that would trigger debate, I even ask them to go and do further research. [FOHL3]
Law	Yes they do. [FOLL1]	Students of law, typical of them, they are very argumentative. All in all they do, they even challenge your content, and they would say this kind of thinking is old mentality. [FOLL2]	
S & T	Yes because of the fact that they are consumers, they challenge very little. [FOSTL1]	They do challenge even me in a very humble manner, but in a lot of instances I have realised that there are some questions they would ask, and they make me jealous they have a critical thinking of some sort. Such questions say to me, at least they are listening and they become inquisitive at one point. [FOSTL2]	
SS	Not lately, occasionally, I then learn that students don't read as a lecturer I am able to triangulate. Students cultivate point of perception therefrom. They can't even follow what you are saying. [FOSSL1]	No in fact no. In the past I experienced few when you encouraged them to ask questions, they would not ask and if they don't do well they come out to complain, that is the time they do ask questions. [FOSSL2]	Since they don't want to ask questions, they won't even debate, we encourage them to talk amongst themselves, and we put them into groups. [FOSSL3]
IEMS	To some extent not all of them. [IEMSL1]	They do, and you find that working groups compete amongst themselves or working	They do debate which a healthy thing is. [IEMSL3]

		groups. [IEMSL2]	
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4.3 Critical questions and critical thinking

Fac/Ins	Responses		
Agric.	When they are in practical sessions they do but in class they are shy. But when they are in an open environment, they are showing that activity. [FOAL1]	If they don't understand something. [FOAL2]	
Edu	To be honest with you very rarely does one come across a student who would demonstrate critical thinking and ask. It is strange that you are asking this question because a day or two days ago we were talking about typical Basotho, that as Basotho a question why is not asked, the impact of not asking that question, especially to people we are training to become teachers, that they don't tend to ask that questions when you research you find that rarely do teachers ask the question why, and the why question is one of the most questions that make our students think deeply and become critical learners. It is not common to that you come across students who are critical. [FOEL1]	They become critical when they cannot grasp a theory and have a fear of failing. I cannot say it is a critical analysis of a phenomenon; it is just that they want to understand the issue for the purpose of passing, not because he/she is questioning the applicability of that or the meaning behind that. [FOEL2]	They do, especially 4 th years, because I have told them that the cause I am teaching is to training them for sociological imagination so they have to question and them practicing that. [FOEL3]
HS	Not very often, they are waiting for information from the lecturer [FHSL1]	Not that often, you see the difference when they get to 4 th year, they start thinking critically about things [FHSL2]	
Hum	Few of them, I remember in the 3 rd year, are beginning to appreciate [FOHL1]	They do it scarcely and rarely [FOHL2]	It depends which they are addressing; but you find that this is a skill which proves to be very difficult for majority of

			our students. Even when the question requires them to critically to deal with or requires them to assess something most of them just narrate. That skills seem to be difficult, but the brilliant ones and good ones will do that [FOHL3]
Law	On assignments, it depends on the nature of the question. if the question requires critical analysis, then the students will critically analyse. if it is a test, asking them to apply the law will critically apply the law. if it is descriptive, there is no critical analysis. In class 30% of time we ask critical questions [FOLL1]	They do [FOLL2]	
S & T	I would say less than 10% [FSTL1]	Not often, but when they do I sough of complement them to show that they have critical thinking. I complement them so that they see how constructive they are [FSTL2]	
SS	They don't think critically, the problem is the coming in of electronic age. Knowledge is accessible on the media and internet. Researched material and library databases are not accessible; you have to be logged in. Cyber points are restricted and well facilitated [FSSL1]	Some of them, I can tell ask very brilliant questions, I think it varies, no matter what you come across students who are very serious minded, who know why they are here, and you can see when you are marking; they are writing interesting information and there are things I learn from some of them [FSSL2]	Our students are very lazy, even when you ask a question that requires critical discussion, they simply narrate and do not critically discuss. [FSSL3]
IEMS	To some extent, but not all of them. There will be handful participants in class, who will ask helpful questions and who will think beyond. [IEMSL1]	When given assignments, I always instruct them to critically interrogate with issues they are dealing with [IEMSL2]	Both ways, as often as we give work. [IEMSL3]

5.1 Reflection on news and current affairs

Fac/Ins	Responses		
Agric.	Yes, they reflect but not often, probably because they are still on traditional way of living. We don't have opportunity to this interactive means of teaching and learning. We don't even have any of these infrastructures to allow that interaction. [FOAL1]	They are very poor in consulting [FOAL2]	
Edu	Not at all, I do not know in other courses that require students to read; in my case, I I would say let us discuss drought and reflect. You find that they do not even know about that problem [FOEL1]	Not in their assignments, but in class they try, like these past months since we had a volatile political situation in the country, they seem to reflect, but they do not do it voluntarily, you still need to probe and trigger on certain issues, that is all what they can, other than that no. Even with the education policy, the debates that are being raised by the members of society outside, they are not bothered. Unless you raise such issues, they panic when they are going to teach, their interest is to pass only. [FOEL2]	They do not because they normally tell me the relevance of what we are doing to their day to day life. Maybe the subject I am teaching is a bit more practical because it is on the social behaviour and social institutions, so they see the practicality in every day to day business they do, and they are very much reflective because they come up with models explained, concepts and theories. [FOEL3]
HS	They do not, our programme is environmental health, you need to listen to the news and watch	They don't. For example; there was this MMR Vaccine where children started reacting, I talked about and they were looking at	

	a television, but they never do that, they are lazy and 5% of the students are capable of doing that. [FOHSL1]	me as if they are saying what are you talking about? [FOHSL2]	
Hum	I think it reflects on us as teachers, do we give them an opportunity to reflect on even the way we set assignments and tests; do we give students opportunity to reflect? They are aware of what is happening because some of the questions force them to reflect. {FOHL1}	We try to contextualize things that are relevant to them of course when we assign them tasks but for them u you don't see that element of being observant and of caring about what is happening around them. {FOHL2}	They do but not much, maybe is because of the generation we have now, I don't know if they are following news that much because there are a lot of things that are entertaining them like social media, watsp and face book. You find that they are mainly focusing on communicating, interacting and socializing yet these news and current affairs is important area for learners and you find that most of them do not take them into account. [FOHL3]
Law	They do but not so much. E.g locally, the news are politically affiliated, so we try to avoid news that are politically affiliated. But what they refer to in a case of law is cases, so cases are current affairs. If the cases in the court of law are subject to discussion, we are not afraid of politics to the extent of cases they do refer internationally, globally but mostly nationally	Before 1999 programmes, we had bachelor of arts in law which was amalgamation of law and other courses from other disciplines. Students would incline to follow current affairs. After 1999, there was a curriculum review which whittled down the crosspollination we used to have. Most of the courses are now law oriented as students are concerned with reading judgements predominantly in the library. They are hardly ever seemed to reflect any appreciation of how other courses inform	

	and South African. [FOLL1].	their own studies. They tend to concentrate on law, but in that area, I am confident to say that as far as it relates to issues concerned with law, they are able to look forward. [FOLL2]	
S & T	No they don't. In class I sometimes ask them about something which trending in chemistry. E.g I was asking them did you hear the new president of America is craping an Environmental Protection Agency. They don't know. [FOSTL1]	Not really because some of the things even if you day this was on the news or newspaper, you find that they are not aware. I even ask them where do you live. They would simply answer that they don't have time to look at things outside their course outline. Sometimes you find that in the science field they fail to they are not obliged to know what is currently happening around them. [FOSTL2]	
SS	Not at all. Students in development and political geography were not even aware that the Lesotho parliament was opening on last Friday. They do not listen to the current programmes. [FOSSL1]	No; all is about social media related, you usually say go and look at what is happening in stock market, it is only then that they ask something sensible in relation to what you asked them to do. [FOSSL2]	Not at all, even if you ask them what was being said in the news, they tell you that they don't listen to the news. I think the generation we have does not care about the current news. [FOSSL3]
IEMS	They don't [IEMSL1]	Some of them, not all. Students differ; some are able to expand on the issue while others are just moderate. [IEMSL2]	They do, but mostly Facebook, but with little analysis. [IEMSL3]

5.2 New ideas in assignments and class discussions

Fac/Ins	Responses
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Agric.	When they are doing practical's in the field they do that; but in lectures they are not showing that ability [FOAL1]	Not quite often [FOAL2]	
Edu	More often than not, students regurgitate the information. It is very rare that you come across innovative students. Let me give you an example of an assignment. One of the students was presenting about a mother who had twins and one of the twins was living with albinism and the other one without it. As a classroom supervisor you would not believe that all students used that example. I was literally shocked to what an extent would you say such people think. They can't look for similar scenarios even if it is not exactly the same. [FOEL1]	They don't, unless I am biased, the reading culture of our students is limited because ideas from reading list, radios and tvs, and they don't have interest in them. I don't know what they discuss on Facebook that they can't bring it into lecture. [FOEL2]	In class the questions they ask you see that these students try to come up with their own theories. In the assignments, the information they share with you is really amazing.
HS	Not often, very rarely. [FOHSL1]	Not that often. [FOHSL2]	
Hum	Very little, some of the assignments we give are simply a reflection of what other people say; sometimes we give assignments that require them to demonstrate what they gathered. [FOHL1]	In a very limited manner like I said, they are not keen readers, they are not extensive readers. [FOHL2]	It depends with students, some do some raise new ideas, some are interested in observations, they are two groups or two calibres of students, some are active and they bring new ideas but some are not really active. [FOHL3]
Law	5% of the time they bring new ideas. [FOLL1]	Yes they would bring that many times but based on what they would have read in judgements pertaining to other countries, that are not being informed by current affairs, but informed by	

		having read judgements. [FOLL2]	
S & T	Very little again, they simply regurgitate what you have told them. [FOSTL1]	They do but in a very limited skill. [FOSTL2]	
SS	Not in assignments because they copy and paste, we therefore prefer tests because they do not bring digested information. Assignments are used as a makeup students copy. [FOSSL1]	At times, when you give them assignments, some of them would go to the greater length on some of the things you said in class they make some research and be able to write something. In most cases you would see regurgitation of all you have given them, they would just write it the same way you have conveyed to them because some of them would just listen when you are lecturing, they are just writing and they rely on them. [FOSSL2]	I am afraid to say zero but they don't care. [FOSSL3]
IEMS	Students differ, when you deal with a large group of students, there would be a significantly a number of few students who would think critically and bring new ideas, while others do not show that ability. [IEMSL1]	Some regularly do, but as I said earlier they differ, few chosen individuals are able to. [IEMSL2]	They are just average. [IEMSL3]

6.1 Information currency

Fac/Ins	Responses		
Agric.	They might be showing that ability because they are introduced to the electronic library systems. We have a semester course that they have to present every week. So we believe they present new articles [FOAL1]	They are poor in that, most of the time their information is outdated [FOAL2]	
Edu	I find it difficult to answer that question, I am 16 years in teaching, but at time, I don't think students are keen to do research and look for information. I could also say negative blame	Not current information, except for the information they take from internet, even when emphasise that it is not everything that is being on the internet that is credible, you must look for journal articles, things that authentic in terms of knowledge they	Relatively a few are, like I said earlier, they still rely on out dated information, you find

	depends on us for the type of assignments we give them. Whether they require students to enquire and be conversant with the current theories in their own disciplines. sometimes students would not go out to look for information FOEL1]	just don't do that. They don't even read newspapers. For example; I have a current newspaper, there is a related article for their course, I said they must analyse and use it as a basis for their assignment on relevance of curriculum on accounting in this country, it was Autumn to them. [FOEL2]	that references ranging from 2008 onwards are very few; the current ones ranging from 2014 to 2017 are very few. To them the currency of information knowledge does not matter. What is interesting is at times they would cite the website without the author and title that is very common they even use unreliable websites like wiki. [FOEL3]
HS	You should direct them, you should prompt. They do not explore, they are not actually concerned indeed. [FOHSL1]	No, not that often. It is a problem for them to find current information. [FOHSL2]	
Hum	For them there is no difference between current and old information. Maybe it is the little emphasis we put as lectures on the importance of reading current information. The ability to consult current information has a reflection on us teachers, as a result they just go to the library and get what might be possible to them, but with those who are doing projects, I specifically tell them to read articles from 2001 to date. [FOHL1]	That would have been part of the rubric, because when you give them assignment, you channel them in a way to the timeframe from where they can get information, we don't allow them to use out-dated sources. They do it always because it part of the rubric. [FOHL2]	Not much, they are supposed to do that, but a good number is doing that, but you find are not maybe is because unavailability of sources sometimes they find it difficult to access, sources they end up using information available, sometimes out-dated text books as long as it is relevant they

			use it without limit. They do fairly. [FOHL3]
Law	I have never seen that interest. I don't know whether it is because they lack interest or waiting for direction from a lecturer to direct them to go and find something. It is rare, a minimal percentage or those who are brilliant go and find, but in general they don't. [FOLL1]	Some of them yes, especially new decisions of the superior courts, once we have a decision that depart judgementally from a previous decision, they will take it up. They seem to demonstrate some interest there. [FOLL2]	
S & T	They do that very little like I said earlier, they use Google, which will return 1000s of responses , they just take the 1 st without looking at source, and how update it is, by chance they find a journal article through Google Scholar, they just pick even 1934 publication. [FOSTL1]	Not really because when you give them assignment, you give them an opportunity to explore widely, and more often than not, they will use material that you gave them in class. Even though we give them chance to expand because in class we just give the basics and expect them to read further, I think that mentality or culture is not yet instilled. [FOSTL2]	
SS	They are not, crisis is the culture of society, society no longer values academia they value a degree (qualification) as far as it is entitled, award of a certain degree. Students don't go to class, when you run a test you see new faces. Putting things on Thuto will aggravate everything. {FOSSL1}	Only few of them, not all the time it is something which is general knowledge, they don't take planes to do research. Our students don't want to go extra mile to learn something new and maybe come to class and ask sir; look at this even though we have not talked about it, they are few of them who go beyond what is on their range of course outline, those ones just show all type of attitude we did not do in class. [FOSSL2]	If you do say they should do so, they won't do so, the honour is on their lecturers to find out new sources and to point them to sources, they will not. If the lecturer knows nothing about current information, students will not know, it is up to the lecturer. [FOSSL3]
IEMS	They don't, to some of them there is this expectation, and we make them aware that they should start visiting library and use academic sources. At this era, you can also assume that	Not all of them, but there are those learners that are intelligent enough to cite current information issues and information. [IEMSL2]	Below average, most of them rely on text books and notes. [IEMSL3]

	students are able to use smart phones and can source current information. [IEMSL1]		
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6.2 Information relevancy

Fac/Ins	Responses		
Agric.	Yes they do, sometimes their work does not show that they are able to judge [FOAL1]	They can judge when information is relevant, but finding current information is a challenge [FOAL2]	
Edu	May be because they would in the library and look for information; I have not come across a student who has used a completely out of relevance source [FOEL1]	They are, otherwise they would not give us this information from internet. [FOEL2]	They do indeed. They just don't know the kind of information that has to be used. They are able to judge because even when they cite a website, it is because the information is relevant to their topic or assignment; it is just that they are not aware that this cannot be cited as is because we need an author, date of publication, publisher and place. It is quite difficult to reference even to cite. [FOEL3]
HS	Very little, they also judge very little, they want to be theoretical not practical. [FOHSL1]	I would say no, for instance; in an assignment, you can see a trend of students who used similar references, when you read	

		you find similar information right through. [FOHSL2]	
Hum	I don't think so, in the first place they don't even understand. Every time we have discussions I select articles that are not too technical. Ability to read is very low; therefore ability to read rigorous articles is a disadvantage. [FOHL1]	Not that much, our type of students are not individual self-driven students, they don't have that spirit, they do it because you want them to do it that way, not because they would be voluntarily deciding on doing it. [FOHL2]	A good number are able to, the weak ones can't do you will see that this information is taken from the internet, but is not even relevant to what a student is writing, they just take it with referencing just to fill the page, you start wondering the relevance. [FOHL3]
Law	It all depends on the level of education and understanding. There is a difference between 5 th years as they are able to find information and are interested in searching, but at the lower level they are interested in what you feed them, if you don't feed them they don't search. [FOLL1]	Some of them yes, some cut and paste certain irrelevant information from internet. Others will be especially in respect of problem questions they tend to use information we have in the country and apply new information they come across. They show interest and dedication in the analysis of such judgements. [FOLL2]	
S & T	Not so, they are not able to judge, they bring everything, to them is like a relief if they find information. [FOSTL1]	I am thinking because I also myself realised when I was furthering my studies, we tend to use old information. We don't have that culture from younger generation, it sticks with students and they don't develop that culture of judging information, I think it is something that should be instilled at younger stage. [FOSTL2]	
SS	It all depends on the type of information. Take academic and non-academic information, social media is not gone for rigorous processing, they have to differentiate types of information.	Yes , some of them do, in most cases some don't bother to do that. To some extent some are able to judge but is not many of them because they would just take it as given and won't even challenge it, but others can reason up with you. [FOSSL2]	They are concerned, they use their cell phones, not even going to the library. Like I said; they are passive they

	[FOSSL1]		don't have time to doubt. [FOSSL3]
IEMS	They are concerned in meeting the teacher's demand, that's all. [IEMSL1]	They are most often. [IEMSL2]	If the work is rejected, then they begin to be concerned. Normally you will see that aspect comes in when you return their work. [IEMSL3]

6.3 Information authority

Fac/Ins	Responses		
Agric.	Yes, they are finally learnt that information is from authorised, peer reviewed journals; they are showing that when they are citing. [FOAL1]	They are able to judge that [FOAL2]	
Edu	I have not had that opportunity to look into that or to research the extent to which students are able to do that. FOEL1]	No, even when you say authentic information, knowledge that has been researched, they don't consider that I have emphasised that I strictly require information from books and journal articles, they keep on giving you whatever they come across from internet, they completely cannot judge. [FOEL2]	That is a problem, when you quote a website; a website is not an authority. I can't say they are able to. They just look at the information they need, its credibility, authenticity, relevance and what have you are out of question for them. [FOEL3]

HS	They don't know how to consult, unless the supervision directs them to look for such information, it happens very little.	To be honest they are lazy, they have this spoon-feeding mentality. No, they don't judge because some time I go through them to show how to reference. I am teaching them what I have to teach them, as long as they graduate, I don't mind, I have to do it. [FOHSL2]	
Hum	I don't think so, for them the term expert in the field could be difficult, they could hear me talking about it, sometimes YouTube's have particular person I direct them to such, they don't go beyond what I have presented. [FOHL1]	They do make an attempt to do that one; they want a quote from authority they are not sure of. They are not able judge, it is through the guidance of the lecturer that they would know whether that is an expert in the field or not, for them it would not be an expert because they don't know. [FOHL2]	We are trying to teach them that they should be able to evaluate the source especially the internet whether it is an acknowledged authority or is just someone wrote and posted it. This is still a difficult skill that they are struggling because most of them believe whatever is written is the information.
Law	At the beginning of the lecture we let them know who the potential authorities are, we even make them aware of certain websites that are not authoritative, they do listen to cite the authoritative sources, if by mistake they cite authoritative, we highlight they should strike it out. [FOLL1]	I think so, especially senior students, they can be very aggressive to that, if you tell a particular book says this and that; they say "who is the person, where was he educated, they would even say that information is not just the opinion of the learned author. These are senior students; they are progressing to become real lawyers. The lower classes take whatever comes on their way, so the lecturers have to be very careful to try to sensitise them of what is expected of law students. [FOLL2]	
S & T	No they are not, they just want to submit.	To a limited extent. I may not say they are able to detect if information is from an expert because for them just gathering	

		information is problematic. [FOSTL2]	
SS	To them authority is anybody who has penned down information, and they are not able to detect if information is from expert. [FOSSL1]	Looking at our students in relation to authoritative sources, I can say some of them try to do that but only a handful. Majority will fall in a category of everything is ok. [FOSSL2]	If you don't say so, they will not. They don't care whether whatever you give them is from an authority or not. They are lazy to read, even if you put the material on reserve, you will read it yourself. [FOSSL3]
IEMS	The use of information source is quite a rare skill and there is too much room of development in this regard let alone appropriate or authority sources. I wonder if they could understand when talk of authority because everything to they come across is information. [IEMSL1]	They take authority but never challenged it. Not quite really can they detect if information is from an expert. [IEMSL2]	Yes, they are aware of authoritative information. I am not sure if they are aware to detect if information is from the expert. [IEMSL3]

6.4 Information authenticity

Fac/Ins	Responses		
Agric.	I think they do. At BSc level the follow the principle and they don't know whether it is the right. Students are not able to detect information authenticity [FOAL1]	Yes, to some extent, Since they know when information is accurate, they should know if information is authentic. [FOAL2]	
Edu	Just part of teaching that goes on during Communication Skills course in First year. I have not got any opportunity of knowing what is	I have insisted that I want information from curriculum studies journal, journal of curriculum or curriculum inquiry, trying to limit them to information that I know it is authentic, you cannot	Accuracy yes, they have accurate information and they bring it forth,

	being taught in that class. But I assume that if they were taught on how to look for authentic information, they would be in a position to do that. [FOEL1]	believe me they never cited articles from those journals. [FOEL2]	that supports their arguments. Authenticity is a problem for our students. [FOEL3]
HS	No accurate information, they are concerned with writing and submitting and they hardly detect authentic information, they need to be spoon-fed. [FOHSL1]	No I think they box information because we have ELG course in 1 st year which has to teach them all these things you are asking about. They leave the 1 st year stuff behind when they proceed to other years; you have to take to ELG again. They can't detect expert in the field that is why they give me information from Wikipedia. [FOHSL2]	
Hum	It is limited by ability to understand and that limits the ability to evaluate. [FOHL1]	They are concerned of finding it, but the problem is they don't find it, they think it is accurate though it might not be the case, but they would have made an attempt to find accurate information. They are not able to detect if information is authentic. [FOHL2]	Some are; the good ones or serious ones but others are not very much concerned, sometimes they just want to fill the pages, they just want to put everything together. For authenticity, that one I think it expects too much from students. [FOHL3]
Law	I don't think they are, probably 5 th years are while the rest are not.[FOLL1]	I cannot say, as accuracy is something else. Majority of students do no go for accuracy they go for relevancy. Sometimes they consider a particular issue relevant and not accurate, they bring it in because in their view is relevant to what they are doing. I don't think in most cases they do that except final years I suspect they are supervised and guided. Junior students are largely concerned with relevance not accuracy and authenticity. [FOLL2]	

S & T	They are not concerned at all. [FOSTL1]	No; what I have seen of interest to them is that if question wants them to get certain about something, they do what they are expected to do; they just want to fill the pages whether it is authentic or not they don't even bother thinking. [FOSTL2]	
SS	Social media has finished academia; information from reliable sources is stiff and boring. Extending the margins of truth; spicier information, the more authentic to students. [FOSSL1]	A few of them, anyway my courses follow standards where you have to derive information from those standards, for that one they don't go and read. I always encourage them to go and read further and they don't like buying text books, they would all read. The books we have in our library are nothing to write home about, some of them have gone back with time, we need new books and we don't have them, some of the students don't even bother to go and check whether there new books in the library. [FOSSL2]	I think so in a way, because they know that if it is not accurate you are going to see as a lecturer. I doubt with the authenticity. [FOSSL3]
IEMS	I think my previous response applies to this question too. [IEMSL1]	Not all of them are ever concerned. [IEMSL2]	On the average yes, they are concerned but when it comes to authenticity no. [IEMSL3]

7.1 Collaboration

Fac/Ins	Responses		
Agric.	Our library is beginning to help a great deal. Our students are not really grasping the significance of electronic library. The library and Faculties are upscaling, even with teaching in workshops. So that is helping students and staff. [FOAL1]	We normally send them to the library to go and consult, in case they do not understand anything. [FOAL2]	
Edu	I collaborate with the library by inviting by inviting from people from outside like Elsevier to	There is a subject specialist for our faculty, I always refer students to her, and they always say they can't find the subject	There is little collaboration because

	<p>run workshops on resources, I know that people from the library participate in such workshops and information they get they would share it with the representations of the faculties and representations share that on boards, the expectation is the faculties would then share such information with students. [FOEL1]</p>	<p>librarian. [FOEL2]</p>	<p>students are just brought to the library during orientation, thereafter nothing happens as to whether they are able to find information or not. Besides it is just the matter of going to the subject specialist in the library which I don't even know whether they know that there is such because I have never been to their orientation. What I do when I put material on reserve shelf I just take them to the library to show them where the material is. [FOEL3]</p>
<p>HS</p>	<p>I have never approached any librarian, we are just given a list of subject specialists, I will approach the specialist to order some books for my course. I am aware that students don't use the library. [FOHSL1]</p>	<p>I don't even know how. There is one person who represents our faculty in meetings; recently we are given a silent list of librarians. I am saying the list is silent because I don't know what to do with it, no one said anything about it. I don't know what they do there, I honestly know nothing. No one said anything about this list, so I don't know whether I should give them a list of certain books to buy or do I just ask them to take my students to the library, I really don't know, what it makes worse is that library staff is not user friendly, I experienced that while I was a still a student, I will just sit here with this list and continue</p>	

		teaching my students. [FOHSL2]	
Hum	<p>Situation has been much easier for us now. Specific individuals who have been allocated responsible for particular departments. I can now interact with a particular person in the library which I did not do before, so I am thinking of the ways of utilizing that facility by sending my students to such individuals earmarked for this discipline. [FOHL1]</p>	<p>We run a course on communication skills, parts of that involve library skills, we take an initiative of taking students to the library collaboratively with the library staff, they take them around the library we call it library tour, they are familiarized to the use of the library by these units working together, our unit and the library. [FOHL2]</p>	<p>As a unit we make arrangements every year for first year students to be given some teachings at the library, they receive oral teachings as to maybe know where to get sources, they are taken around to have library tour to be shown different sections where they can get different types of sources but it is just for an hour or two which we feel it is not enough considering all what we have been discussing, we need the librarians to help a lot to teach our students about these issues of assessing and evaluating information looking at the authenticity and other things even the search engines that are there they can use, there is a lot they could get from the librarians but</p>

			we don't have enough time. [FOHL3]
Law	I liaise with the librarians to order the most relevant books on store. I also ask for activation for helping students to be helped by using Lexis Nexis for sourcing. [FOLL1]	Collaboration is predominantly minimal in this university. When students first come to university during orientation programme, they are taken to the library where librarians are called in to introduce them even taken to a conducted tour in the library. [FOLL2]	
S & T	As a lecturer it is difficult because we have been told that there is a subject specialist at the library, you come up with something, you don't find help. As part of administration, there was one time I was a pre-entry coordinator, I would invite the library to come to talk to students about the library and what type of information they will get. When it comes to subject specific matters they are not up to scratch. [FOSTL1]	To be honest, I have not done played that role, we only see the gaps, maybe I don't know why I am reluctant to do that. But I think it is something that should be done because we expect our students even ourselves to be able to use the library. But I guess we are sort of not interacting much with the library staff to be able to access information and device an easy and user friendly way of doing it. [FOSTL2]	
SS	We don't have established collaboration. There is no direct link between the library and the departments. [FOSSL1]	I have not yet done that. [FOSSL2]	Not much because we expect that the library is doing job of teaching students from when they start with the university. I used to go to the subject librarian when needed some information, but I no longer do that I don't know why. [FOSSL3]
IEMS	Library used to invite us to select new books from their new collection but lately that has stopped with the emphasis that we can access	We do collaborate during orientation period where the librarian orientates students on how to get information and we do not	We normally collaborate by ordering relevant

	form online. [IEMSL1]	have a problem with that. [IEMSL2]	books. [IEMSL3]
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7.2 Library support

Fac/Ins	Responses		
Agric.	Weekly videos and CD-Roms so that they can read, so that they can access the information. [FOAL1]	There should be more up to date materials. The problem with the library is the textbooks are not covering all the subjects [FOAL2]	
Edu	The library has a lot of work to do, they try to help lecturers in the faculties by participating in the boards of faculties but I feel that is not adequate. They have interesting skills but I wish in collaborating with them, we could agree on timetables to train lecturers because they spend so much money to purchase journals. I also think the library has to be proactive, if there are new developments in that science, because the library is here to support teaching and learning. If there are new areas that we are not aware of them, they should publicise that much more aggressively. [FOEL1]	I suggest that students need to be strongly assisted in the library, because as a lecturer I teach, I assign tasks to them to go to the library to look for certain information, if there is nobody in the library to assist them, indeed it becomes too much for me. We acknowledge that our library is under resourced, but it should be up to scratch when it comes to neatness and shelving. [FOEL2]	There should be orientations and probably should be done subject by subject not this wholesome orientation. Once students are registered, they should be called to the library according to their subjects of major and be shown to look for information in their subject areas, because now of late we have too many students. With reference to your topic of your study, I feel that literacy is wanting, it is very much wanting, probably because we don't do enough we don't teach our students how to use the library, classification of information is problematic. In an

			academia library is an important component of that which we have to be conversant with its use, structure and everything. [FOEL3]
HS	We lecturers do not go to the library for support, since we are given a specialist I will then arrange with the librarian to come to the faculty to teach students how to find information especially the 3 rd years. [FOHSL1]	They should take us through the library as lecturers, show us the entire system, how students including myself can we get the recent articles using library databases, as for now I rely on this weak internet in the office which is troublesome. They should take us through library system to see what books they have, if we are waiting to include new research that have been done by other students should be readily available, things like that. [FOHSL2]	
Hum	We don't interact more often with library staff to get to understand each other, what are the things you need from the library,, what skills are at disposal of us? Now that you asking that question it get to me, thinking that we need to engage librarians more, there should be more interactions maybe through seminars. [FOHL1]	I think they are doing that already, for them to devote their time in making a library tour with our students in the library is part of what they are doing. I think that is enough for them. [FOHL2]	We should work together with the library, I think there were some attempts we made in the past to but I am not sure how far it has gone to integrate the library and information skills into communication study skills course so that the librarians will help us with the certain portion for teaching them even having practical's with them as to searching for information so that it would directly contribute towards final assessment for our course.

			I think we still need that integration; we have to put them together so that our course will become very useful for students. [FOHL3]
Law	By making sure that librarians teach students about the current authoritative websites for their. Eg. Introduce Google Scholar, how it works and how to navigate it. I recommend that the library should teach students to use interlibrary services. They can even connect them to Judah Start, Google Scholar, Lexis Nexis and I think I will submit a list of these databases to the library so that students should be conversant with them. [FOLL1]	The library should work closely with the Centre for Teaching and Learning. Centre conducts a lot of workshops, seminars and trainings on how to access information. In most circumstances when CTL comes to speak to our students which they do on a regular basis, they (CTL) then introduce them to the library. The question is how would you expect the library to assist you? In my view then should the library become aware that there are stumbling blocks on the way of our students being able to find information? The library should certainly have to communicate with us to say that there is something you are not doing. Eg. You are not introducing students to the fact that there is some available e-journals in the library when students come here they look for hard information; they don't seem to be aware of electronic system that we are operating as library. [FOLL2]	
S & T	The library should either employ discipline specialist or alternatively they should involve 1 or 2 lectures from every discipline to collaborate very closely with the library so as to form an interface so that even if it is because of the finances they don't have chemistry specialist but have chemistry lecturer interested in chemistry literacy who is responsible to make sure that in the department have acceptable literacy skills and should be working in conjunction with library staff or somebody like a tutor. [FOSTL1]	It may not be easy for a librarian to interact with every student to be able to deliver that information, they should equip the lecturers themselves then it becomes easy because you can decide as a lecturer that in one of the initial lessons you can tell them how to access information because the course is based on finding information. I belief constant seminars for staff so that we are equipped to help students to access information and databases so that they can provide good services and we are aware of them. FOSTL2]	

SS	I believe in the print resources because it has less temptations. The library seems to be inclined to e-resources. E tools have multiple uses, negatives dominate academic use. I think the library should invest more on print resources. [FOSSL1]	The library should start updating their books. Also when they buy new books they should go through our heads of departments or on one on one they should ask for books that are quite essential so that they can stock them then we can refer students to them, deliberately students can now be supported. [FOSSL2]	Students need to go to the library, but how to use the library is very difficult for me to say. But I feel that I also need to be orientated to use library resources especially e- journals so that I will be in a position to refer students to the credible and authentic sources. [FOSSL3]
IEMS	Library should make some packages in terms of information accessibility and use so that we dispense such information to students. [IEMSL1]	In my opinion, I think our library has out-dated material and it should also have a computer where we can get first information online. [IEMSL2]	

Appendix D: NUL request for data collection

University of Cape Town

Private Bag X3

Rondebosch 7701

27th October 2017

The Registrar

National University of Lesotho

Roma 180.

SUBJECT: REQUEST FOR DATA COLLECTION

I am a Master's student at the University of Cape Town (UCT) in the Department of Library and Information Studies Centre. I am carrying out a study titled 'Analysis of information literacy training at the National University of Lesotho'. This study is conducted as part of my master's degree in Library and Information Studies. The purpose of this study is to investigate information literacy curriculum, delivery and assessment at the National University of Lesotho.

Guided by the Association of College and Research Libraries (ACRL) information literacy framework for higher education, the study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames. The study is under supervision of Dr Connie Bitso.

As part of this research, I would like to interview lecturers and the librarians. The questions seek their views on information literacy curriculum, delivery and assessment at the National University of Lesotho. Their participation in these interviews will be of paramount importance to my study and will be appreciated in advance.

I am therefore writing this letter to seek permission from your office to interview the lecturers as well as the librarians. Upon the granted permission, I would like to collect

data from the 1st November 2017 before consolidation week and before the examinations begin, as the lecturers and librarians may need to attend to students in preparation for the upcoming examinations.

Please find attached letter from my supervisor and ethical clearance letter from UCT.

Your assistance will be highly appreciated.

Yours Sincerely,

Limakatso Lefalatsa

Appendix E: Cover letter for librarian's interviews

Dear Librarian,

Thank you for accepting to participate in this study.

I would like to invite you to participate in an interview session to assist with my research on this topic 'Analysis of information literacy training at the National University of Lesotho'.

The study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames.

In addition, the study is to fulfil the award of master degree in Library and information studies by the University of Cape Town.

Confidentiality is guaranteed to any information you will provide.

I am looking forward for your participation and support in this study.

Thank you

Limakatso Lefalatsa

Appendix F: Cover letter for lecturers' interviews

Dear Lecturer,

Thank you for accepting to participate in this study.

I intend to invite you in an interview session to assist with my research on this topic "Analysis of information literacy training at the National University of Lesotho".

The study seeks to establish to what extent is the NUL information literacy programme complying with ACRL frames.

In addition, the study is to fulfil the award of master degree in Library and information studies by the University of Cape Town.

Confidentiality is guaranteed to any information you will provide.

I am looking forward for your participation and support in this study.

Thank you

Limakatso Lefalatsa

Appendix G: UCT ethics clearance letter



Library and Information Studies Centre

University of Cape Town
Upper Campus

Private Bag X1, RONDEBOSCH, 7701 South Africa
Level 6 Hlanganani, Chancellor Oppenheimer Library
Tel: +27 (0) 21 650 4546 Fax: +27 (0) 21 650 2529
E-mail: lisc@uct.ac.za
Internet: www.lisc.uct.ac.za

Ref. no.: UCTLIS201710-18
2017

27 October

Dear Ms Lefalatsa

I am pleased to inform you that ethical clearance has been granted by the Ethics Review Committee of the Library and Information Studies Centre on behalf of the Humanities Faculty of the University of Cape Town for your Master's study entitled: *Analysis of information literacy training at the National University of Lesotho*.

I wish you well with your study.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Michelle Kahn'.

Ms Michelle Kahn

Chair, Department (LISC) Research Ethics Committee

"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."

Appendix H: NUL research approval letter

THE NATIONAL UNIVERSITY OF LESOTHO

Fax: +266 22340264
+266 22340601
+266 22340000
Website <http://www.nul.ls>



P O Roma 180,
Lesotho.
Africa.

OFFICE OF THE REGISTRAR

3rd November 2017

REF. REG/ADM-1 37LML/hyml

Ms Limakatso Lefalatsa

University of Cape Town **2017**

Private Bag X3

Rondebosch 7701

Dear Ms. Lefalatsa

Re: Request for Data Collection at the National University of Lesotho:

The National University of Lesotho (NUL) is in receipt of your application for **data** collection at this institution

After careful consideration of all relevant facts the University has agreed to allow you to continue with **your** assignment as requested We believe that **the** research outcome will be beneficial to both **the** University and the **country** at large

By copy of this **letter** the Librarian and Deans of faculties are requested to assist you with all the **necessary information** you need to carry out your assignment.

Yours sincerely

A stylized signature of L. Maqalika-Lerotholi, consisting of a series of horizontal lines and a vertical line.

L. Maqalika-Lerotholi

Registrar

Cc: Pro vice
Chancellor
Librarian
Deans of Faculties