UNIVERSITY OF BOTSWANA

DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

IMPACT ASSESSMENT OF THE DLIS PROGRAMME ON THE BOTSWANA LABOUR MARKET

RESEARCH STUDY
BY MESSRS:

JUSTUS WAMUKOYA
SAUL ZULU
TRYWELL KALUSOPA

FINAL REPORT

GABORONE: UNIVERSITY OF BOTSWANA

JUNE 2007

PREFACE

In recognising the highly dynamic nature of the information discipline, an information studies curriculum needs to be equally dynamic not only to embrace new developments and the changes taking place but also to enrich and add value to the programme itself. Furthermore, such a curriculum must ensure that the various courses on offer, as well as the range of skills and competencies offered to students meet the needs of both the graduates and employers.

The Department of Library and Information Studies (DLIS) at the University of Botswana is well aware of the need to constantly monitor and review its programmes and courses to ensure that they meet the needs of the profession, graduates and employer.

To meet these challenges, the research study team of Messrs Justus Wamukoya, Saul Zulu and Trywell Kalusopa undertook to seek the views of current (in-school) students, DLIS graduates, employers and DLIS lecturers on the impact and relevance of the DLIS programme on the labour market in Botswana. The research team also solicited the views of the non-traditional employers of DLIS graduates since these represented a potentially emerging market for DLIS graduates.

It is the hope of the research team that the findings of this study will not only contribute to the on-going efforts by the Department of Library and Information Studies to review its programmes and courses, but will also bring to light the range of practical skills and competencies that both graduates and employers would like graduates to have upon completion of their programmes.

The research team would like to thank various organizations and individuals for their assistance and support which made it possible to carry out the study. Specifically, the team is grateful to the following: Office of Research and Development, University of Botswana for availing funds for the study and the Ministry of Labour and Home Affairs for granting a research permit to conduct the study. Additionally, we thank the following for participating in the study and availing information to the research team: the Botswana National Archives and Records Service; Botswana National Library Service; Botswana Library Association; the Seventh Day Adventist Church Hospital Administrator, Kanye; the Rural Industry Innovation and Centre, Kanye; the National Health Service, Francistown; Francistown College of Education; Department of Vocational Education and Training, Francistown; the High Court Francistown; UB Library, Francistown; Selibe-Phikwe Senior Secondary School; Selibe-Phikwe Technical College; Palapye Technical College; the High Court Lobatse; the Lobatse College of Education; Lobatse Senior Secondary School; the Geological Surveys Information Centre, Lobatse; and many other institutions that provided information through our research assistants.

Last but not least, we wish to thank our research assistants; DLIS students; DLIS graduates and lecturers.

JMW; SZ and TK, Gaborone, June 2007

Impact Assessment of the DLIS Programme on the Botswana Labour Market

EXECUTIVE SUMMARY

1.1   Introduction

This study was made possible with funding from the Office of Research and Development, University of Botswana. The aim of the study was to assess the impact and relevance of the LIS Programme on the labour market in Botswana. Since 1979, the Department of Library and Information Studies (DLIS) has produced many graduates ranging from certificate to PhD. In spite of this no comprehensive study has been done to gauge the impact and relevance of the DLIS programmes on the Botswana labour market.

1.2   Objectives of the Study

The specific objectives of the study were to provide:

- baseline information upon which the department can review, improve and optimize the curriculum for quality assurance
- information about the existing and potential employers of LIS graduates
- knowledge about the labour market needs in the library and information field

1.3   Methodology of the study

The study employed the survey research design. The survey population comprised DLIS graduates (Certificate to Masters), students currently enrolled in DLIS programmes (in-school) (Certificate to Masters), employers of DLIS graduates as well as potential employers, and DLIS members of staff. The study covered the following towns: Gaborone, Lobatse, Kanye, Selibe-Phikwe, Palapye and Francistown. Questionnaires, interviews, observations and document review were used to gather data for the study. Data gathering was undertaken during 2005.

2.0   Findings

The study covered various aspects as shown by the findings which are presented theme by theme below.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

2.1   Choice of Programme

On the choice of programme and motivation to do LIS the findings were as follows:

2.1.1   The earlier entrants into the DLIS programme knew about its existence while the recent entrants did not.

2.1.2   The study also showed that the majority of both the in-school and graduates were not motivated to do LIS and would have chosen another career given a choice.

2.1.3   The study further indicated that the majority of the students admitted into DLIS had lower entry qualifications in comparison with various other University programmes.

2.2   Content of the LIS Programme

On the content of the DLIS programme the findings were as follows:

2.2.1   In-school students and graduates were generally satisfied with the content of the DLIS programme, except for lack of practical applications in courses such as cataloguing and classification.

2.2.2   The employers were of the view that the programme was too theoretical and the graduates were therefore not 'work-ready'.

2.3   Methods of Delivery of Course Content

On the methods of delivering the course content the findings were as follows:

2.3.1   The technology-based delivery methods were ranked higher than the traditional ones.

2.3.2   In contrast, practice-based methods such as demonstrations, video and slide presentations, field trips, group work and exhibitions were generally ranked low in spite of their innovativeness as teaching aids.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

2.4   Usefulness of DLIS Skills and Competencies

On the usefulness of DLIS skills and competencies the findings were as follows:

2.4.1   Both in-school and graduate respondents rated the skills and competences obtained from the DLIS programme favourably.

2.4.2   Employers maintained that while the graduates had obtained some useful skills and competences such as IT, these were by and large general and lacked specific applications.

2.4.3   Employers also said that DLIS graduates lacked managerial skills.

2.5   Balance between Theory and Practice in the delivery of Courses

On the balance between theory and practice of the DLIS programme the finding was:

2.2.1   The view of graduates, students and employers is that the DLIS programme is largely theory-based with little practice. The implication of this is that the DLIS programme is not meeting the expectations of employers and the graduates both of whom place emphasis on practical skills and competencies.

2.2.2   The timing of the practical attachment for Diploma LIS programme is inappropriate as it comes at the end of the programme and does not give the Department and students the opportunity to review the practical experiences in relation to the theory part of the programme.

2.6   Application of Information Literacy and Information-Seeking Skills

On the application of information literacy and information-seeking skills by DLIS students and graduates, the findings were as follows:

2.6.1   The lecture methods (face-to-face and handouts), technology-based methods (internet and WebCT), and use of the library were the most preferred methods of teaching and learning.

2.6.2   In contrast, the least preferred methods were the manual-based tasks including taking notes from prescribed texts and analysing chapters in books and periodicals.

2.6.3   The study further established that students faced various difficulties in applying information literacy skills in the following areas: using prescribed readings, expressing own ideas, expressing another writers ideas in own words, organising assignments, referencing and citations.

2.7   Availability of Learning and Teaching Resources

On the availability of learning and teaching resources, the findings were as follows:

2.7.1   The study established that most resources in the following areas were inadequate: computer facilities, bookshop services, lecture rooms.

2.7.2   Library facilities were said be adequate.

2.7.3   It was also observed that a number of courses with substantial practical components such as cataloguing, classification, preservation and conservation; and records management were being taught without laboratory facilities.

2.8   Availability and Accessibility of Lecturers

On the availability and accessibility of lecturers, the finding was that:

2.8.1   Lecturers were generally inaccessible outside lecture hours.

2.9   Desirable Changes to the DLIS Programme

On the desirable changes to the DLIS programme, the following were proposed:

2.9.1   There was need for DLIS students to take courses outside the department to broaden their subject/academic base.

2.9.2   Other desirable recommended changes included:
   • Change of name of the department

- Introduction of Degree level programme in Archives and Records Management
- Marketing the programme
- Introduction of Part-time degree programme and distance learning

2.10   Work-Related Issues

On work-related issues, the findings were as follows:

2.10.1 The study confirmed the predominance of traditional library related tasks over modern non-traditional tasks such IT, information repackaging, etc in the work environment. This shows a mismatch between the skills which graduates are taught during their training and what they actually do in the workplace. While the DLIS curriculum has continued to evolve by embracing new information management skills such as application of IT, the work environment routines have continued to revolve around traditional LIS tasks.

2.10.2 A umber of observations were made on employment patterns for DLIS graduates:

- The majority of the job tiles of DLIS graduates reflected the traditional archives/records management and library nomenclature.
- Employment opportunities in the traditional public sector were shrinking.
- The structural rigidities in the staff establishments of the main employing public sector agencies for DLIS graduates namely BNLS and BNARS could be partly responsible for the slow expansion of this sector in absorbing the graduates. This is so in the sense that the current legal and policy frameworks assign to both BNARS and the BNLS the mandate to recruit staff in government departments thus limiting employment opportunities in both the library and archives professions.
- The general perception of the DLIS programme as a 'library' qualification rather than as an information management qualification has proved to be a barrier for the graduates to venture into the non- traditional library job market.
- Since 2000, the DLIS programme has experienced a rapid increase in enrolments as well as in the output of graduates. The increased output of

Impact Assessment of the DLIS Programme on the Botswana Labour Market

graduates has contributed to difficulties experienced by DLIS graduates in finding employment.

2.10.3 The DLIS graduates were neither satisfied with their job environment nor the tasks performed because they were not challenging enough as they were largely routine.

3.0   Recommendations

The problems identified in the findings above call for decisive action on the part of the Department and the University especially that the University is currently undergoing restructuring and repositioning itself in line with its strategic vision 'Shaping Our Future'. It is hoped that this study will contribute towards the realization of the vision of the University and the Department through the various recommendations which are outlined below:

3.1   Choice of Programme

In order to attract students that are highly motivated to enrol into the DLIS programmes, it is recommended that:

3.1.1   DLIS should devise an innovative strategy for marketing its programmes. This could be done through conducting market research and specifically tailor the marketing strategies to the identified segments.

3.1.2   The DLIS entry requirements be made competitive with English as a prerequisite subject.

3.1.3   The Departments should be involved in the selection process of new entrants.

3.2   Content of the DLIS Programme

In order to enrich the content of the DLIS programmes, it is recommended that:

3.2.1 DLIS should take appropriate measures to infuse more practical applications and modernise some of its programmes which have remained traditional such as

Impact Assessment of the DLIS Programme on the Botswana Labour Market

cataloguing, classification, collection development and management by incorporating IT.

3.2.2 DLIS should provide adequate equipment and laboratory facilities to enhance the practical component of its various courses and programmes.

3.3   Methods of Delivery of Course Content

In order to improve and enhance the delivery of course content, it is recommended that:

3.3.1   LIS should devise strategies to infuse practical and technology applications into its programmes. This also means that staff training needs are be reviewed regularly to determine areas in which further training may be required as part of staff development.

3.4   Usefulness of DLIS Skills and Competencies

As a way of enhancing the skills and competencies of DLIS graduates, it is recommended that:

3.4.1 DLIS should ensure that its courses are backed up by practical application tools and software in courses such as conservation and preservation, record management, cataloguing, reprographics, information storage and retrieval in line with recommendation 3.2.2 above.

3.5   Balance between Theory and Practice in the delivery of courses

As a way of addressing the imbalance between theory and practice in DLIS courses, it is recommended that:

3.5.1   As a professional programme, DLIS should undertake a thorough review of its courses and the delivery mechanisms.

3.5.2   The timing of the practical attachment for Diploma LIS programme should be changed so that it comes at the end of the Second Semester of Year One as is the case with the ARM Diploma programme

3.6   Application of Information Literacy and Information-Seeking Skills

On the problem of applying information literacy and information-seeking skills by DLIS students and graduates, it is recommended that:

3.6.1 DLIS should adopt a variety of teaching methods.

3.6.2 Lecturers should link prescribed readings with topics in the course outline

3.6.3 The teaching of communication skills and other GEC courses should be reinforced with an infusion of more practice and hands-on applications.

3.7 Availability of Learning and Teaching Resources

On the inadequacy of learning and teaching resources, the study established that most resources in the following areas were inadequate namely: computer facilities, bookshop services and lecture rooms. It was also observed that a number of courses with substantial practical components such as cataloguing, classification, preservation and conservation; and records management were being taught without laboratory facilities. It is therefore recommended that:

3.7.1 Greater attention be paid to the provision of learning and teaching facilities such as computers, lecture rooms, laboratories and demonstration rooms bearing in mind the implementation of both the department and faculty strategic plans.

3.7.2 The high cost of textbooks in the bookshop should be addressed by the bookshop negotiating concessionary prices with publishers.

3.8 Availability and Accessibility of Lecturers

On the problem of students' access to lecturers outside teaching hours, it is recommended that:

3.8.1 The workload of lecturers should be reduced by reviewing and expanding the staff establishment in line with the courses and programmes offered in the Department.

3.8.2 Lecturers should also indicate the hours when they are available for consultation.

3.8.3 The capping of numbers of students to register into courses should be strictly enforced at registration.

3.9   Desirable Changes to the DLIS Programme

On the desirable changes to the DLIS programme, it is recommended that:

3.9.1   DLIS should consider moving away from a single subject major to a double major programme.

3.9.2   Other desirable recommendations are as follows:

- DLIS should change its current name to reflect the variety and diversity of its programmes and courses as is the practice other universities;

- DLIS should introduce a degree level programme in Archives and Records Management;

- DLIS embark on aggressive marketing and promotion of its programmes, and;

- DLIS should introduce part-time degree programmes and offer some of the programmes through distance learning.

3.10   Work-Related Issues

On the problems related to limited employment opportunities of DLIS graduates, it is recommended:

3.10.1   That recruitment of personnel be decentralised to user departments and ministries away from BNARS and BNLS, leaving the two institutions to concentrate on policy formulation, quality assurance and standards, coordination and general leadership in the professions.

3.10.2   That the name of DLIS as well as that of its degrees and diplomas be changed to address the poor perception of DLIS qualifications and graduates which arises because of the 'library' tag. The current name does not adequately reflect the content of the various courses on offer.

3.10.3   That DLIS discontinues the offering of certificate level programmes.

3.10.4   That the entry requirements into DLIS programmes be raised in line with other competitive programmes at UB such as Law and Business.

TABLE OF CONTENTS

Impact Assessment of the DLIS Programme on the Botswana Labour Market

LIST OF TABLES

TABLE NO.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

LIST OF FIGURES

FIGURE NO.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

LIST OF ABBREVIATIONS AND ACRONYMS

ALISE   Association of Library and Information Science Education

BNARS   Botswana National Archives Records Services

BNLS   Botswana National Library Services

DLIS   Department of Library and Information Studies

ICT   Information Communication Technology

IT   Information Technology

KALIPER   Kellogg-ALISE Information Professions and Education Renewal

LIS   Library and Information Science

SLA   Special Library Association

Impact Assessment of the DLIS Programme on the Botswana Labour Market

APPENDICES

Impact Assessment of the DLIS Programme on the Botswana Labour Market

CHAPTER ONE

INTRODUCTION

1.0 BACKGROUND INFORMATION

The University of Botswana has played an important role in the development of Botswana through its mandate to expand the quantity and improve the quality of the human resources needed for the country's development. This is in line with its mission and vision which are geared to advancing the "intellectual and human resource capacity of the nation and the international community" (UB Calendar, 2005-2006). In order to fulfil this mandate, the University undertakes the traditional functions of teaching, research and community service through its academic departments such as the Department of Library and Information Studies.

The Department of Library and Information Studies (DLIS), though initially established to train junior library staff, it has over the years expanded its programmes to include education and training at certificate, diploma, bachelors degree and postgraduate levels. Today, the Department is an internationally recognized centre of excellence within Africa, offering a wide range of academic and professional programmes in library and information studies, archives and records management, and information systems.

The Department has since its inception in 1979 made outstanding contribution to the education and training of information professionals in Botswana, and the Southern, Central, Eastern and West African regions. Through research, consultancy, publications and service it has made a unique contribution to the development of the information discipline on the continent.

The various educational and training programmes offered in the Department are geared to making those graduating in various disciplines perform effectively and competitively in the various information-related work environments in Botswana, Africa and beyond. The programmes offered in the Department take cognizance of the fact that information is today recognized and perceived as a key and strategic resource

Impact Assessment of the DLIS Programme on the Botswana Labour Market

in the development process. The graduates of the various DLIS programmes are therefore expected to exemplify a wide range of skills and competencies requisite to the rigours and demands of the information work environment. It is also imperative that the methods of teaching should be more practical, geared to instilling appropriate knowledge, skills and competencies (Rosenberg, 1994; Thapisa, 1999b; Aina and Moahi, 1998; Ocholla, 2000; and Odini, 1999).

1.1 STATEMENT OF THE PROBLEM

Since 1979, DLIS has produced many graduates ranging from certificate to PhD. Besides the Tracer Study by Aina and Moahi (1998), no study has been done to gauge the impact of the DLIS programmes on the labour market. Furthermore, as Rosenberg (1994) points out, the field of information sciences is constantly changing giving rise to new specializations and professional practices. An information science curriculum needs to be dynamic to incorporate these changes and to impart the professional competencies required by employers. Additionally, in order to attain quality assurance in line with Botswana's NDP 9, Vision 2016, and University of Botswana strategic goals (Shaping Our Future), DLIS programmes need to be reviewed regularly so as to align them with the job market needs. The findings and recommendations of the study will no doubt contribute to the department's efforts to critically and continually evaluate its programmes as part of its strategic vision.

1.2 OBJECTIVES OF THE STUDY

The aim of the project was to assess the impact and relevance of the LIS Programme on the labour market in Botswana. The specific objectives of the study were to provide:
- baseline information upon which the department can review, improve and optimize the curriculum for quality assurance
- information about the existing and potential employers of LIS graduates
- knowledge about the labour market needs in the library and information field

Impact Assessment of the DLIS Programme on the Botswana Labour Market

1.3 JUSTIFICATION OF THE STUDY

NDP 9, among others, identifies information and communication technology as a key component to sustainable national development and a link to the global world. It further pinpoints the need to train a highly literate technologically innovative work force. Specifically, NDP 9 acknowledges that:

> Knowledge, intellectual capacity, information skills and information technology are, besides labour and capital, the key elements for nations to successfully engage with the transforming impact of globalization. In the new globalized world, high value, relevant and quality education will be the most prized asset a citizen should possess and high quality knowledge capital will be necessary for national prosperity.

In line with the objectives of NDP 9, the findings of this study will assist the University realise its objective of producing high quality human resources for the country. Furthermore, the methodology used in conducting the study provides a benchmark for conducting similar market studies in future. As a tracer study, its findings inform on the impact of the University training programmes on the labour market. It is hoped that other researchers at the University will use the outcomes of the study as a basis for conducting similar tracer studies on other training programmes offered in the University.

CHAPTER TWO

METHODOLOGY OF THE STUDY

2.1   Research Design

The research design used for the study was the survey method consisting of various components which are outlined below.

2.1.1   Field Study

This involved visiting institutions, administering questionnaires, and conducting interviews with the relevant stakeholders. This was done in order to understand the nature of the opportunities and problems around the employment market for library and information graduates in Botswana. For the purposes of this study, the following areas were visited: Gaborone, Kanye, Lobatse, Francistown, Selebi-Phikwe and Palapye.

2.1.2   Document Research

The study also involved the analysis of policy documents and other relevant literature on the subject.

2.1.3   Observations

Observations were used to gain insights into library and information environment and infrastructure in organisations visited.

2.2   Population and Sample Description

The study sample included the following categories:
- Current students (certificate to postgraduate)
- Graduates from the DLIS programmes (Certificate, Diploma, Degree and Postgraduate)
- Organizations (employers and potential employers)
- Lecturers in DLIS

2.2.1   Current Students

The questionnaires for current students were distributed as follows:

Certificate (LIS, ARM)   (100 students)

Diploma   (LIS, ARM)   (100 students)

Degree   (BLIS, BIS)   (100 students)

Postgraduate   (10 students)

The total number of DLIS students was **532.** The total target sample was **310.** The study, however, yielded 215 valid responses from current students, representing a 69% response rate.

2.2.1.1 Gender

Out of the 215 respondents, 137 (64%) were females. Figure 1 presents the gender representation of the respondents.

Figure 1: Gender representation of respondents

Source: Field data

Impact Assessment of the DLIS Programme on the Botswana Labour Market
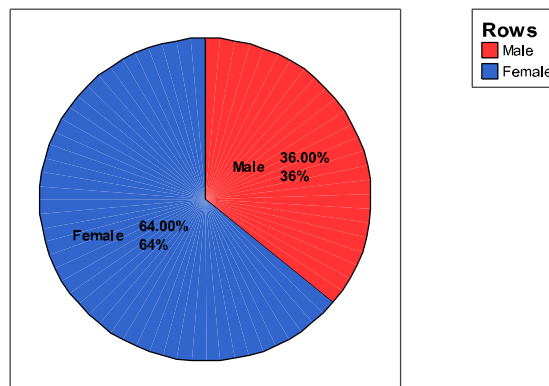
2.2.1.2 Age group

131 out of 215 respondents (70%) were in the age group 21-30 years; 14% were in the age group 20 year or below; and 16% were above 30 years. Figure 2 below shows age representations of the sample.

Figure 2: Age representation of respondents
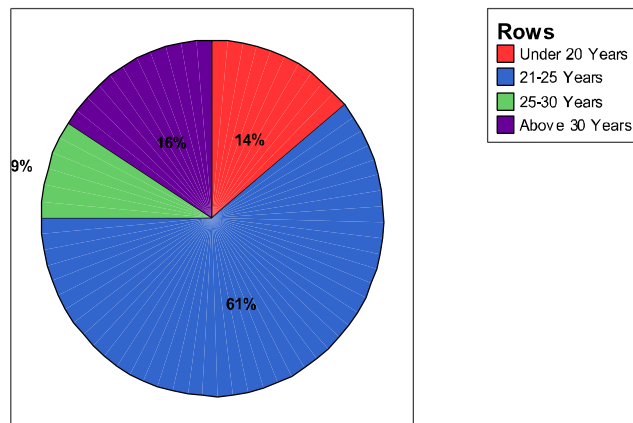
Source: Field data

2.2.1.3 Status of respondents on admission

Out of a total of 215 respondents, 170 (79%) were direct from school, 45 (21%) were already in employment. Figure 3 below gives a summary of the status of respondents on admission into the department.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Figure 3: Status of respondents on admission into DLIS programme

Status on admission
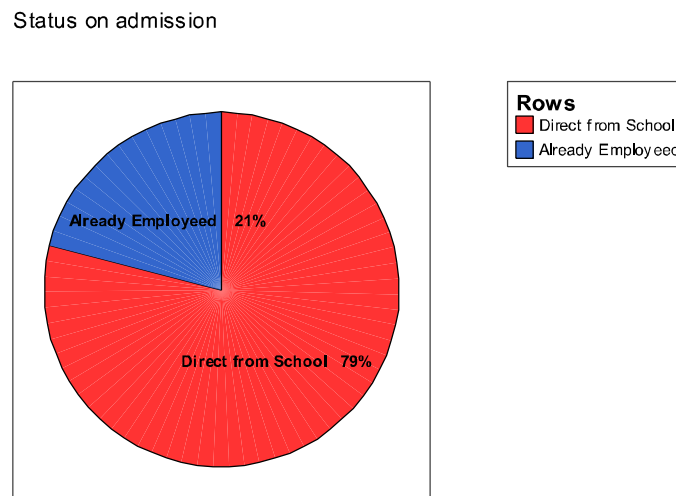
Source: Field data

The implication of this is that 80% of the students have to find employment after completing their studies. A further implication is that this group of students will be without practical work experience.

A further examination of the data revealed that out of the 170 respondents who are direct from school, 30 (18%) were under 20 and 126 (74%) were between 21-25 years old. The implication here is that the majority of the enrolment into the DLIS programmes is comprised of young people

2.2.1.4 Education Background

Out of the 215 respondents:

- 9 (4.4%) had Junior secondary school certificates
- 196 (91%) had senior secondary school education
- 1 person (0.5%) had a degree

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 1 below provides a summary of the education backgrounds of the respondents

Table 1: Educational background of respondents

Educational background		Frequency	Percent	Valid Percent	Cumulative Percent
	Junior Certificate in Secondary Education	9	4.2	4.4	4.4
	Botswana General certificate of secondary Education	192	89.3	93.2	97.6
	O level	2	.9	1.0	98.5
	COSC	2	.9	1.0	99.5
	Degree	1	.5	.5	100.0
	Total	206	95.8	100.0	
	No response	9	4.2		
Total		215	100.0		

Source: Field data

This shows that the majority of those admitted into the DLIS programme have attained senior secondary education

2.2.2 DLIS Graduates

The total target number of DLIS graduates was 100 drawn from Gaborone, Lobatse, Kanye, Selibe-Pekwe and Francistown. Seventy nine (79) DLIS graduates responded to the questionnaire representing a response rate of 79%. Of these, 60% were drawn from the traditional market (such as libraries, Record Management Units (RMUs) and archival institutions), while 40% represented the potential market (emerging information environments such as IT firms, NGOs, etc). Therefore, DLIS graduates that responded were 51 from the traditional market and 28 from the potential market.

Out of 79 DLIS graduates 54 (68%) were female, while 25 (32%) were male. Of these 54 or 70% were above 30 years, 18 (23%) were between 26 -30 years old, while only 5 (6%) were 26 years or below. This means most of those in employment are 30 years and above. The status of the respondents on

Impact Assessment of the DLIS Programme on the Botswana Labour Market

admission was that 48 (62%) were already in employment while 30 (38%) were directly from school.

In terms of education background, 61 (78%) of the respondents had attained senior secondary school. Of this 8 (10%) of the respondents had attained a degree from other fields prior to being and had been attracted to the library and information studies field.

Most of the respondents (85%) surveyed had graduated within the last ten years and there was a progressive and significant increase in the number of graduates in the last four years, that is out of 79 DLIS graduates, 51 (65%) had graduated in the last four years (between 2000 and 2004).

2.3 Data Analysis

Data collected from the survey was analyzed using the following tools:
- Qualitative data from interviews and focused group discussions were categorized and organized to get relevant significant themes pertaining to the study.
- The Statistical Package for the Social Sciences (SPSS) software was used to process quantitative data from current students and DLIS graduates in employment. Descriptive statistics such as percentages, averages, frequencies and cross tabulations of selected variables were produced for analysis.

CHAPTER THREE

3.0   LITERATURE REVIEW

Anwar & Al-Ansari (2002) assert that the information profession today faces more fierce economic and technical problems than before. This is partly attributed to the fact that employers and academics in Library and Information Studies (LIS) today increasingly see a need to link organisational performance and employee skills, competencies and ability to changing organisational needs. Thapisa (1999a) adds that LIS education and training should provide sufficient competencies to enable students to tackle real job or employment related problems. It should be sufficiently broad-based to provide not only the technical understanding of job requirements but also competencies and skills that make up a whole and complete worker. Occupational and professional competence should first be made adaptable to the immediate requirements of the work situation, skill deployment, management roles, and responsibility for standards, creativity and flexibility to change.

This chapter reviews literature on relevant and appropriate skill requirements for today's graduates in the field of the Department of Library and Information Studies, with specific reference to the Department of Library and Information Studies (DLIS), University of Botswana. It focuses on three main areas namely:

1. Curriculum Reviews;
2. Competencies and Skills of the twenty first century;
3. LIS education and the Job market.

3.1   Curriculum Reviews

Library and information education in developed countries is undergoing revolutionary and evolutionary changes. This is in view of the fact that today librarians and other information professionals are increasingly moving on to acquire more of the characteristics of information scientists. A new information market is emerging and many graduates who join traditional library work settings are moving away to assume

10

new roles in the emerging market. The information management approach is gaining ground with emphasis on a combination of professional skills, management skills, system skills, and multimedia skills.

A curriculum is a set of guidelines that a department will follow to impart education and training to its trainees and it is expected that it should be market or demand driven. This ensures that graduates produced would be employable (Aina, 2004). Odini (1999) observes that this is due to the rapid pace with which the field of information science is developing and bringing about new specialisations and professional practices. Therefore, the curriculum must be designed in such a way that it meets local needs while at the same time it remains academically acceptable internationally. In addition it should try to develop the learners' attitudes, or mind sets rather than to drill them in techniques.

A number of empirical studies worldwide have been carried out to be able to demonstrate the benefits of curriculum reviews; the results have been almost similar in terms of the various needs of the library schools and the labour market. They show that no curriculum is static and therefore must be open to review and revision (Rosenberg, 1994). Thapisa (1999a) looked at developing lasting competencies for a twenty-first century information economy workforce in Africa. The specific objective of the study was to produce job ready students in all of the study programmes of the DLIS at the University of Botswana. A competence based product vision was launched which triggered discussions from various colleagues both internationally and in the region. The questions asked were related to the kind of competencies and skills that the information profession would require during this millennium which relate to the job opportunities for the LIS graduates. Further, the questions focused on what kind of students or professionals should be produced to meet the challenges of the 21st century.

The discussions highlighted issues relating to the need for competencies and skills to be developed in information handling in the electronic world and using electronic information tools. It was noted that curricula should have courses that emphasise electronic/digital handling skills, information management skills, and that the

methods of teaching should be more practical. This is collaborated by Tenopir (2000) who looked at the curriculum changes in LIS in the United States through the KALIPER (Kellogg-ALISE Information Professions and Education Renewal) project sponsored by the W. K. Kellog Foundation and Association for Library and Information Science Education (ALISE). The scholars examined patterns of change in new courses, curricula changes, modes of delivery, and changes in specialisation, records management and school librarianship. They also looked at the development of undergraduate programs. The report makes it clear that almost all schools make changes to the curriculum regularly and will continue to do so and that the Internet and related technologies were the primary driving force behind rapid and seemingly constant curricular changes for the next millennium.

3.2   Competencies and Skills of the twenty first century

There are different definitions of competencies, all of which remain controversial. According to Mahmood (2003) competence used to be considered in terms of the personal characteristics one had, including one's character, virtue, innate abilities, and underlying attributes. Today, however, competence is considered more in terms of skill-oriented behaviour and observable actions measured against quantitative standards; one's competence is judged on the basis of whether or not learned mental and physical tasks can be performed.

Sajjad, et al (1997) provide an operational definition for competence as generic knowledge, skill or attitude of a person that is related to effective behaviours as demonstrated through performance. Knowledge here means having information about, knowing, understanding, being acquainted with, being aware of, having experience of, or being familiar with something, someone or how to do something. Skill refers to the ability to use one's knowledge effectively. Attitude is the mental or emotional approach to something or someone. Competence is directly related to performance, effectiveness of performance, and the value of the performed work. The capacity to develop competences is derived from education, training and experience.

Employers and academics in Library and Information Studies (LIS), argues Thapisa (1999a), are increasingly linking organisational performance to employee skills,

competencies and ability to adapt to changing organisational needs. A competence is moderated by the rewards attached to the performance and results of performance in the form of services or products.

According to Thapisa (1999b), in a world that is increasingly becoming global, the Library and Information Studies education and training should change to be able to cultivate appropriate talents, skills and knowledge to the students. This means that there is a need to exploit the opportunities offered by information technology, which necessitates a drive for new competencies, skills and knowledge. Therefore the syllabi should have courses that emphasise electronic information, its management and digitisation. Ocholla, (2000) sums it up as, sound education that encompasses management, information and communication technologies, information searching, analysis and synthesis, as well as the ability to perform practical work. The general view by LIS scholars is that the methods of teaching should be more practical (Rosenberg, 1994; Thapisa, 1999b; Aina & Moahi, 1998; Ocholla, 2000; Odini, 1999).

Furthermore, the core competencies for all librarians that have attained new prominence could be summarised as Information Communication Technology (ICT), Information Management, Information Access, Information resources, Research and Marketing (Tenopir, 2000; Mahmood, 2003; Buttlar and Du Mont, 1996; Ocholla, 2000; Aina & Moahi, 1999; Basheti, 1999). This is affirmed by the Special Library Association (SLA) (1998) final report on competence for special librarians of the 21st century that highlighted competencies required for special librarianship which heavily bordered on information technology (IT), with particular emphasis on information systems and the Internet. This therefore shows that all information professionals irrespective of the area of specialization need to adapt to the changing professional and job requirements which are heavily biased towards IT in order to survive in the 21st century.

3.3   LIS education and the Job market

Sajjad et al (1997), note that employers are now looking for librarians who possess good computer and communication skills. This applies to all other information

professionals who should have the skills and competences to perform in a diversified information environment and to serve information to all categories of users by excelling as managers and communicators. Librarians and other information professionals therefore face severe competition and will have to broaden their skills. This requires library schools to redesign their curriculum to meet the changing market demands. Sajjad et al, conclude that very few schools were equipping their graduates with the type of skills which are being demanded by the emerging job market. Aina (2004) adds that possessing library skills is not enough to function in a non-traditional library setting and therefore the curriculum should be infused with strong ICT component. This will enable the graduates to have IT skills such as basic computer skills, operating systems, networking, database management systems, Internet services, web publishing and design among others, which will enable them to function effectively in the emerging market.

A postal survey of senior academic librarians conducted in Pakistan by Mahmood, (2003) showed that curriculum development has not been taken seriously in library schools and this had caused Pakistan to produce poor quality graduates. According to Mahmood, the practitioners interviewed cited out-dated and irrelevant curriculum, including intellectual content that has not kept pace with the demands of the profession, weaknesses of the curricula followed by the country's library schools and absence of proper feedback from the profession. The study recommended the following measures to improve LIS education in Pakistan: an extensive study of changes taking place in the LIS profession in developed and developing countries; a comprehensive study of competencies needed in various types of libraries in Pakistan (even for various job positions in a library); and a complete revision of LIS curricula in light of competency study.

Ocholla (1995) points out the need for a current curriculum as it was done in Kenya when the Faculty of Information Sciences conducted a survey to determine the demand and supply situation in the information profession in Kenya and to match the training to demand. The objective of the survey was to identify and locate types of employers who required personnel with information-handling skills; the qualifications needed; experience and skills demanded by employers; nature, characteristics and

14

range of skills that were required for the jobs identified; and match curricula content to the required professional competencies. He notes that although most employment opportunities in the information profession in Kenya at the time were available in libraries and that although the public sector was the major employer of the LIS graduates, the private sector had offered most employment opportunities to the faculty's graduates equivalent to 65% of the LIS employment market.

Various tracer studies were conducted by Rosenberg (1994) in Kenya; Aina & Moahi (1998) in Botswana and Ocholla in South Africa (2000) to review existing curricula in order to find out if the courses being provided were appropriate, determine the changes required and to ensure the curricula met the needs of the graduates as well as employers in areas of professional competencies and the extent to which the curricula kept abreast with changes in the job market. The outcomes showed that the public sector was no longer the major employer and that public and academic libraries dominated this segment of the employment market. On competencies, sound and detailed knowledge in management, information and communication technologies, information searching, analysis and synthesis, as well as the ability to perform practical work was regarded as essential in the job market.

Curricula are dynamic academic tools. They can only be relevant to the community if in their development and revision sufficient consideration is given to the forces of demand and supply and also to the changes affecting the profession in other spheres. While these may not be the prime considerations, however it is evident that adherence to demand and supply forces has been disregarded by many professions today. The result is that in many developing countries there is a likely result of over-production of information professionals with basic information processing skills and not enough innovativeness to propel the profession to another level.

Curriculum design and review is not a one-off assignment but a continuous exercise. A curriculum should be sensitive to market forces, the needs of the employers and also be able to produce graduates who can adapt easily in the job environment. Information Science graduates should, in addition to professional content, be provided with training that is tailored to information technology, management, and communication, since these are rated as competency areas that are critical to the

15

profession. In addition, there should be a continuous review of national and international trends in information competency requirements so that the necessary adjustments can be made in the training of information professionals. This will enable library and information schools to produce professionals with appropriate skills to operate effectively in a modern and changing information environment. It is against this background that the DLIS impact study was conceived and conducted.

CHAPTER FOUR

FINDINGS AND DISCUSSION OF THE STUDY

The findings reflect three major areas which were the focus of the study as follows:

- impact of the DLIS programme on the current students
- impact of the DLIS programme on the graduates in employment
- relevance of the DLIS programme on the labour market (traditional and potential)

4.1 IMPACT OF THE DLIS PROGRAMME ON THE CURRENT STUDENTS

In assessing the impact of the DLIS programme on the current students, the following areas were assessed:

- Choice of programme
- Content of the LIS programme
- Delivery of course content
- Usefulness of skills and competencies
- Adequacy of skills and competencies
- Balance between theory and practice of courses
- Application of information literacy
- Availability of learning and teaching resources
- Availability and accessibility of lecturers
- Desirable courses to be included in the DLIS programme
- Suggested improvements to the DLIS programme

4.1.1 Choice of the DLIS Programme

In order to understand the factors leading to the choice of programme, the study addressed the following:

- Knowledge about the DLIS Programme
- Source of Information on the DLIS Programme
- Motivating Factors for Choosing LIS Programme

- DLIS Programme as First Choice
- Preference to Other Programmes Outside LIS

The findings of the study show that out of 215 respondents 59 (27%) had prior knowledge about the DLIS programme; 154 (72%) did not know about the DLIS programme and that all Masters Students knew about the existence of the programme

However, when the respondents were further segregated by programme that they registered for within DLIS, the following picture emerged:

- DARM: 69 out of 91 (76%) did not have prior knowledge of the DLIS programmes
- CARM: 17 out of 20 (85%) did not have prior knowledge of the DLIS programmes
- CLIS: 13 out 18 (73%) did not have prior knowledge of the DLIS programmes
- DLIS: 28 out of 30 (93%) did not have prior knowledge of the DLIS programmes
- BLIS: 23 out of 41 (56%) did not have prior knowledge of the DLIS programmes

4.1.1.1 Source of Information on the DLIS Programme

Those who had prior knowledge about the existence of the DLIS programme were asked to state where they had learnt about the DLIS programme from. The results show that out of a total of 52 valid responses:

- 16 (7%) indicated the University Brochure
- 12 (6%) indicated the Career and Guidance Teacher at School
- 10 (5%) indicated parents/guardians
- 9 (4%) indicated friends
- 3 (1%) cited previous employment
- 2 (1%) indicated previous LIS education

A large proportion of the respondents i.e. 163 (76%) of the 215 respondents did not know how they came into the programme. The implications of this finding are that:

- The majority of the new undergraduate entrants come into the DLIS programme without knowing what the programme is about.
- The DLIS programme is not well marketed to potential undergraduate students.
- Entrants into the programme are not motivated to do LIS
- The entry requirements for LIS are lower than those of other competing programmes such as Law, Business, Computer Science, etc.

4.1.1.2 Motivating Factors for Choosing LIS Program

Respondents were asked to state what motivated them to take the DLIS programme. The results show that out of a total of 170 valid responses:
- 67 (39%) desired to make a career in LIS because of its novelty
- 52 (31%) said that they had no choice because they qualified only for LIS
- 27 (16%) indicated previous employment in a LIS environment such as those who had worked in schools as student librarians and others who had worked in a library environment prior to joining UB.

The implication of this finding is that the majority of the students that enrol for the DLIS programme have no motivation to do the programme. Furthermore, this group of unmotivated students cannot be expected to apply themselves fully to the demands and rigours of the programme.

However, 64 (30%) of the 215 respondents did not state their reasons for taking LIS. This group and those who did not have a choice make a total of 116 respondents (or 54%) of the respondents who had no motivation for doing LIS.

4.1.1.3 DLIS Programme as First Choice

Respondents were asked to state whether the DLIS programme was their first choice when they were admitted into the University. The results show that out of the 211 respondents, 126 (60%) said LIS was not their first choice while 85 (40%) indicated that DLIS was their first choice. This finding reinforces the view that the majority of

the LIS students did not choose being in the LIS programme hence their lack of motivation and commitment.

4.1.1.4 Preference to Other Programmes outside DLIS

Respondents were asked to state whether they would have preferred another programme to LIS if they had a choice. Out of 189 valid responses 147 (78%) said that they would have preferred another programme to DLIS.

Those respondents who said that they would have preferred another programme to LIS were further asked to state their reasons why another programme would have been preferred. The statistically significant responses of the 118 who responded were:

- 69 (59%) cited the poor status and recognition of LIS in relation to other professions
- 16 (14%) said that they had no knowledge about LIS before they registered
- 16 (14%) had poor employment and career prospects in LIS
- 11 (9%) said that some DLIS programmes had no progression beyond the certificate and diploma levels (i.e. no degree)

These findings show that the lack of knowledge about the programme and the perceived poor status of the profession are some of the de-motivating factors affecting LIS students.

4.1.2 Content of the DLIS Programme

In order to assess the content of the DLIS programme, the following areas were examined:

- Why DLIS programme was liked
- Why DLIS was not liked
- Adequacy of the DLIS Content
- Usefulness of the DLIS Courses

4.1.2.1 Why DLIS programme was liked

Respondents were asked to state areas of the content of the LIS programme which they liked. Out of 175 valid responses:

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- 68 (39%) said they liked the programme because of the IT content
- 68 (39%) liked the programme because of its broad-based content such as IT, ARM, legal aspects, conservation, cataloguing and classification and practical attachment. And that the programme was challenging, flexible and in line with their future career prospects
- 5 (3%) cited effective teaching in the Department
- 38 (18%) did not state any reasons

Despite the majority of the respondents having come into the DLIS programme involuntarily, due to lack of choice, they still found the content of the DLIS programme to be credible and useful.

4.1.2.2 Why DLIS was not liked

Respondents were further asked to identify areas of the content of the LIS programme which they did not like. Out of 215 respondents, 129 gave valid responses as follows:
- 21(16%) cited heavy workload including General Education Courses (GECs)
- 18 (14%) cited brief course content, not challenging, boring, overlapping and repetitive and that there were very few optional courses
- 14 (11%) cited absence of enough practicals in cataloguing and classification
- 11 (9%) cited the DLIS programme as being traditional library oriented in content and courses offered
- 8 (6%) cited absence of a degree programme in ARM
- 8 (6%) cited inadequate delivery in some IT courses where basics are not given
- 6 (5%) said that some courses taught were not job/market oriented
- 43 (33%) gave varied responses, each of which was statistically insignificant
- 86 (40%) did not state why they disliked the DLIS content.

As can be observed above, the implication is that heavy work load because of GECs was taking a toll on the students. Furthermore, the DLIS course structure and content needs to be reviewed to meet student expectations.

4.1.2.3 Adequacy of the DLIS Content

Respondents were asked to comment on the adequacy of the LIS programme in terms of meeting their professional expectations. Table 6 below shows the details of the findings.

Table 2: Adequacy of the content of the DLIS programme

Adequacy		Frequency	Percent	Valid Percent	Cumulative Percent
	Most Adequate	36	16.7	17.4	17.4
	Adequate	128	59.5	61.8	79.2
	Inadequate	13	6.0	6.3	85.5
	Not Sure	30	14.0	14.5	100.0
	Total	207	96.3	100.0	
Missing	99	8	3.7		
Total		215	100.0		

Source: Field data

According to Table 2, out of 207 valid responses:

- 164 (79%) said the content of the DLIS programme was adequate
- 13 (6.3%) respondents said the content was inadequate
- 30 (14%) were non-committal

The findings indicate that by and large the DLIS programme was meeting the expectations of the students.

4.1.2.4 Usefulness of the DLIS Courses

Respondents were asked to comment on the usefulness of the courses in the DLIS programme. The Table 3 below gives a summary of the responses.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 3: Usefulness of the content of the DLIS courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most Useful	71	33.0	33.8	33.8
	Useful	118	54.9	56.2	90.0
	Not Useful	6	2.8	2.9	92.9
	Not Sure	15	7.0	7.1	100.0
	Total	210	97.7	100.0	
Missing	99	5	2.3		
Total		215	100.0		

Source: Field data

Table 3 shows that out of 210 valid responses:

- 189 (90%) said the DLIS content was useful

- 6 (3%) said it was not useful

- 15 (7%) did not state their stand.

This finding shows that students find the courses in the programme to be useful.

4.1.3 Methods of Delivery of Course Content

Respondents were asked to rate, in terms of effectiveness, the various modes of course delivery being employed in the department. The modes of delivery included:

- Lectures
- Practical assignments
- Seminars/discussions
- Group work
- Field trips, visits, exhibitions
- Use of audio/visual aids
- Use of WebCT
- Team teaching
- Practical attachments

23

The results are summarized in Table 4 below:

Table 4: Methods of delivery of courses

Method of delivery	Excellent		Very Good		Good		Poor	
	Count	%	Count	%	Count	%	Count	%
Lectures	49	23%	87	41%	72	34%	3	1%
Practical Assignments	30	14%	72	34%	88	42%	22	10%
Seminars/Discussion	15	8%	37	19%	86	43%	61	31%
Group Work	14	7%	36	18%	100	50%	52	26%
Field Trips/Visits/Exhibitions	14	7%	20	11%	46	24%	109	58%
AV Aids/ Video/Slides/Demonstrations	15	8%	19	10%	50	27%	104	55%
Using WebCT	51	25%	46	23%	79	39%	28	14%
Team-teaching	15	7%	29	14%	62	31%	95	47%
Practical Attachments	44	23%	46	24%	59	31%	41	22%

Source: Field data

4.1.3.1 Lectures

Out of 211 respondents

- 49 (23%) respondents rated the lecture method of delivery as excellent
- 87 (41%) respondents rated the lecture method of delivery as being very good
- 72 (34%) said the lecture method of delivery was good
- Only 3 (1%) said the lecture method of delivery was poor

4.1.3.2 Practical Assignment

Out of 212 respondents:

- 30 (14%) rated the Practical assignments methods of delivery as excellent
- 72(34%) rated the method as very good
- 88(42%) rated the method as good
- 22(10%) rated the method as poor

24

4.1.3.3 Seminars/Discussion

Out of 199 respondents:

- 15 (8%) rated the method excellent
- 37 (19%) rated the method very good
- 86(43%) rated the method as good
- 61 (31%) rated the method as poor

4.1.3.4 Group work

Out of 202 respondents

- 14 (7%) rated the method as excellent
- 36 (18%) rated the method as very good
- 100 (50%) rated the method as good
- 52 (26%) rated the method as poor

4.1.3.5 Field trips, visits and exhibitions

Out of 189 respondents:

- 14(7%) rated the method as excellent
- 20(11%) rated the method as very good
- 46 (24%) rated the method as good
- 109 (58%) rated the method as poor

4.1.3.6 Use of Videos/Slides/Demonstrations

Out 188 respondents:

- 15 (8%) rated the method as excellent
- 19 (10%) rated the method as very good
- 50 (27%) rated the method as good
- 104 (55%) rated the method as poor

4.1.3.7 Use of WebCT

Out 204 respondents:

- 51 (25) rated the method as excellent
- 46 (23%) rated the method as very good

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- 79 (39%) rated the method as good
- 28 (14%) rated the method as poor

4.1.3.8 Team-Teaching

Out 201 respondents:

- 15 (7%) rated the method as excellent
- 29 (14%) rated the method as very good
- 62 (31 %) rated the method as good
- 95 (47%) rated the method as poor

4.1.3.9 Practical Attachments

Out 190 respondents:

- 44 (23%) rated the method as excellent
- 46 (24%) rated the method as very good
- 59 (31%) rated the method as good
- 41 (22%) rated the method as poor

These findings show that:

- the lecture method remains the most dominant and preferred method of delivery with a favourable rating of 98% across all programmes in DLIS from certificate to postgraduate
- This is followed by practical assignments with a favourable rating of 90%
- WebCT was third with 88% favourable rating
- Practical attachment was rated fourth with a favourable rating of 78%
- Group work was fifth with a 75% favourable rating
- Seminars and discussions ranked sixth with a favourable rating of 70%

The following methods were rated unfavourably:

- The use of videos, slides and demonstrations received a favourable rating at 45%
- Field trips, visits and exhibitions were rated favourably by 42% of the respondents

26

Impact Assessment of the DLIS Programme on the Botswana Labour Market

The high rating of WebCT underscores the importance of an appropriate technology-based approach to a learner-centred environment and demonstrates the potential of delivering through this method. The WebCT approach is in line with the department's goal of entrenching information literacy in its programmes. It also corroborates the recent studies on the application of WebCT to teaching undertaken by Mooko, Kalusopa and Mooketsi (2005); Mutula, Kalusopa, Moahi & Wamukoya (2006).

The low rating of demonstrations, video and slide presentations, trips, field visits and exhibitions, which represent learning outside the school environment, show the lack of or inadequate use of these learning/teaching methods in the Department. This could be attributed to a number of factors such as inadequate laboratory facilities, fatigue by overloaded lecturers, lack of interest by lecturers, large classes, and lack of funding for field trips.

4.1.4 Usefulness of Skills and Competencies of the DLIS programme

Respondents were asked to rate the usefulness of the various skills and competences obtained from DLIS programme. A summary of findings is presented in Table 5 below.

Table 5: Usefulness of the skills and competencies obtained from DLIS

Rate of usefulness		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Most Useful	56	26.0	26.4	26.4
	Useful	133	61.9	62.7	89.2
	Not Useful	8	3.7	3.8	92.9
	I Do Not Know	15	7.0	7.1	100.0
	Total	212	98.6	100.0	
Missing	99	3	1.4		
Total		215	100.0		

Source: Field data

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 5 shows that out of 215 respondents, the skills and competencies obtained from the DLIS programme were rated as follows:

- 189 (89%) rated skills and competencies favourably
- 8 (3.8%) rated skills and competencies unfavourably
- 15 (7%) were noncommittal (I don't know)
- 3 (1.4%) did not respond

This finding shows that the students find the skills and competencies obtained from the DLIS programme useful.

4.1.5 Adequacy of Skills and Competencies of the DLIS programme

Respondents were asked to rate the adequacy of skills and competence in the DLIS programme. Table 6 below presents a summary of the findings.

Table 6: Adequacy of skills and competencies of the DLIS programme

Adequacy		Frequency	Percent	Valid Percent	Cumulative Percent
	Most Adequate	32	14.9	15.0	15.0
	Adequate	138	64.2	64.8	79.8
	Inadequate	16	7.4	7.5	87.3
	Not Sure	27	12.6	12.7	100.0
	Total	213	99.1	100.0	
Missing	99	2	.9		
Total		215	100.0		

Source: Field data

Table 6 shows that out of 215 respondents, the adequacy of the skills and competencies of the DLIS programme were rated as follows:

- 170 (80%) said the skills and competencies from DLIS were adequate
- 16 (8) said the skills and competencies were inadequate

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- 27(13%) were not sure (noncommittal) about the adequacy/inadequacy) of the programme
- 2(1%) did not respond to the question

These findings show that the trainees believed that the skills obtained from the DLIS programme prepared them adequately to perform effectively after training.

4.1.6 Balance between Theory and Practice of DLIS Courses

The study sought to establish from respondents whether courses in the DLIS programme were theory or practice oriented, or whether the courses were equally balanced between theory and practice. The findings are presented in Table 7 below.

Table 7: Balance between theory and practice in the delivery of courses

Balance of courses		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Equally Balanced	58	27.0	27.2	27.2
	Biased Towards Theory	102	47.4	47.9	75.1
	Biased Towards Practice	33	15.3	15.5	90.6
	I Do Not Know	20	9.3	9.4	100.0
	Total	213	99.1	100.0	
Missing	99	2	.9		
Total		215	100.0		

Source: Field data

Table 7 shows that out of 215 respondents, the balance between theory and practice in the delivery of the DLIS programme was rated as follows:
- 102 (48%) said that the programme was biased towards theory
- 58 (27%) said the programme was equally balanced between theory and practice
- 33 (16%) said that it was biased towards practice
- 20 (9%) said they did not know (noncommittal)
- 2 (1%) did not respond

Impact Assessment of the DLIS Programme on the Botswana Labour Market

This finding indicates that the delivery of the programme is biased towards theory with little practice. The ratio of those who said it was biased towards theory is three to one (3:1) to those who said it was biased towards practice. Comparing those who said it was biased towards theory to those who said it is equally balanced between theory and practice, the ratio is almost two to one (2:1).

4.1.7 Information Literacy

The study sought to find out the state of information literacy and information seeking skills among the DLIS students. Students were asked questions pertaining to the following areas of information skills:

- Preferred methods of teaching and learning
- Use of computer technology
- Use of the University Library

4.1.7.1 Preference of methods of teaching and learning

Students were asked to rate their preferences in the methods of teaching and learning. Their responses are summarized in Table 8 below.

Table 8: Preference in methods of teaching and learning

Method of delivery	Most Preferred		Preferred		Not Preferred		Total	
	Count	%	Count	%	Count	%	Count	%
Taking Notes During Lectures	120	57%	80	38%	11	5%	211	100%
Lecture Hand-outs	120	57%	75	35%	17	8%	212	100%
Copying Notes from Friends	6	3%	5	2%	196	95%	207	100%
Taking Notes from Prescribes Books	31	15%	108	53%	64	32%	203	100%
Using Materials in the Library	66	32%	112	54%	28	14%	206	100%
Analysing Chapters in Books and Periodical Articles Assigned by Lecturer	34	17%	107	52%	65	32%	206	100%

Searching for Information in the Internet	104	50%	87	42%	16	8%	207	100%
Using the WebCT	88	43%	96	47%	22	11%	206	100%

Source: Field data

4.1.7.2 Note-taking during lectures

Table 8 shows that out of 211 respondents:
- 200 (95%) preferred note taking during lectures
- 11 (5%) did not prefer the note taking during lectures

4.1.7.3 Lecture handouts
Out of 212 respondents:
- 195 (92%) preferred lecture handouts
- 17 (8%) did not prefer lecture handouts

4.1.7.4 Copying notes from friends
Out of 207 respondents:
- 11 (5%) preferred this method of teaching and learning
- 196 (95) did not like this method of learning and teaching

4.1.7.5 Taking notes from prescribed books
Out of 203 respondents:

- 139 (68%) preferred this method of teaching and learning
- 64 (32%) did not like this method of teaching and learning

4.1.7.6 Using materials in the library
Out of 206 respondents:
- 178 (86%) said they preferred this method of teaching and learning
- 28 (14%) did not like this method

4.1.7.7 Analysing chapters in books and periodical articles assigned by a lecturer

31

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Out of 206 respondents:

- 141 (69%) said they preferred this method of teaching and learning
- 65 (32%) said that they did not like this method

4.1.7.8 Searching for information using the Internet

Out of 207 respondents:

- 191 (92%) said that they preferred this method of learning and teaching
- 16 (8%) said that they did not like this method

4.1.7.9 Using WebCT

Out of 206 respondents:

- 184 (90%) said that they preferred this method
- 22 (10%) did not like this method

The above responses show that:

- The lecture method is the most preferred method of learning by students, as indicated by 95% of the respondents;
- Using the Internet and lecture handouts were the second most preferred methods, having been preferred by 92% of the respondents;
- Using the WebCT was ranked fourth most preferred method, having been cited by 90% of the respondents;
- Using library materials was ranked fifth, having been preferred by 86% of the respondents;
- Analyzing chapters in books and periodical articles was ranked sixth, as indicated by 69% of the respondents;
- Taking notes from prescribed books was ranked seventh, having been preferred by 68% of the respondents;
- The least preferred method was copying notes from friends as it was preferred by only 5% of the respondents.

While the lecture methods (face-to-face and handouts) were the most preferred methods of teaching and learning, the technology-based methods (Internet and

WebCT) have also made a strong showing, indicating that students get motivated to search for information using information technology. This contrasts sharply with manual-based tasks of taking notes from prescribed texts and analyzing chapters in books and periodical articles. The library, one of the traditional learner-centred tools of higher education, was still rated highly. The five percent (5%) that preferred copying notes from friends is probably made of students who do not attend classes regularly.

However when the respondents were further segregated by programme, postgraduate students appear not to favour taking notes from lectures. Instead they prefer other methods such as handouts (100%), using the library and analyzing chapter/periodical articles. It should, however, be noted that the number of postgraduates who participated in the study was small to constitute a meaningful sample whose findings can be generalised.

4.1.7.10   Use of Computer Technology

Respondents were asked to state what they used computers for in the university. The findings are summarized in Table 9 below.

Table 9: Use of the computer by students

Uses	Yes		No		Total	
	Count	%	Count	%	Count	%
Computer Used for Internet Searching	184	88%	26	12%	210	100%
Computer Used for Word Processing (typing assignments)	176	84%	34	16%	210	100%
Computer Used for WebCT	135	64%	75	36%	210	100%
Computer Not Used	2	1%	208	99%	210	100%

Source: Field data

The following are the multiple responses for the various uses of computers cited by the 210 respondents:

- 184 (88%) said they used the computer for searching the Internet, with only 26 (12%) saying that they did not use it for Internet searching

33

- 176 (84%) said they used the computer for word processing, while 34 (16%) said they did not use the computer for word processing
- 135 (64%) said that they used the computer to get the materials from WebCT, while 75 (36%) said that they never used it for WebCT
- Only 2 (1%) said they never used the computer

These finding show that ICT literacy was very high among students in DLIS with the majority of the students (98%) using the computer in their studies. The most popular application of computers was searching for information on the Internet (88%). Internet searching was closely followed by word processing applications cited by 84% of the respondents. The last major application of computers was WebCT cited by 64% of the respondents. However, 36% of the respondents said that they never used the computer for WebCT. The lack of usage of the WebCT could be a reflection of lack of use of this facility by some faculty members in the DLIS.

4.1.7.11   Use of the UB Library

Respondents were asked to state the various way in which they used the University Library. The findings are summarized in the Table 10 below.

Table 10: Uses of the University library

Uses	Yes		No		Total	
	Count	%	Count	%	Count	%
Use Library for Searching Information	173	82%	37	18%	210	100%
Use Library for Accessing Computers	113	54%	97	46%	210	100%
Use Library for Reading and Studying	153	73%	57	27%	210	100%

Source: Field data

The following are the multiple responses for the various uses of the UB Library cited by the 210 respondents:

- 173 (82%) said they used it for searching for information, while 37 (18%) said they did not use it to search for information

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- 153 (73%) said that they used the library as a reading/study area, while 57 (27%) said that they did not use the library for this purpose
- 113 (54%) said they used the library to access computers, while 97 (46%) said that they did not use it for that purpose

These findings show that the library was primarily used as a source of information as well as a place where students can read and study. If this was true, then it has implications for continued adequate funding of the University Library to provide both relevant materials as well as seating space for students. The high percentage of the respondents who said that they did not use the library to access the computers (46%) could be because of inadequate computers that are currently available in the library.

4.1.7.12   Application of Information Literacy Skills

Respondents were asked to state the problems they were facing in applying information literacy skills to learning experiences in the university. The results are as indicated in Table 11 below.

Table 11: Information Literacy Problems

Problem area	Often		Sometimes		Never		Total	
	Count	%	Count	%	Count	%	Count	%
Prescribed Readings Difficult to Understand	38	19%	151	74%	16	8%	205	100%
Too Many Readings to Cope With	74	36%	100	49%	30	15%	204	100%
Difficulty Expressing Own Ideas	38	19%	116	57%	48	24%	202	100%
Difficulty Expressing Another Writer's Idea in Own Words	50	24%	128	63%	26	13%	204	100%
Difficulty in Organizing an Essay or Assignment	20	10%	124	60%	61	30%	205	100%
Inability to Give Reference or Bibliography to Own Written Work	22	11%	61	30%	121	59%	204	100%

Source: Field data

According to Table 11, the respondents cited various difficulties in applying information literacy skills as presented below:

Impact Assessment of the DLIS Programme on the Botswana Labour Market

4.1.7.13   Prescribed readings

Out of 205 respondents:

- 189 (92%) said that they faced problems in understanding the prescribed readings

- 16 (8%) said they did not have any problems understanding prescribed readings.

There are two major implications arising from this finding:

- There is lack of knowledge by students on the use of prescribed texts as an aid to learning. This could partly be attributed to lecturers not linking their lectures with the prescribed texts. In other words, textbooks are just recommended by lecturers without being applied to their courses.

- Students do not read outside the lecture hours. They largely depend on what the lecturer gives them. This could be attributed to laziness by students or ineffective induction in the GEC courses on the use of textbooks in the teaching/learning process.

4.1.7.14   Coping with Readings

Out of 204 respondents who commented on this issue:

- 174 (85%) said they were having difficulties coping with too many readings
- 30 (15%) said they had no difficulties.

It is evident from this finding that students were having difficulties coping with readings. This could be attributed to the heavy workload which students have to cope with. Part of the problem could be that there are simply too many courses which students have to take. Under current regulations students are required to take up to a third of their credit hours in GECs. The course load is further compounded by under crediting of some of the courses, which leads to students taking more courses in order to meet the number of required credits.

4.1.7.15 Expressing Own Ideas

Out of 202 respondents:

- 154 (76%) said they had difficulties in expressing their own ideas when writing.

- 48 (24%) said they had no problems in expressing themselves in writing.

This finding shows that the majority of students in the department had problems in expressing themselves in writing. This could be attributed to poor writing skills acquired from the school system.

4.1.7.16 Expressing another Writer's Idea in Own Words

Out of 204 respondents:

- 178 (87%) said that they had difficulties in expressing someone else's idea in their own words.

- 26 (13%) said that they had no difficulties in expressing someone's ideas in their own words.

This problem is manifested in many ways including plagiarism and inability to paraphrase or recasting other people's ideas. These problems could be attributed to a number of factors such as poor writing skills acquired from the school system and poor preparation of students by the relevant GECs.

4.1.7.17 Organizing Essays and Assignments

Out of 205 respondents:

- 144 (70%) said that they had difficulties in organizing essays or assignments.

- 61 (30%) said that they had no difficulties in organizing essays or assignments

It is evident from this finding that the majority of DLIS students experienced problems in organizing written work. The problem could be attributed to a number of factors including lack of preparation of students in proper presentation of ideas in writing by lecturers in the department. In addition, the relevant GEC courses seem not to be having the desired impact. Large class sizes in both GECs and professional courses could be a barrier to lecturers devoting more time to assist individual students with problems of writing and organizing materials for presentation.

4.1.7.18   Referencing and Citations

Out of 204 respondents:

- 83 (41%) said they had difficulties in making references and bibliographic citations to the work they had written.

- 121 (59%) said they had no difficulties in making references and bibliographic citation to written works.

While the majority of students said they were able to make references and bibliographic citations to their written work, over 40% expressed difficulties in this area. This problem could be attributed to poor preparation by lecturers in the department and those teaching GECs.

It is clear from the findings on the application of information literacy skills that the majority of students in the department are deficient in this area. This means the department needs to take corrective measures.

4.1.8   Teaching and Learning Resources

The study sought to find out the level of satisfaction among students on various learning and teaching resources in the University. The items of study that were rated were:

- Computer facilities
- Library services
- Bookshop services
- Lecture rooms.

The results are presented below.

4.1.8.1 Computer facilities

Respondents were asked to rate computing facilities in the faculty (laboratories) in the following areas: accessibility of computing facilities, network connectivity, printing facilities, support for students by computer laboratory technical staff, laboratory space. The results are presented in the table below.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 12: Adequacy of computer facilities

Computing facility	Excellent		Very Good		Good		Poor		Very Poor		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Accessibility to Computers	27	13%	38	18%	77	37%	39	19%	26	13%	207	100%
Network Connectivity	28	14%	55	27%	86	42%	29	14%	8	4%	206	100%
Computer Printing Facilities of	11	5%	11	5%	49	23%	78	37%	61	29%	210	100%
Support by computer Lab Technicians	19	9%	21	10%	77	37%	51	24%	42	20%	210	100%
Lab Space of Computers	6	3%	13	6%	28	13%	77	37%	85	41%	209	100%

Source: Field data

4.1.8.1.1 Accessibility to computer facilities

Table 12 shows that out of 207 respondents:

- 142 or 69% of the respondents rated accessibility of computer facilities from excellent to good.
- The rest of the respondents (31% or 65) rated the computer facilities in terms of accessibility ranging from poor to very poor

These responses appear to indicate that although computing facilities are generally accessible in the University, the facilities are not enough to satisfy the demands of the student population.

4.1.8.1.2 Network connectivity

Out of 206 respondents: 169 (83%) rated network connectivity of the computer systems from good to excellent, while the rest 37(17%)) rated it from poor to very poor.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

It is evident from this finding that network connectivity was not a major problem in the university.

4.1.8.1.3 Printing facilities

Out of 210 respondents:

- 71 (33%) rated printing facilities ranging from good to excellent.
- 39 (67%)) rated printing services from poor to very poor

This finding confirms the general complaint among students that printing facilities are very poor in the university.

4.1.8.1.4 Support by Laboratory technicians

Out of 210 respondents:

- 117 (56%) rated support by laboratory technicians from good to excellent,
- 93(44%) rated laboratory technicians support ranging from poor to very poor.

The implication of this finding is that computer laboratories are inadequately staffed to cater for students needs.

4.1.8.1.5 Laboratory space for computer facilities

Out of 209 respondents:

- 47 (22%) rated space for computer facilities from good to excellent.
- 188 (78%)) rated it from poor to very poor

Lack of laboratory space to cater for the large numbers of students appears to be one of the major weaknesses of the computer facilities in the faculty.

These findings show that while generally computing facilities exist in the university, they are not adequate to meet the needs of students. The major problems highlighted include inadequate laboratory space, lack of printing facilities and poor technical

support to students in the laboratories. There are no laboratory assistants to help students. In addition, a number of the courses with a practical component are being taught without laboratory support services.

4.1.8.2 Library Services

Respondents were asked to rate University Library services in the following areas: adequacy of current books, willingness of staff to assist students, accessibility of the multimedia resources, sitting space, library hours of operation, and access to computers. The findings are summarized in the table below.

Table 13: State of Library Services

Service area	Excellent		Very Good		Good		Poor		Very Poor		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Adequacy of Current Books	37	18%	63	30%	71	34%	29	14%	10	5%	210	100%
Willingness of Library Staff to Help	22	10%	40	19%	87	41%	45	21%	16	8%	210	100%
Accessibility of UB Library Multimedia Resources	12	6%	24	12%	75	37%	61	30%	29	14%	201	100%
UB Library Sitting Space	60	30%	53	27%	65	33%	14	7%	6	3%	198	100%
Library Hours of Operation	83	40%	48	23%	62	30%	13	6%	4	2%	210	100%
Access to Library Computers	16	8%	22	11%	54	26%	70	33%	47	22%	209	100%

Source: Field data

4.1.8.2.1 Adequacy of Current Books

Table 13 shows that out of 210 respondents:

- 171 (82%) rated the adequacy of books in the library ranging from good to excellent
- 39 (18%) rated it as being poor to very poor.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

This seems to indicate that students are satisfied with the collection of information materials in the library.

4.1.8.2.2 Willingness of UB Library Staff to Help Students

Out of 210 respondents:

- 149 (70%) rated library staffs' willingness to assist when students had problems in using library facilities, ranging from good to excellent
- 61(30%) rated them ranging from poor to very poor.

While library members of staff are generally relating well with students, this relationship needs to be improved in the point of service areas.

4.1.8.2.3 Accessibility of the UB Multimedia Resources

Out of 201 respondents:

- 111 (55%) rated accessibility to the multimedia resources ranging from good to excellent,
- 90 (45%) rated the services ranging from poor to very poor.

This response seems to indicate that a lot of students have limited access to multimedia services and as such the service is not meeting the needs of students as just over half of the respondents rated it favourably.

4.1.8.2.4 Library Sitting Space

Out of 198 respondents:

- 178 (90%) rated sitting capacity in the library ranging from good to excellent,
- 20 (10%) said to was poor to very poor.

The provision of seating space appears to be adequate as about 90% of the respondents were satisfied with the seating facilities.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

4.1.8.2.5 Library Hours of Operation

Out of 210 respondents:

- 193 (93%) favourably rated the library's hours of operation,
- 17 (7%) were not happy with the hours of operation.

This finding shows that students were happy with the current library hours of operation.

4.1.8.2.6 Access to Library Computers

Out of 209 respondents:

- 82 (39%) rated the service favourably,
- 127 (61%) said that they were not happy with the service.

Generally access to computers in the library is poor as the majority cannot have access when they want to use the facility

4.1.8.3 Bookshop Services

Respondents were asked to rate bookshop services in the following areas: availability of recommended textbooks, cost of books and willingness of staff to assist students. The findings are summarized in the table below.

Table14: Bookshop Services

Service area	Excellent		Very Good		Good		Poor		Very Poor		Total	
	Count	%	Count	%	Count	%	Cou nt	%	Count	%	Count	%
Availability of Recommende d Text Books at UB Bookshop	11	5%	22	11%	60	29%	66	32%	48	23%	207	100%
Cost of Text Books at UB Bookshop	4	2%	5	2%	29	14%	46	22%	122	59%	206	100%

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Willingness of UB Bookshop Staff to Assist	23	11%	30	15%	96	47%	36	17%	21	10%	206	100%

Source: Field data

4.1.8.3.1 Availability of Recommended Text Books at UB Bookshop

Table 14 shows that out of 207 respondents:

- 99 (48%) rated the availability of recommended textbooks positively,
- 108 (52%) rated it negatively.

It is evident from this finding that the majority of students do not find the recommended textbooks in the bookshop

4.1.8.3.2 Cost of Textbooks

Out of 206 respondents:

- 38 (18%) were happy with the cost being charged for textbooks,
- 168 (82%) were not happy with the prices of books in the bookshop

An overwhelming majority of students feel that books are overpriced in the bookshop.

4.1.8.3.3 Willingness of Bookshop Staff to Assist Students

Out of 206 respondents:

- 159 (77%) rated staff assistance positively,
- 47 (23%) rated it negatively.

There seems to be no problem in the area of student-staff relationships.

4.1.8.4 Adequacy of Lecture Rooms

Respondents were asked to rate the adequacy of lecture rooms in terms of sitting capacity, availability of chairs in lecture rooms, teaching aids in classrooms (e.g. projection facilities such as projectors, lighting, and air conditioning). The results are

44

Impact Assessment of the DLIS Programme on the Botswana Labour Market

summarized in the table below.

Table15: Adequacy of Lecture Rooms

Adequacy of	Excellent		Very Good		Good		Poor		Very Poor		Total	
	Count	%	Count	%	Count	%	Count	%	Count	%	Count	%
Sitting Capacity	19	9%	49	24%	102	49%	25	12%	12	6%	207	100%
Chairs	13	6%	33	16%	86	41%	60	29%	16	8%	208	100%
Teaching Aids	12	6%	28	14%	92	44%	56	27%	19	9%	207	100%
Lighting	54	26%	41	20%	99	47%	13	6%	2	1%	209	100%
Air conditioning	21	10%	34	16%	85	41%	40	19%	28	13%	208	100%

Source: Field data

4.1.8.4.1 Sitting capacity

Table 15 shows that out of 207 respondents:

- 170 (82%) rated the seating capacity ranging from good to excellent,
- 37 (18%) rated sitting capacity ranging from poor to very poor.

The sitting capacity, in terms of the size of the lecture rooms, according to the respondents, is adequate.

4.1.8.4.2 Availability of Chairs

Out of 208 respondents:

- 132 (63%) rated the availability of chairs in classrooms ranging from good to excellent,
- 76 (37%) rated the availability of chairs from poor or very poor.

Over a third of the respondents feel that the seating capacity in lecture rooms is inadequate. This could be attributed to the large class sizes in some courses.

4.1.8.4.3 Availability of teaching aids

Out of 207 respondents:

- 132 (64%) rated the availability of teaching aids ranging from good to excellent,
- 75 (36%) rated teaching aids in classrooms between poor and very poor.

4.1.8.4.4 Lighting in classrooms

Out of 209 respondents:

- 199 (95%) rated lighting as being good to excellent,
- 10(5%) rated lighting in classrooms as being poor to very poor.

There seems be no problem in this area as the majority of students were satisfied with the quality of lighting in lecture rooms.

4.1.8.4.5 Air conditioning

Out of 208 respondents:

- 140 (67%) rated the comfort of class rooms in terms of air conditioning as ranging from good to excellent,
- 68 (33%) rated air conditioning in class rooms as being between poor and very poor.

This finding shows that a significant percentage of respondents were not satisfied with air conditioning facilities in classrooms. The need for effective air conditioning, particularly in summer, makes it a necessary ingredient into creating a conducive learning and teaching environment.

4.1.9   Availability and Accessibility of Lecturers

Respondents were asked to comment on the availability and accessibility of lecturers to students outside class hours. A summary of the finding is presented in the table below.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 16: Accessibility of lecturers

Lecturer Accessibility	All Times		Sometimes		Never		Total	
	Count	%	Count	%	Count	%	Count	%
Availability of Lecturers for Consultation Outside Class Hours	32	16%	158	77%	14	7%	204	100%
Accessibility of Lecturers for Consultation Outside Class Hours	23	12%	156	80%	17	9%	196	100%

Source: Field data

4.1.9..1 Availability of Lecturers

Table 16 shows that out of 204 respondents:

- 32 (16%) said that lecturers were available all the time

- 158 (77%) said that lecturers were available sometime

- 14 (7%) said that lecturers were never available at all times

4.1.9.2 Accessibility of lecturers

Out of 196 respondents:

- 23 (12%) said that lecturers were accessible all the time

- 156 (80%) said that lecturers were accessible sometimes

- 17 (9%) said that lecturers were never accessible

These findings seem to suggest that students have difficulties in accessing their lecturers. This could be attributed to a number of factors including heavy workload, large classes, departmental responsibilities over and above teaching, too many administrative duties such as meetings.

4.1.10 Other Courses to be Included in the DLIS Programme

Respondents were asked to indicate the courses they would like to be included in the LIS Programme. The findings are presented in the table below.

47

Table 17: Other courses that should be in the DLIS programme

What DLIS should do		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		183	85.1	85.1	85.1
	Advertising and marketing courses	1	.5	.5	85.6
	Broadcasting, artistic programmes and journalism courses	1	.5	.5	86.0
	Economics courses	1	.5	.5	86.5
	English and mathematics courses	1	.5	.5	87.0
	English courses	1	.5	.5	87.4
	English courses. Get rid of GEC courses	1	.5	.5	87.9
	Ethics of Information Science	1	.5	.5	88.4
	File and mail management courses	1	.5	.5	88.8
	French courses	1	.5	.5	89.3
	Health, physical education and environmental science courses	1	.5	.5	89.8
	Language courses	2	.9	.9	90.7
	Mail and file management courses	1	.5	.5	91.2
	Marketing and philosophy courses	1	.5	.5	91.6
	Marketing courses	1	.5	.5	92.1
	Marketing, statistics courses	1	.5	.5	92.6
	Mathematics courses	1	.5	.5	93.0
	Media courses	3	1.4	1.4	94.4
	Media studies courses	3	1.4	1.4	95.8
	Physical education courses	1	.5	.5	96.3
	Psychology courses	1	.5	.5	96.7
	Psychology, marketing courses	1	.5	.5	97.2
	Radio programming and reprography	1	.5	.5	97.7

Impact Assessment of the DLIS Programme on the Botswana Labour Market

courses				
Records management courses	1	.5	.5	98.1
Statistics courses	4	1.9	1.9	100.0
Total	215	100.0	100.0	

Source: Field data

This finding seems to suggest the need to move away from a single major LIS programme to a double or double and minors programme in combination with other programmes offered in the university. Other comments are summarized in Table 18 below.

4.1.11 General Comments on How DLIS can improve the Programme

Respondents were asked to make suggestions on what the Department of Library and Information Studies should do to make its programmes more attractive. Summary of the major comments are presented in the table below.

Table 18: How DLIS can improve the programme

What DLLIS should do	Yes		Total	
	Count	%	Count	%
Change the name of the department	10	100%	10	100%
Introduce degree in ARM	35	100%	35	100%
Market the department/teach the outside market what the programme is about	17	100%	17	100%
Increase no. of computers/build computer lab for DLIS students only	7	100%	7	100%

Source: Field data

Among the major issues which respondents would like the Department to address are:

- To change the name of the Department and the Programme from Library and Information Studies to Information Management. There is a very strong feeling

that employers and society are averse to the name "library" denoting the profession and that this puts DLIS graduates at a disadvantage whether they are working or seeking for employment.

- That the department should introduce a degree level programme in Archives and Records Management to create an upward mobility for diploma holders as well as to support the Masters programme in Archives and Records Management (MARM).

- That the department should market the programme to the labour market more effectively as a way of explaining that the content of the DLIS programme is not about "book packing" as most people perceive it to be.

- That the department should increase the number of computers and expand laboratories to cater for the increased numbers of students.

4.2   IMPACT OF THE DLIS PRPGRAMME ON GRADUATES

In assessing the impact of the DLIS programme on the DLIS graduates, the following areas were assessed:

- Choice of programme

- Content of the LIS programme

- Information Literacy

- Job Environment

- Knowledge, Skills and Competencies

4.2.1 Choice of DLIS Programme

In terms of awareness, 55 (70%) were aware of the existence of the programmes, while 24 (30%) were not. This is in contrast to the earlier finding from the in-school students which showed that 72% were not aware of the programme's existence. This could be attributed to the fact that most of the earlier entrants into the DLIS programme were drawn from those already in employment. This is not the case at present.

Among those already employed, 39 (81%) were aware, while 16 (53%) were not aware about the existence of the DLIS programme. Of those who were already aware about the DLIS programme, 33 (60%) of the respondents knew about the programme

50

from their employers, while only 13 (28%) knew it from the University Brochure and advertisement. Table 19 below provides a summary of the responses.

Table 19: Knowledge about the DLIS programme before admission

Source of Information about DLIS Programme	How did you know about the programme	
	Count	%
Career Teacher at School	1	2%
University Brochure	13	24%
Friends	3	5%
Employer	23	42%
Lecturer	1	2%
Sponsor	2	4%
Previous/current employment	10	18%
Advertisement	2	4%

Source: Field data

When the respondents were further segregated by qualification, the following picture emerged: 41 (52%) of the respondents were undergraduate diploma holders, while degree holders were 16 (20%), those with postgraduate qualifications (Masters and Postgraduate Diploma in Library and Information Studies) were 8 (10%) and Certificate holders were 10 (14%). The rest were 1 holder of Certificate in Archives and Records Management and, 3 were holders of a Diploma in Archives and Records Management. Respondents were drawn from traditional employment agencies (National Library and National Archives).

4.2.1.1 Motivating Factors for Doing LIS

Respondents were asked to state what motivated them to do the DLIS programme. The results are summarised in the Table below.

Table 20: Motivating Factors for Doing LIS

Motivating factors	Motivating factors to doing LIS	
	Count	%
Inspired by lecturers	1	1%
Interest/passion in books	4	6%
Previously worked/attached to a library	46	65%
Better pay	1	1%
Passion for librarianship/ARM	4	6%
Nothing	2	3%

Continuing previously started course	2	3%
Interest in information management for development	3	4%
Desperation	1	1%
Had no choice	4	6%
Marketability of the programme	1	1%
For further studies	1	1%
School library	1	1%

Source: Filed data

This finding seems to indicate that by far the major motivating factor for taking the DLIS programme was the respondents' prior work in a library environment.

The study sought to establish whether LIS was their first choice when they enrolled into the University. 66 (86%) indicated that it was their first choice, while 11 (14%) were negative. When those who had indicated that LIS was their first choice were further segregated by status on admission, 22 (73%) of the 30 of the school leavers indicated that LIS was their first choice, while for those who were already employed, 43 (93%) of the 46 respondents responded in the affirmative.

When the respondents were further asked to state what their choice would have been had they been given an opportunity to choose another programme other than DLIS, 47 (69%) of the 68 respondents said that they would have chosen another programme of study. When the respondents were segregated by status on admission, 81% of 25 school leavers said they would have chosen another programme, while 61% of the 41 already employed were of the same view. This shows that the majority of the graduates lack the motivation to do the programme and to pursue a life-long career in the LIS profession.

4.2.2 Content of the DLIS programme

Respondents were asked to state the factors that attracted them to the DLIS programme. The results are summarised in Tables 21 and 22 below. These findings show that the major attractions to the DLIS programmes were in three major areas: IT related courses (55%), management courses (10%) and cataloguing and classification (10%). These three areas accounted for 75% of the respondents who have graduated from the DLIS programme in the last twenty years.

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 21: Why DLIS Programme is liked

Pull Factor to DLIS Programme	Content of LIS programme is liked for	
	Count	%
Records management and archives administration	2	3%
IT related courses	37	55%
Reference services	1	1%
Wide coverage of information science	3	4%
Cataloguing and classification	7	10%
Realistic and applicable	1	1%
Nothing	2	3%
Management courses	7	10%
Research methods	1	1%
Legal issues of information	1	1%
Everything/most courses	5	7%

Source: Field data

Table 22: Factors why LIS Programme is liked on Admission

Pull Factor to DLIS Programme	Status on admission to UB			
	Direct from School		Already Employed	
	Content of LIS programme is liked for		Content of LIS programme is liked for	
	Count	%	Count	%
Records management and archives administration	0	0%	2	5%
IT related courses	19	76%	18	44%
Reference services	1	4%	0	0%
Wide coverage of information science	1	4%	2	5%
Cataloguing and classification	3	12%	4	10%
Realistic and applicable	0	0%	1	2%
Nothing	0	0%	2	5%
Management courses	0	0%	7	17%
Legal issues of information	1	4%	0	0%
Everything/most courses	0	0%	5	12%

Source: Field data

A further segregation by status of the three major areas of attraction in the DLIS programme revealed that 76% of the direct entrants preferred IT related courses, 12% cataloguing and classification, while none preferred management courses. For those already employed, 44% preferred IT-related courses, 10% preferred cataloguing and classification, while 17% preferred management related courses. This finding seems to indicate that the major pull factor for the school leavers to the DLIS programme was IT.

53

When respondents were asked about the factors that made them dislike the DLIS programme, over a third of the respondents (36%) identified the content in cataloguing and classification-related courses as the major factor for disliking the DLIS programme; 17% were non committal, while 9% did not like the practical attachment courses. Other significant findings were that: the programme was theory-based (4%), there were too many traditional library courses (4%), the courses in the programme focussed too much on a public library setting (4%).

Out of the 20 school leavers, 8 respondents (40%) identified presentation of the cataloguing course as the main reason for disliking the programme. The corresponding response for those already employed on the same was 31% of the 124 respondents citing the presentation of cataloguing courses. 15% of the school leavers and 19% of those already employed were non-committal. The other factors that made the DLIS programme unpopular were as follows: practical attachments was cited by 15% of school leavers and 4% for those already employed; bias towards theory was cited by 5% of school leavers and 4% of those already employed; programme's bias towards traditional library courses was mentioned by 5% of school leavers and 4% of those already employed.

The segregated responses on the programme being based too much on a public library setting, none of the school levers identified that as a problem, while 8% of those already employed cited this as one of the reasons. The reason for this disparity between the two groups could be that school leavers have no experience of the practical library environment, hence their indifference on the issue.

When asked what should be done to strengthen the DLIS programme, out of 63 respondents: 29% said cataloguing and classification could be improved by infusing IT and by making the course more practical; 38% proposed the development of more IT courses; 9% said the department should introduce management courses such as customer/public relations; 8% said that the design of courses should be informed by interaction of the DLIS department with stakeholders to know the market needs. In general, the other responses point to the need to develop more non-traditional courses

Impact Assessment of the DLIS Programme on the Botswana Labour Market

that meet market needs such as information repackaging, marketing information resources, specialized information management systems such as medical records management, business records, legal information systems, and energy information systems.

4.2.3 Information Literacy Skills in the DLIS Programme

The study sought to find out the information literacy skills which the DLIS programme imparted to the graduates. To do this the following areas of information literacy skills were assessed:

- computer literacy
- use of the library and
- communication skills

4.2.3.1 Use of Computers

On whether they had used computers while at the University, out of 75 respondents, 72 (96%) indicated that they had used computers in the course of their studies at the University. And 92% of the use of computers was directly related to IT-related courses while 8% was for general purposes such as information processing or word processing assignments.

4.2.3.2 Use of the Library

Respondents were asked to state whether they had used the library during their stay at the University. Out of 79 respondents, 77 (97%) stated that they had used the library during their time of study, with 86% of them having used it for research and assignments. Only 14% had used the library for general academic purposes such as Internet searching, OPAC searching, borrowing material and as a study reading area. It would appear from this finding that the use of the library was lecture or assignment driven.

4.2.3.3 Information Literacy and Communication skills

The study sought to find out whether DLIS graduates had acquired communications skills such as the ability to search, organize, evaluate and use information to solve problems. Out of 79 respondents, 70 (89%) acknowledged that the DLIS programme

had given them the skills in searching, organising, analysing, evaluating and use of information. This is an interesting finding given that the earlier findings on the use of the library by the respondents had clearly shown that library usage was driven by course work.

On communications skills (i.e. the ability to communicate with clients and to write and present reports), out of 78 respondents, 71 (91%) expressed confidence that they were able to communicate with clients, while 68 out of 77 (89%) felt that they were equipped with good report writing and presentation skills. This finding is in contrast with the views of employers who noted that most of the DLIS graduates were weak in communication skills including customer relations. The implication is that while the respondents say that the DLIS programme adequately equips the graduates with these skills, they are unable to apply them in a work environment. As the study has shown on the choice of programme, this inability to apply knowledge and skills from the DLIS programme could be attributed to various factors such as:

- The type of candidates that are admitted into the programme that are either already employed but academically weak or direct entrants who are not motivated because DLIS was never their choice;
- Poor conceptualisation and application of ideas, which are higher level academic skills.

Respondents were asked to identify courses that had equipped them with communications skills. Out of 62 respondents, 35 (56%) identified the GEC courses in communications and study skills as being the major source of their preparation. Only (18%) cited DLIS courses for their communications skills abilities. The implication of this finding is that the DLIS programme content does not emphasize communication skills. This is in tandem with the views of most employers who said that DLIS graduates lacked skills in areas of customer relations, management, analytical and oral presentation.

4.2.4 Impact of the DLIS Programme on the Job Environment

One of the objectives of the study was to find out the performance of the graduates after they had completed their DLIS programmes. To do this the following areas were examined:

- the institutions where they had worked since graduating from the DLIS programme;
- how long it took them to find employment after graduating;
- their current job titles;
- their satisfaction with their current employment;
- career prospects in their current employment;
- how challenging their current jobs were with respect to applying professional skills learnt in school;
- their satisfaction or lack of it in their current jobs
- their job descriptions
- the relationship between the job description and what they actually do
- the provision of resources required to do their work by their employers
- their status with respect to attending management meetings
- the relevance of DLIS skills and competencies to their work environment

4.2.4.1 Institutions worked for since leaving DLIS programme

Graduates were asked to state the various institutions which they had worked for since graduating from the DLIS programme. Out of 89 multiple responses, the following pattern emerged:

- 60 (67.4%) had worked for government departments under the Botswana National Library Services
- 22 (24.7%) had worked for parastatal bodies
- 7 (7.8%) had worked for non-public sector institutions

This study shows that when public-sector institutions are combined they account for 92.2% of the institutions where DLIS graduates have worked. This shows a predominance of the public sector as the main employers of DLIS graduates. Among these, the main public-sector employers were the BNLS (accounting for 52.4%), the

Impact Assessment of the DLIS Programme on the Botswana Labour Market

University of Botswana (13.4%), and the Botswana National Archives and Records Service (4.9%). The rest of the public sector employers were parastatal bodies, schools and colleges. It can be seen from these findings that employment opportunities in the private sector are either very few or are yet to be tapped. This could be attributed to a number of factors, among, them:

- The predominance of the public sector in the economy
- Lack of appreciation of the role and integration of information in the operation/production process in the private sector
- Lack of market drive by DLIS and the professional bodies such as BLA to market the profession to the market

The study also shows a lot of mobility of the DLIS graduates in that out of 58 respondents, 18 (31%) had worked for more than one employer since leaving DLIS.

4.2.4.2 Time taken to find employment after graduating

The study sought to establish how long the graduates took to find employment after graduating. The results of the study (Table 23) show that out of 37 respondents who had come direct from school, 33 (89%) got employed within 12 months of graduating with over 51% of the graduates being employed within three months of graduating. Only 4 out of 37 (11%) respondents who were direct from school found employment in a period exceeding 12 months after graduating. The rest of the respondents were already working before they enrolled for training in the DLIS programme.

Table 23: Time taken by graduates to find employment

Period taken to find employment	Time taken to get employment after leaving UB	
	Count	%
<= 3 months	19	31%
4-6 months	6	10%
7-9 months	5	8%
10-12 months	3	5%
More than 12 months	4	7%
Already employed	24	39%

Source: Field data

Impact Assessment of the DLIS Programme on the Botswana Labour Market

This finding is in contrast with the current unemployment trends among university graduates as shown by findings of the study by the Department of Institutional Planning at the University of Botswana, which indicates that most of the DLIS graduates were not employed in the first 6 -12 months.

4.2.4.3 Current Job Titles of DLIS Graduates

Respondents were asked to state their current job titles. The results are summarised in Table 24 below.

Table 24: Job Titles of DLIS Graduates

Job Title	Current employment job title	
	Count	%
Lecturer	1	1%
Librarian 1	4	5%
Senior library assistant	2	3%
Senior information officer	1	1%
Acting director	1	1%
Information officer	1	1%
Assistant librarian	6	8%
Principal library officer	3	4%
Teacher librarian	2	3%
Resource center officer	1	1%
Librarian	6	8%
Assistant records officer	2	3%
Senior librarian	3	4%
Library and IT coordinator	1	1%
Library officer	21	27%
Documentalist/Archivist	1	1%
Resource center officer	1	1%
Librarian class 2	1	1%
Library assistant	6	8%
Principal Archivist	1	1%
Senior library officer	3	4%
Records officer	1	1%
Chief librarian	1	1%
Principal records officer	1	1%
Resource center coordinator	1	1%
Manager	1	1%
Librarian 2	2	3%
Temporary, no job title yet	1	1%
Senior library officer 2	1	1%
School librarian	1	1%

Source: Field data

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Table 24 shows that the majority of the job tiles (i.e. 22 of the 30 job titles cited 73%) of DLIS graduates were within the traditional archives/records management and library nomenclature. Only 7 of the 30 (23%) respondents indicated job titles that were outside the traditional LIS nomenclature as can be seen from table 24 above.

A number of observations can be made on employment patterns for DLIS graduates:

- Employment opportunities in the traditional public sector were shrinking.
- The structural rigidities in the staff establishments of the main employing public sector agencies for DLIS graduates such as the BNLS and the BNARS could be responsible for slow expansion of this sector in absorbing the graduates. This is so in the sense that the current legal frameworks for both the BNARS and the BNLS has given the mandate to recruit staff in government departments with LIS professionals to the two bodies, dictated by the number of positions which the Public Service Management Division and the Ministry of Finance allocates to them. For this reason, departments cannot recruit LIS professionals on their own.
- The general perception of the DLIS programme as a library qualification rather than as an information management qualification has proved to be a barrier for the graduates to venture into the non- traditional library job market. This is evident from the findings of the study which indicated that most job titles still largely reflect the traditional library nomenclature. The implication is that penetration in the non-library sector continues to be slow.
- Since 2000, the DLIS programme has experienced a rapid increase in enrolments. This can be attributed to the general government policy of expanding enrolments into higher education which has seen the University admitting increased numbers of students

4.2.4.4 Satisfaction of Graduates with their Current Employment

The employed graduates were asked to indicate whether they were happy with their current employment. Out of 78 respondents, 41 (53%) indicated that they were not happy in their current employment. Only 47% said they were happy in their employment. The implication of this is that the LIS workforce is not motivated and therefore its commitment to the profession is in doubt

Career Prospects

Graduates were asked about their career prospects in their current employment. The results are summarised in Table 25 below.

Table 25: Career prospects of DLIS graduates in employment

Career Prospects	Career prospects in current employment	
	Count	%
Upgrading after 2 years	1	2%
Have some short courses in computers	1	2%
Nothing	23	41%
Aspire to be a national leader	1	2%
Want to do publishing	1	2%
Further studies	14	25%
Promotion/pay rise	5	9%
Newly employed	6	11%
Change career/profession	3	5%
Getting a permanent job	1	2%

Source: Field data

These finding show that 41% did not see any career prospects in their current jobs whereas 27% saw further studies as providing prospects for career development thus indicating training as a key motivating factor. 11% looked forward to being promoted and having their pay raised, while another 11% contemplated a change of career. This confirms the earlier findings that DLIS graduate were generally unhappy with the work environment.

Although most respondents were not happy about their job context, when the graduates were asked to state whether they found their jobs challenging, out of 72 respondents, 49 (68%) said they found their jobs challenging and were satisfied with the tasks they performed.

The study further established that the job descriptions of DLIS graduates reflected professional content such as collection development, organising information materials, information retrieval, user information service, management, general stock management, and others. The study also found that the job descriptions reflected what

61

the graduates actually do. This was the view of the majority of the respondents (52 out of 70 or 74%).

However, this study confirmed the predominance of traditional library related tasks over modern non-traditional tasks such IT, information repackaging, etc in the work environment. This shows a mismatch between the skills which graduates are taught during their training and what they actually do in the workplace. While the DLIS curriculum has continued to evolve by embracing new information management skills such as application of IT, the work environment routines have continued to revolve around traditional LIS tasks.

4.2.4.5 Provision of Resources by Employers

The study sought to find out whether the DLIS graduate employees were being provided with the requisite resources with which to carry out their professional duties at their places of work. Table 25 below provides a summary of the responses. The study findings seem to indicate that the LIS professionals are working in environments where they are generally well resourced in terms of finances, labour and technology.

Table 26: Provision of operational resources by employers

Resources requirements	Adequate		Partly adequate		Inadequate	
	Count	%	Count	%	Count	%
Availability of necessary recourses to do work	19	27%	30	43%	21	30%
Adequacy of financial resources	30	42%	9	13%	32	45%
Adequacy of human resources	30	43%	6	9%	34	49%
Adequacy of technological resources	34	49%	8	11%	28	40%

Source: Field data

4.2.4.6 Status of LIS Professionals in Organizations

Respondents were asked to state whether they were treated as part of management through attendance of management meetings at their places of work. The results show that of the 77 respondents, only 38 (49%) attended management meetings. Of the 49% who attended management meetings, 84% of them indicated that information related issues were discussed at the meetings. The non attendance of management meetings

62

Impact Assessment of the DLIS Programme on the Botswana Labour Market

by LIS professionals could be attributed to the dominance of certificate and diploma holders in the study sample in that the holders of first degrees and above represented only 30 percent of the study sample.

4.2.5 Relevance of Knowledge, Skills and Competencies from the DLIS Programme

The study sought to establish the relevance of the courses offered in the DLIS programme to the graduates' work environment. To do this, the following areas were assessed:

- Relevance of the skills and competencies of the DLIS programme;
- Additional skills which the graduates would have liked to have obtained from the programme, and;
- Additional skills that the graduates felt they needed in their current job.

Table 27: Relevance of knowledge, skills and competencies from DLIS programme

Relevance of DLIS Programme	Relevance of skills and competencies obtained from the LIS programme	
	Count	%
Very relevant	29	38%
Relevant	42	55%
Partly relevant	4	5%
Not relevant	1	1%

Source: Field data

The results in Table 27 above show that 94% of the respondents felt that the skills and competencies obtained from the DLIS programme were relevant to their work environment.

On additional skills that that the graduates would have wished to obtain from the DLIS programme, respondent identified four major categories of skills as follows:

- 50% of the respondents cited non traditional courses that would impart skills in the following areas: business management, research, publishing, financial management, specialized IT applications, general management, knowledge management, legal information, media, procurement management;

- 25% of the respondents cited communications skills in the following areas: report and minutes writing, and presentation;
- 17% of the respondents cited advanced skills in traditional library processes such as cataloguing, indexing, classification and collection building and management.
- 8% of the respondents cited skills in managing clients and the ability to interact with adult clients and customer care.

This finding is a clear indication of the need for the Department to design new non-traditional specific application courses and improve on the existing ones.

Graduates were also asked to identify skills they felt they needed to acquire to enable them perform better in their current jobs. Out of 67 respondents:
- 40% said they needed more training in IT
- 27% required more practical experience in cataloguing and classification
- 18% cited areas of management such as administration/management and public relations

When the graduates were asked to assess whether the DLIS programme was theory or practice-based, out of 79 respondents, 56 (71%) said it was largely a theory-based programme; 21 (27%) said that it was equally balanced, with only 2 (3%) saying that it was practice-based.

Respondents were asked to state the problems which they faced in the course of their studies in DLIS. The frequency of multiple responses centred on the following three major areas of concern:
- there were 50 citations of inadequacies of IT facilities;
- 34 citations were on inadequate sitting space;
- 18 citations were on inadequate stocking of the book store.

Other problem areas identified included: poor programme structure (6 citations), inadequate practice of the courses (6 citations) and inadequate time allocated to cover course contents (4 citations).

Impact Assessment of the DLIS Programme on the Botswana Labour Market

Graduates were asked to suggest measures which the DLIS should take in order to improve its programmes. Suggestions for improving DLIS programme included the following:

- 29 citations suggested that the DLIS should change the name of the programme to Information Science or Information Management. This was a recurring theme among both graduates and in-school students. There is a very strong feeling that the term "library" has negative connotations in that people associate it with 'packing books' and not a serious profession. Because of this the profession is accorded a low status and makes it difficult for students to compete for jobs with graduates from other fields with attractive non-traditional programme titles;
- 4 citations were for the introduction of part-time undergraduate degree programme;
- 9 citations proposed that the DLIS should align course content with the market needs;
- 8 citations proposed that the DLIS programmes should be marketed much more than was currently the case so that the public is educated more about them.

Other suggestions were that DLIS should:
- Provide more teaching aids in cataloguing and classification;
- More time should be provided to cover the course content adequately because as things stand now, "semeterisation gives time for introduction only";
- Improve practical attachment training through extending the period of attachment, and closer supervision of students on practical attachment with follow-ups visits;
- The course workload should be reduced so that students could have more focused learning
- Duplications and repetitions in course contents should be reduced
- Introduce specialised courses to cater for special information management needs;
- Introduce a bachelors degree programme in archives and records management;

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- Introduce short-term courses to upgrade the knowledge base of graduates who were in the field;

- Introduce more IT courses

- Increase the staffing complement so that there is a wider range of course offerings

- Ensure better relationship between lecturers and students

4.3   VIEWS OF EMPLOYERS ON DLIS GRADUATES

Interviews with employers revealed that there were two major perceptions about the DLIS programme which centred on: programme content and work-environment related issues.

4.3.1 Programme Content Issues

- The DLIS programme seems too theoretical with no clear visible impact of the application of skills.

- While most of the earlier DLIS graduates are generally competent in cataloguing and classifications, the most recent ones take some time to perform satisfactorily.

- Most DLIS graduates are routine oriented and lack managerial skills in areas such as planning, supervisory, communication (verbal and writing), public relations and financial management skills such as budgeting.

- The graduates lack appreciation of the some of the pertinent issues in information environment such as copyright.

- The DLIS programme is too general to produce graduates with specialist skills in areas such as legal information, medical information, environmental information etc.

- Some employers such as UB Library Staff cited the lack of subject content as one of the weaknesses of the DLIS programme

- The timing for industrial attachment at Certificate and Diploma levels is inappropriate as it comes at the end of the programme and as such it does not feed back into learning experiences

Impact Assessment of the DLIS Programme on the Botswana Labour Market

- The entry requirements for certificate level are restrictive in that most in-service personnel with a training need do not qualify.
- Most of the current graduating students have shown strong competences in ICTs e.g. database management, webpage design, information storage and retrieval.
- There is no provision for distance education programme to cater for the traditional market.

4.4 WORK ENVIRONMENT RELATED ISSUES

- BNLS and BNARS staff ceilings are at variance with institutional staffing needs. For example, most institutions indicated a willingness to hire more staff but this was curtailed by BNLS and BNARS establishment ceilings. This is because current legislations for BNLS and BNARS mandates them to be the sole recruiting/placement agencies for libraries, RMU and Archives across all government departments. This has implications on employment opportunities for the DLIS graduates. For instance, Francistown, the second largest city in Botswana with about 90 government departments, only about 10 have seconded qualified staff from BNARS. The other 80 department are operating records management services without qualified personnel.
- The issue of staff secondment to user departments also breeds divided loyalty between BNLS or BNARS with the user institutions where the staff are seconded. This caused problems in areas such as staff supervision, assessment, training and promotions.
- BNLS has centralised most professional activities at the Headquarters making it difficult for DLIS graduates to apply skills such as collection development, cataloguing, classification, and ICT.
- User departments outside BNLS and BNARS Headquarters are under resourced in terms of equipment e.g. computers. This makes it difficult for the DLIS graduates to apply some of the IT related skills.

CHAPTER FIVE

5.0   RECOMMENDATIONS

The following are the recommendations arising from the study:

5.1 Choice of Programme

The findings of the study revealed that the earlier entrants into the DLIS programmes knew about its existence while the recent entrants did not. The study also showed that the majority of both the in-school and graduates were not motivated to do LIS and would have chosen another career given a choice. The study further indicated that the majority of the students admitted into DLIS had lower entry qualifications in comparison with various other University programmes.

It is recommended that DLIS needs to devise an innovative strategy for marketing its programmes. This could be done through conducting market research and specifically tailor the marketing strategies to the identified segments.

It is also recommended that the entry requirements for DLIS be made competitive with English as a prerequisite subject. Furthermore, Departments should be involved in the selection process.

5.2 Content of the LIS programme

The study revealed that in-school students and graduates were generally satisfied with the content of the DLIS programme, except for lack of practical applications in courses such as cataloguing and classification. However, employers were of the view that the programme was too theoretical.

It is recommended that DLIS should take appropriate measures to infuse more practical applications and modernise some of its programmes which have remained traditional such as cataloguing, classification, collection development and management by incorporating IT. It is further recommended that DLIS should provide

Impact Assessment of the DLIS Programme on the Botswana Labour Market

adequate equipment and laboratory facilities to enhance the practical component of its various courses and programmes.

5.3 Methods of Delivery of Course Content

The study showed that the technology-based delivery methods were ranked higher than the traditional ones. In contrast, practice-based methods such as demonstrations, video and slide presentations, field trips, group work and exhibitions were generally ranked low in spite of their innovativeness as teaching aids.

It is recommended that the DLIS finds ways to institutionalise the use of technology approaches as well the practical methods to enhance teaching and learning. This also means that staff training needs are to be reviewed regularly to determine areas in which further training may be required as part of staff development.

5.4 Usefulness of DLIS Skills and Competencies

The study revealed that both in-school and graduate respondents rated the skills and competences obtained from the DLIS favourably. However, employers maintained that while the graduates had obtained some useful skills and competences such as IT, these were by and large general and lacked specific applications. Managerial skills were also found to be lacking.

It is recommended that DLIS should create an environment where courses are backed up by practical application tools and software in courses such as conservation and preservation, record management, cataloguing, reprographics, information storage and retrieval.

5.5 Balance between theory and practice in the delivery of courses

The findings of the study showed that the DLIS programme was largely theory-based with little practice. The implication of this is that the DLIS programme is not meeting the expectations of employers and the graduates both of whom place emphasis on practical skills and competencies.

It is therefore recommended that as a professional programme, DLIS should strive to strike a balance between theory and practice in the delivery of its programmes. This entails undertaking a thorough review of courses and the delivery mechanisms. The timing of the practical attachment for Diploma programmes is inappropriate and should change from being offered at the end of the programme to the end of the first year.

5.6 Application of information literacy and information-seeking skills

The study findings focused on three main areas of information literacy namely: preferred method of teaching and learning; use of computer technology; and use of the library. The specific findings were that lecture methods (face-to-face and handouts), technology-based methods (internet and WebCT), and use of the library were the most preferred methods of teaching and learning. In contrast, the least preferred methods were the manual-based tasks including taking notes from prescribed texts and analysing chapters in books and periodicals. Based on these findings, it is recommended that DLIS should as much as possible embrace a mixed-mode approach in teaching and learning.

The study further established that students faced various difficulties in applying information literacy skills in the following areas: using prescribed readings, expressing own ideas, expressing another writers ideas in own words, organising assignments, referencing and citations. The study recommends as follows:

- There is a need for lecturers to link prescribed reading with topics in the course outline
- The teaching of communication skills needs to be reinforced with an infusion of more practice and hands-on applications.
- DLIS should adopt a variety of teaching methods.

5.7 Availability of Learning and Teaching Resources

The study established that most resources in the following areas were inadequate: computer facilities, bookshop services, lecture rooms. Only library facilities were said be adequate. It was also observed that a number of courses with substantial practical components such as cataloguing, classification, preservation and conservation; and

70

records management were being taught without laboratory facilities. It is recommended that greater attention be paid to the provision of these facilities bearing in mind the implementation of both the department and faculty strategic plans. Further, it is recommended that the high cost of textbooks in the bookshop should be addresses by the bookshop negotiating concessionary prices with publishers.

5.8 Availability and Accessibility of lecturers

The findings of the study revealed that lecturers were generally inaccessible outside lecture hours. It is recommended that Lecturers should indicate the hours when they are available for consultation. In addition, the workload of lecturers should be reduced by reviewing and expanding the staff establishment in line with the courses and programmes offered in the department. It is also recommended that the capping of numbers of students to register into courses should be strictly enforced at registration.

5.9 Desirable Changes to the DLIS programme

The study established the need for students to take courses outside the department to broaden their subject/academic base. It is recommended that DLIS should consider moving away from a single subject major to a double major.

Other desirable recommended changes include:
- Change of name of the department;
- Degree level programme in Archives and Records Management;
- Marketing the programme, and;
- Part-time degree programme and distance learning.

5.10 Work-related issues

The study revealed that the current BNLS and BNARS legislations make these two institutions the sole employers for DLIS graduates in government thus limiting employment opportunities in the library and archives professions.

It is recommended that recruitment should be decentralised to the user departments and ministries, leaving the two institutions to concentrate on policy formulation, quality assurance and standards, coordination and general leadership in the

Impact Assessment of the DLIS Programme on the Botswana Labour Market

professions. Further, the name of DLIS as well as that of its degrees and diplomas should be changed to address the poor perception of DLIS qualifications and graduates which arises because of the 'library' tag. The current name does not adequately reflect the content of the various courses on offer. In addition, DLIS should discontinue the offering of certificate level programmes and the entry requirements into DLIS programmes should be raised to match those of other competitive programmes at UB such as Law and Business.

REFERENCES

1. Aina L. O. (2004) Towards an ideal Library and Information Studies (LIS) Curriculum for Africa: Some Preliminary Thoughts. A paper presented at the Departmental Seminar of the Department of Library and Information Studies. University of Botswana.

2. Aina L. O. & Moahi K. (1999) Librarians and the Emerging Information Market in Botswana. Library Management: Bradford. Vol 20, Iss 8 pg 420.

3. Aina L. O. & Moahi K. (1998) A study of the Appropriateness of Curriculum to Professional Practice: A Tracer Study of the Botswana Library School Products.

4. Anwar, M. & Al-Ansari, H. (2003) Developing Working LIS Professionals in the Gulf Cooperation Council countries: A study of the Perceptions of Deans and Directors of Academic Libraries. The Electronic Library. Oxford: Vol.20, Iss. 3; pg. 231.

5. Basheti J. (1999) Library and Information Studies Curriculum [Online] Available at http://www.gslis.mcgill.ca/beheshti/alacais4.htm Accessed on 16/10/05.

6. Buttlar, L. & Du Mont, R.R. (1996) Library and Information Science Competencies Revisited. Journal of Education for Library and Information Science, Vol. 37, pp. 44-62.

7. Mahmood, K. (2003) A Comparison between Needed Competencies of Academic Librarians and LIS Curricula in Pakistan. The Electronic Library. Oxford: Vol.21, Iss. 2; pg. 99.

8. Ocholla, D. (1995) Professional Development, Manpower Education and Training in Information Sciences in Kenya. Library Management. Bradford:Vol.16, Iss. 8; pg. 11.

9. Ocholla, D. (2000) Review and Revision of Library and Information Science Curriculum in a South African University and the Usage of Follow-Up Study and Advertisement Scanning Methods. Dimensions of a Global Information Science: Canadian Association for information science proceedings of the 28th annual conference. Available online at http://www.slis.ualberta.ca/cais2000/ocholla.htm accessed on 3/10/05.

10. Odini C. (1999) Training and Development of Skills in a Changing Information Environment. Library Management. Bradford: Vol 20, Iss 2 pg 100.

11. Rosenberg, D. (1994) Achieving the Optimum Curriculum: A survey of the BSc in Information Science Curriculum in the Context of Market Needs in Kenya: Eldoret: Kenya.

12. Sajjad, R. et al (1997) Competences for Future Library Professionals of Academic Libraries in Malaysia. Library Review. Bradford: http://proquest.umi.com.ezproxy6.ndu.edu/pqdweb?RQT=572&VType=PQD &VName=PQD&VInst=PROD&pmid=46151&pcid=1664162&SrchMode=3 Vol.46, Iss. 6; pg. 381

13. SLA, (1998) Competence for Special Librarians of the 21st Century Library and Information Science Programs Survey. Final Report. [Online] Available at http://www.gslis.mcgill.ca/beheshti/alacais4.htm Accessed on 19/10/05.

14. Tenopir, C. (2000) I Never Learned About That in Library School: Curriculum Changes in LIS. Medford: Vol.24, Iss. 2; pg. 42.

15. Thapisa, A. (1999a) Developing Lasting Competencies for a Twenty-First Century Information Economy Workforce in Africa. Library Management. Bradford: Vol.20, Iss. 2; pg. 90.

16. Thapisa, A. (1999b) Training for the Real Working World in an Information Economy. Library Management. Bradford: Vol.20, Iss. 2; pg. 84.

REPUBLIC OF BOTSWANA.

TELEPHONE: 3611100
FAX: 313584

MINISTRY OF LABOUR AND HOME
AFFAIRS
PRIVATE BAG 002
GABORONE

CHA 1/17/2 II (41)

29 December 2004

Dr Justus M. Wamukoya
Department of Library and Information Studies
University of Botswana
Private bag 0022
Gaborone

Dear Sir

APPLICATION FOR A RESEARCH PERMIT

You application for a research permit dated 14 December 2004 refers.

You are hereby granted permission to carry out research in "Impact Assessment of the Librarian and Information Studies Programme on the Botswana Labour Market". Your research will be carried out in Gaborone, Kanye, se!ibe Phikwe, Francistown and Lobatse from December 2004 to December 2005.

The permit is granted subject to the following conditions:

1. Copies of any report/video are deposited with this Ministry, Director of Research and Development Office of the University of Botswana, Botswana National Library and Botswana National Archives.

2. The permit does not give authority to enter any premises, private establishment or protected area. Permission for such entry should be negotiated with those concerned.

3. You conduct the study according t) the particulars furnished in the Application form.

4. Failure to comply with any of the above - stipulated conditions will result in the immediate cancellation of the permit.

Yours faithfully,

/) ﻮﻟ

A.M Pone

For / Permanent Secretary

Appendix 2

QUESTIONNAIRE FOR CURRENT DLIS STUDENTS

Dear student,

The Department of Library & Information Studies (DLIS) is conducting a study to assess the impact and relevance of the Library & Information Studies (LIS) programme on the labour market in Botswana. You are kindly invited to participate in the study by completing the questionnaire. We wish to assure you that all the information supplied will be treated in the strictest confidence and will be used solely this study. Thank you.

A. BACKGROUND INFORMATION

1. Gender

   ❑ Male
   ❑ Female

2. Age group

   ❑ Under 20 years
   ❑ 21-25 years
   ❑ 25-30 years
   ❑ Above 30 years

3. Status on Admission

   ❑ Direct from school
   ❑ Already Employed

4. Education Background

   ❑ Junior Certificate in Secondary Education (JCSE)
   ❑ Botswana General Certificate of Secondary Education (BGCSE)

B. CHOICE OF PROGRAMME

5. Did you have prior knowledge of the DLIS programme before admission?

   ❑ Yes
   ❑ No

6. If **YES**, how did you know about the programme?

   ❑ Career teacher at school
   ❑ Parent/Guardian
   ❑ University Brochure
   ❑ Friends

Others, specify--

7. What programme are you registered for?--

----

8. What motivated you to do the Library & Information Studies (LIS) programme? Explain---
----

----

9. Was LIS your first choice?

    ❏ YES
    ❏ NO

10. If you had an option, would you have chosen another programme of study?

Explain--

C. CONTENT

11. What do you particularly like about the content of LIS programme?--------------------------
----

----

12. What don't you like about the content of the LIS programme?---------------------------------
----

----

13. How adequate is the content of the LIS programme you are following?

    ❏ Most Adequate
    ❏ Adequate
    ❏ Inadequate
    ❏ Not sure

14. How useful is the content of the LIS courses you are taking?

    ❏ Most Useful
    ❏ Useful
    ❏ Not Useful
    ❏ Not sure

D. DELIVERY OF COURSE CONTENT

15. How do you rate the delivery methods in the courses that you take in the LIS programme? *(Tick once for each method of delivery).*

Method of Delivery	Excellent	Very Good	Good	Poor
Lectures				
Practical assignments				
Seminars /discussions				
Group work				
Field trips/visits/exhibitions				
Video/slides/ demonstrations				
Using WebCT				
Team-teaching (i.e. a course handled by more than one lecturer/tutor)				
Practical Attachments				

E. SKILLS AND COMPETENCES

16. How do you rate the skills and competences obtained from the LIS programme?

- ❏ Most Useful
- ❏ Useful
- ❏ Not Useful
- ❏ I don't know

17. To what extent do you feel these skills and competences are adequate?

- ❏ Most Adequate
- ❏ Adequate
- ❏ Inadequate
- ❏ Not sure

18. Comment on the balance between theory and practice of the courses you have taken in the LIS programme?

- ❏ Equally balanced
- ❏ Biased towards theory
- ❏ Biased towards practice
- ❏ I don't know

Appendix 2

F. INFORMATION LITERACY

19. Which methods of teaching and learning do you prefer? *Rate each of the responses below:*

Method	Most Preferred	Preferred	Not Preferred
Note taking during lectures			
Lecturers' hand-outs			
Copying notes from friends			
Taking notes from prescribed texts			
Using materials in the library			
Analyzing chapters in books and periodical articles assigned by lecturers			
Searching for information on the Internet			
Using the WebCT			

20. Indicate the problems you face during your studies. *Please tick in the appropriate box for each of the issues below.*

Problems	Often	Sometimes	Never
I find prescribed readings difficult to understand			
I am given too many readings to cope with			
I have difficulty expressing my own ideas			
I have difficulty expressing another writer's idea in my own words			
I find it difficult to organize an essay or assignment			
I am unable to give references or bibliographies to my written work			
I find it difficult to explain the information in tables, pictures and other illustrations when I am writing an assignment			

Any others, specify --

21. List what you use the computer for. *(Tick all applicable responses)*

- ❑ Internet searching
- ❑ Word processing (typing assignments)
- ❑ WebCT
- ❑ I don't use the computers

Appendix 2

22. What do you use the UB library for? *(Tick all applicable responses)*

- ❏ Searching for Information
- ❏ Accessing computers
- ❏ Reading and studying

G. RESOURCES

23. How do you rate **computer facilities and services** available to support your learning purposes? *(Tick all applicable responses)*

Computer facilities	Excellent	Very Good	Good	Poor	Very Poor
Accessibility					
Network connectivity					
Printing facilities					
Support by lab technicians					
Lab space					

Any others, specify --

24. How do you rate **UB library** services for your learning purposes?

UB Library services	Excellent	Very Good	Good	Poor	Very Poor
Adequacy of current books					
Willingness of staff to help					
Accessibility to multimedia resources e.g. CD-ROMs, Videos, etc					
Sitting space					
Hours of operation					
Access to library computers					

25. How do you rate the **bookshop services** for your learning purposes?

Bookshop services	Excellent	Very Good	Good	Poor	Very Poor
Availability of recommended text books					
Cost of text books					
Willingness of staff to assist					

Any other, specify--

26. How do you rate the **lecture rooms** for your learning purposes?

Lecture rooms	Excellent	Very Good	Good	Poor	Very Poor
Sitting capacity of lecture rooms					
Adequacy of chairs in lecture rooms					
Availability of teaching aids e.g. overhead projectors, data projectors etc.					
Lighting					
Air conditioning					

H. ACCESSIBILITY OF LECTURERS

27. Comment on the **availability** of lecturers for consultation outside class hours?
    (*Tick one appropriate response only*).

    ❏ All times
    ❏ Sometimes
    ❏ Never

28. Comment on the **accessibility** of lecturers for consultation outside class hours?
    (*Tick one appropriate response only*).

    ❏ All times
    ❏ Sometimes
    ❏ Never

Appendix 2

I. OTHER INFORMATION

29. List other courses you would like to be included in the LIS programme?

    ----

30. List other comments you may have about the DLIS programme.

THANK YOU FOR SPENDING YOUR TIME ANSWERING THIS QUESTIONNAIRE

INTERVIEW GUIDE FOR DLIS GRADUATES

A. BACKGROUND INFORMATION

1. Gender
   - ❑ Male
   - ❑ Female

2. Age group

   - ❑ 21-25 years
   - ❑ 25-30 years
   - ❑ Above 30 years

3. What was your status on admission?

   - ❑ Direct from school
   - ❑ Already Employed

4. Education Background

   - ❑ Junior Certificate in Secondary Education (JCSE)
   - ❑ Botswana General Certificate of Secondary Education (BGCSE)

5. Which year did you attend UB?

6. Indicate the institutions you have worked for since leaving UB?

7. How long did it take you to find employment after leaving UB?

B. JOB ENVIRONMENT

8. What is your job title in your current employment?

9. How would rate your satisfaction with your current employment?

10. What are your career prospects in your current employment?

11. How enriching is your job: Are you satisfied with the tasks you do?

12. Job description: how well is your job defined in the organization you are working?

13. Job environment: do you have the tools to execute your tasks/Is management supportive/what of technological support?

Appendix 3

C. CHOICE OF PROGRAMME

14. Did you have prior knowledge of the DLIS programme before admission?

  - ❑ YES
  - ❑ NO
  - ❑

15. If YES, how did you know about the programme?

  - ❑ Career teacher at school
  - ❑ Parent/Guardian
  - ❑ University Brochure
  - ❑ Friends

Others, specify---

16. What programme were you registered for?---

----

17. What motivated you to do the Library & Information Studies (LIS) programme?

Explain---

----

18. Was LIS your first choice?

  - ❑ YES
  - ❑ NO

19. If you had an option, would you have chosen another programme of study?

Explain---

D. CONTENT

20. What did you particularly like about the content of LIS programme?--------------------------
----

----

21. What didn't you like about the content of the LIS programme?--------------------------------
----

Appendix 3

E. KNOWLEDGE, SKILLS AND COMPETENCES

22. How relevant are the skills and competences obtained from the LIS programme to your job?

23. What other additional skills would you have liked to obtain from the LIS programme?

24. Comment on the balance between theory and practice of the courses you took in the LIS programme?

    ❑ Equally balanced
    ❑ Biased towards theory
    ❑ Biased towards practice
    ❑ I don't know

F. INFORMATION LITERACY

25. Indicate the problems you faced during your studies.

    ----

26. Did you use computer technology in your courses?
    a. If **YES**, in which areas.
    b. If **NO**, do think computers would have been useful, explain why?

27. Did you use the UB library and what did you use for? Elaborate.

G. OTHER INFORMATION

28. List other courses you would like to be included in the LIS programme?

    ----

29. List other comments you may have about the DLIS programme.

END OF INTERVIEW GUIDE

Appendix 4

INTERVIEW GUIDE FOR EMPLOYERS

A. BACKGROUND INFORMATION

1. Name of Organization--
2. Job Title of the Interviewee--
3. Purpose/Legal Mandate--
4. Functions/Activities--
5. Organizational structure--
6. Type of institution (Public, Private, NGO)--

B. JOB ENVIRONMENT

7. Information infrastructure in existence?
   - ❏ Library
   - ❏ RMU,
   - ❏ IT unit
   - ❏ Record Centre
   - ❏ Archives
   - ❏ Records Storeroom

8. Are these units budgeted for?--

9. What is the staff establishment in these information units?--

10. Do the Heads of these Units attend management meetings?--

11. What role do these Information Units play in supporting organizational functions and activities?--

12. Do you feel that these Information Units are playing their role effectively?
    - ❏ Library--
    - ❏ RMU---
    - ❏ IT unit---
    - ❏ Record Centre---
    - ❏ Archives---
    - ❏ Records Storeroom---

13. Are you able to retain the staff in these information units?-------------------------------
----
----
14. Is there a policy on information services ?---

C. KNOWLEDGE, SKILLS AND COMPETENCES

15. How effectively are the graduates able to execute their following?

- ❏ Communication with clients---
- ❏ Communication with other staff--
- ❏ Report Writing--
- ❏ Supervision of staff--
- ❏ Working with minimum supervision---
- ❏ Meeting deadlines---
- ❏ Creativity and innovation in job performance----------------------------------
- ❏ Management of resources--

16. How do the LIS graduates compare with other graduates employed within the
institution?--
----
17. What particular deficiencies have you noted in the LIS graduates?------------------------
----
----
18. What particular strengths have noted in the LIS graduates?---------------------------------
----

D. OTHER INFORMATION

19. How do you think information services can be improved in your organization?---------
----

----
20. Any other comments you like to make of how DLIS can improve the training of
graduates?---

END OF INTERVIEW

APPENDIX 5

UNIVERSITY OF BOTSWANA
DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

IMPACT OF DLIS PROGRAMME ON THE LABOUR MARKET

INTERVIEW GUIDE FOR POTENTIAL EMPLOYERS

1. Name of organization:
2. Location
3. Type of organization
4. Date of establishment
5. Indicate the type of information units that you have in your organization:
   - Record Management Unit/Registry
   - Record Centre
   - Archives
   - Library
   - IT
6. What role do they play in the operations of your organization?
7. Who manages these units
8. What are the qualifications of the personnel managing these units
9. What is the training backgrounds of the people managing these units
10. What kind of training do you give to information professionals
11. Are you happy with the quality of service of these units
12. Do you have any need for employing a qualified:
    - Records manager/archivist
    - Librarian
    - IT specialist

13. Follow up question on the response to the above
    - If yes , state the level (certificate, diploma, degree, masters),
    - If not why?
14. Are you aware of institutions that train information professionals in the country
15. Have you used any graduates from the University of Botswana

APPENDIX 6

UNIVERSITY OF BOTSWANA
DEPARTMENT OF LIBRARY AND INFORMATION STUDIES

IMPACT OF DLIS PROGRAMME ON THE BOTSWANA LABOUR MARKET

Interview guide for Lecturers in DLIS

Range and suitability of courses offered in DLIS
Question 1: Do you think the courses currently being offered in the Department of Library and Information Studies, both undergraduate and postgraduate, suitable for the demands of the job market? (please explain)

Question 2: What courses in addition to those currently on offer in the Department should be introduced to respond to the demand of the job market?

Question 3: What courses amongst those on offer in REC, LIS , BLIS and MARM/MLIS should be discontinued because they are no-longer relevant? (please explain)

Question 4: What new programmes would you recommend for DLIS in order to address some gaps in the current curriculum and job market?

Question 5: What resources would be needed and how would such resources be secured?

Question 6: What GECs would you recommend DLIS to offer?

Course overlaps and the need for merging and/or enhancing

Question 7: Which among the courses on offer in REC, LIS, BLIS and MARM/MLIS should have the content modified? Explain why.

Question 8: Among the existing courses/programs in DLIS, which ones should be merged or separated? (please explain)

Question 9: What course overlaps (if any) exist among programmes in LIS, BIS, REC and MARM/MLIS? How can these overlaps if they exist be resolved?

Creating synergy between BIS, LIS, REC and MARM/MLIS at course level

Question 10: What synergy is required between BIS, LIS, REC and MARM/MLIS at program level?

Question 11: What synergy is required between BIS, LIS, REC and MARM/MLIS at course level?

MARM/MLIS full-time and part-time

Question 12: What issues affect the course offerings for MARM/MLIS academic programmes?

Question 13: How can the issues identified in 10 above be resolved?

Practicum attachment

Question 14: What issues affect the administration of practicum attachment for BIS, LIS, REC, MARM/MLIS?

Question 15: How can the issues in 12 above be resolved?

Facilities available for teaching

Question 16: What facilities/resources do you require for the courses you teach?

Question 17: Are the facilities/resources in 16 above readily available?

Question 18: What actions should be taken to make facilities/resources identified in 16 above available and in appropriate quantity/quality to meet your needs?

Question 19: What elective courses do you recommend DLIS students to enroll for in other departments (please specify the departments)?

Question 20: What GECs do you consider relevant to DLIS students at all program levels?

Question 21: What are your preferred teaching areas?

Question 22: List the courses you teach during the first and second semesters and provide a brief summary of content of each course.

- END -

MINISTRY OF LABOUR AND HOME AFFAIRS
BOTSWANA NATIONAL LIBRARY SERVICE

B NLS

Private Bag 0036, GABORONE, BOTSWANA. Telephone 3952397 and 3952288 Cables: BONALiBS Fax

No. (267) 3901149

Our ref: Ref. LIB 811/1/13 (17)
Please quOIC in your reply)
our ref

31 st January 2005

Dr Wamukoya
Dept of Library and Information Science
Gaborone

Dear Dr. Wamukoya

Impact Assessment Study: Library and Information Studies
ProQramme on the Botswana Labour Market

Thank you for your letter informing us of the study being undertaken by yourself and some members of the Department of Library and Information Science, (Mr Saul Zulu, and Mr Trywell Kalusopa). We understand that the study is a UB funded research into the impact of DLiS on the Botswana Labour market.

As requested you are given permission to visit Gaborone, Francistown Kanye and Selibe Phikwe, branch libraries to conduct your study.

We have informed the libraries concerned of your intended visit and requested that they give you all the necessary support.

We wish you all the best with the study and look forward to receipt of the study results

Yours faithfully

M. Baffour-Awuah
For Director

Cc Branch Librarians, Francistown, Gaborone Kanye, Lobatse and Selebi-Phikwe