

Competencies required by South African, entry-level, library and information science graduates

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A mini-thesis submitted in partial fulfilment of the requirements for the degree of **Magister Bibliothecologiae** in the Department of Library and Information Science, University of the Western Cape

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Supervisor: Professor G.H. Fredericks

Declaration

I declare that *Competencies required by South African, entry-level, library and information science graduates* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

Renee Anne Reagon

November 2005

Signed:

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Abstract

Competencies required by South African, entry-level, library and information science graduates

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Keywords: librarian, graduates, skills, competencies, South Africa, library and information science

This mini-thesis identifies competencies required by the South African, entry-level library and information science (LIS) graduate. It takes into account the development of the information society and resultant proliferation of information and communication technologies and how these developments have given rise to new roles for the library and information worker. This mini-thesis also looks at developments within the South African library and information environment and how these have affected the LIS profession.

A documentary analysis is performed in order to identify competencies mentioned in the literature. Information services, information systems, interpersonal, communication skills and behavioural skills are mentioned most frequently in the literature.

Employers from the public, academic and special library sector are telephonically interviewed in order to round off the study with personal and in-depth insights, as well as to test the findings of the documentary analysis. The interview findings show a distinct similarity with the documentary analysis findings. Information services competencies, information systems competencies, interpersonal, communication and behavioural competencies are identified most frequently by employers as being key competencies for entry-level graduates.

Facilities and management competencies are mentioned least frequently in the literature and during the interviews.

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Chapter 1: Introduction

1.1 Background

The field of Library and Information Science (LIS) is undergoing immense transformation, internationally and in South Africa. The impact of information and communication technologies (ICTs) on the profession has changed how LIS workers access, manage and disseminate information. It has changed their roles within the workplace and opened up an entirely new information arena within which to apply their unique information skills. Within the global, information age LIS workers are required to possess competencies for working in an increasingly diverse workplace, with an increasingly diverse user base (Buttlar and Du Mont, 1996: 44).

In South Africa, political and social changes have added new dimensions to the role of the information worker. Not only has their user base grown and changed dramatically, LIS workers also have to perform roles outside of the traditional LIS arena, such as literacy trainer, ICT instructor or programme manager in the case of a community outreach programme.

The South African LIS graduate entering the profession will require a set of competencies that will equip him or her to be able to work in a complex, changing and hybrid information environment. According to Buttlar and Du Mont (1996: 44) LIS workers in the twenty first century will not only need the traditional skills and knowledge of the profession, they will also need a new list of competencies such as lifelong learning, flexibility, people skills, ICT skills, business skills and valuing diversity.

1.2 Aim, objectives and scope of the study

Accordingly, the main aim of this mini-thesis is to investigate the following question: What are the competencies required by the South African, entry-level LIS graduate? In examining this question, the study focuses specifically on South African LIS graduates who have completed an undergraduate degree. The study produces lists of competencies that may be used by students, educators and practitioners alike to obtain information on what the current labour market skill requirements are for library and information services.

The main objectives of the study are:

- To identify, through the literature, generic and discipline-specific competencies needed by today's South African LIS, entry-level graduate. The study brings together arguments, theories, debates and other forms of information from a variety of documentary sources.
- To explore employers' personal and in-depth perspectives about what competencies are required by entry-level graduates. This data is used to examine and substantiate the main findings of the literature study.

1.3 Justification for the study

The abundant growth of ICT's, and the increasing importance of information as a critical commodity within the knowledge economy, have propelled the field of information management and librarianship into the 21st century. Library and Information Science workers are required to work innovatively, taking on new roles in the information age. Additional challenges include a lack of library funding, rising costs of library materials, the increasing complexity of user needs and competition with other information providers. Within this challenging environment it is imperative that LIS schools produce graduates of the highest calibre, armed with the correct competencies to be able to work in a rapidly changing and unpredictable information environment.

Key South African policy documents such as the Ministry of Education's National Plan for Higher Education, the Council on Higher Education's (CHE) size and shape report to the Department of Education and the White Paper of 1997, A Programme for the Transformation of Higher Education, all refer to the idea that higher education is accountable for the types of graduates it produces, and is responsible for ensuring that graduates have the competencies needed by society (Council on Higher Education, 2000: 30; Department of Education, 1997: 5; Ministry of Education, 2001: 5).

One method of ensuring that graduates have the appropriate competencies to enter the world of work is to identify competency requirements and to incorporate these competencies into the curriculum. This study identifies competency requirements for South African, entry-level LIS graduates and obtains insights and perceptions on the topic from employers of LIS graduates.

Identifying competency requirements within the LIS profession may assist members of the discipline in many ways:

- LIS educators who want to review their curriculum and training programmes and areas of the curriculum that should be expounded upon.
- Graduates who would like to identify areas where they may need further training or identify which competencies they should market to prospective employers.
- Practitioners who are interested in updating their skills.
- Employers of LIS graduates who want to assess competencies for recruitment purposes.

1.4 Definition of terms

In the education literature the term 'competency' refers to a set of learning outcomes that the learner should acquire during or at the end of the learning period (Holmes and Hooper, 2000: p247). For the purposes of this study the term 'competency' incorporates the three elements of knowledge, skills and attitudes, as defined by other research in this area (Buttlar and Du Mont, 1989: 5; Buttlar and Du Mont, 1996: 46).

1.5 Framework of the research



The following issues provide a framework for guiding the research:

1.5.1 The paradigm shift within LIS

The revolution in ICTs has changed and redefined the role of the library and information worker. ICTs have provided us with a myriad of information storage and retrieval mediums, transforming our libraries into hybrid information centers and adding new dimensions to LIS services (Carrasco and Vanderkast, 1998: 95; Cilliers, 1984: 3-20; Johnson, 1998: 52).

Not only has the librarian's role changed from 'keeper of books' to 'information managers', but they also have to fulfill roles outside of the traditional library and information centre settings. With sophisticated ICTs to perform information management and dissemination, and with their unique set of information skills, new opportunities exist for the information worker to become a specialist consultant on information management and retrieval. The traditional worker is able to move out of the 'institutionalised' library setting to the 'de-institutionalised' information environment where they can perform a variety of roles. New job opportunities for librarians include 'information broker', 'website developer', 'information specialist', 'knowledge manager', 'software librarian' and

'information analyst'. (Cilliers, 1984: 25; Dolan and Schumacher, 1997: 68; Editorial Board, 1998: 373)

These changes in the field require that the profession reassess the competencies needed to perform optimally in the current LIS labour market. There is an increasing emphasis on generic skills, and skills that will provide a basis for learning in a constantly changing work environment (Boon and Fairer-Wessels, 1995: online; Carrasco and Vanderkast, 1998: 97; Cilliers, 1984: 25-28).

1.5.2 The changing role of the South African librarian

Library and Information Science workers, in South Africa in particular, are increasingly being required to take on roles outside of the traditional LIS arena. The South African apartheid system has created an unbalanced landscape of disadvantaged and advantaged communities, where information and facilities have been concentrated in the latter. The disadvantaged communities were provided with inferior library and information facilities and services. In order to address this imbalance, it is important for South African LIS workers to constantly try and improve and adapt LIS services to meet local information needs.

Public and community librarians, in particular, are required to take on development support roles in their communities and to work with local organisations and members of the community to develop outreach strategies. Librarians are often required to coordinate and take part in non-formal education programmes, such as literacy training, life-skills training and ICT training. Information needs are often linked to basic needs, such as housing, jobs, environment and social welfare. The LIS worker often has to work with community leaders to generate income for outreach programmes, which can then be offered free of charge to library users. (Bekker and Lategan, 1988: 70-71; Leach, 1998: 17; Morrison, Van Niekerk and Wallis, 1998: 42; Nassimbeni, Stilwell and Walker, 1993: 40-41; Roux and Zaaiman, 1989: 8-13)

One of the challenges for library schools is to incorporate these changes into their curricula so as to equip graduates with the appropriate competencies to enter the world of work. It is clear therefore that the LIS profession, practitioners and educators alike, need to systematically identify what these core competencies are.

1.6 Research questions

In order to realise the aim of the study the following research questions are addressed:

- What developments and changes are taking place within the LIS field, internationally and in South Africa?
- In light of these changes, how has the role of the librarian developed or changed?
- Within the context of the above changes and developments, what does the literature say are the competencies LIS graduates should have?
- Are there any specific dynamics within the South African context that call for additional competencies?
- What, according to employers, are the core competencies needed by LIS graduates?

1.7 Research design

A literature review research design is used, which involves analyzing texts to investigate and gain a proper understanding of theories and debates set out in the literature. Mouton (2001: 179) describes this type of design as “providing an overview of scholarship...through an analysis of trends and debates”. This type of study is usually descriptive in nature. It involves describing and summarizing the salient points and key research themes in the literature, examining and collating the main results and the most common patterns recorded in the various studies.

The majority of related studies that have been identified in the literature are quantitative in nature. Buttlar and Du Mont (1989: 3; 1996: 45) in two individual studies mailed questionnaires to alumni to rate, according to importance, lists of competencies required by graduates. Buttlar and Du Mont compiled the initial competency lists from previous studies and by reviewing the literature. Maceviciute (1999: online), Quarmby, Willett, and Wood (1999: 147), Aina and Moahi (1999: online), Karim et al (1998: online) and Green (1993: 166) all similarly used survey questionnaires to obtain data, either from employers, practitioners or alumni, in order to assess competencies required by the LIS graduate or practitioner. Three of the studies also used lists of competencies that were ranked or rated by respondents.

It is important to note that the findings from these types of studies are not always applicable to all populations or situations. For example, in the Maceviciute (1999: online) and Aina and Moahi (1999: online) studies it is reported that information technology is under-developed within their respective library sectors (Baltic States and Botswana). This will of course affect

competency requirements for the LIS worker. Another example is that in Botswana, LIS graduates tend to end up working in the more traditional academic and national library settings, whereas in the United Kingdom LIS graduates tend to land up working in the commercial or industrial sectors (Aina and Moahi, 1999: online; Quarmby, Willett, and Wood, 1999: 154). This again will influence the competency requirements for graduates. Studies surveying only one particular group also have their own limitations. For example, as indicated below, employers are not always objective and tend to emphasise skills that are in short supply within the organization.

This mini-thesis employs a qualitative approach to interpret and describe in detail the theories and debates in the literature, and the perceptions and personal experiences of individuals interviewed. None of the studies above include interviews of respondents to assess competencies. This mini-thesis includes a wide range of studies and scholarly literature dealing with competencies for entry-level LIS graduates (as opposed to a study of one particular group of students or employers, within a specific country or region). The study therefore includes perspectives and findings across a broad scope of sources, and compares these findings to arrive at a well-grounded conclusion about the competency requirements for South African entry-level graduates. The study is therefore less biased towards any one particular group, (for example, students or employers), or LIS sector.



1.8 Data collection

The main method of data collection was through documentary analysis:

1.8.1 Documentary analysis

A wide variety of materials were used, including books, reports, articles, job advertisements and other sources dealing with competency requirements for LIS and general university graduates. Topics include:

- The paradigm shift in LIS, within the work and education arena.
- Developments and changes in the South African LIS environment.
- Graduate employment.
- Employer surveys and LIS graduate tracer studies.
- LIS course syllabi.

According to Bernard and Ryan (2001: online) at the heart of qualitative data analysis is the task of discovering themes. They cite various methods for identifying themes in texts, including an analysis of words (e.g. word repetitions), comparing, contrasting and searching for gaps in the texts and even

the physical manipulation of texts (e.g. cut and sort procedures) (Bernard and Ryan, 2001: online).

By using insights and theoretical knowledge of the topic, and by interpreting and critically analyzing broad parts of the text, the author has identified and described themes, patterns and debates in the literature. The author identifies and describes competencies mentioned in the literature, and classifies competencies into broad categories or classes. Classes are identified in the literature and new ones are suggested. Collins et al (2000: 245) refers to this method as 'qualitative coding', where the researcher organizes the data into categories and at the same time develops those categories as the study progresses. This facilitates understanding and makes the data more manageable.

1.8.2 Interviewing

According to Mouton (2001: 180) the literature review design can, at best, only summarise and organize the existing debates, patterns and theories. To examine and illustrate the theoretical insights and conclusions reached during the documentary analysis the study is rounded off by the researcher telephonically interviewing a small sample of employers of LIS graduates. The term 'employer' refers to the manager of the library, information center, resource center, or any other typical information environment, that employs LIS graduates.



Employers were selected from the South African National Library's list of libraries belonging to the national interlibrary lending network. Purposive sampling was used, where "...judgment is made on the basis of available information or the researcher's knowledge about the population" (Collins, 2000: 159). Employers were selected on the basis of the criteria indicated below, and based on the author's own knowledge of the LIS environment and types of libraries that may best provide the study with the insights and data needed.

Employers interviewed all employ LIS university graduates. Employers all worked within a managerial position within the information environment concerned, and all possess a LIS qualification. The criteria ensured that, to some extent, the respondents possessed comprehensive and in-depth knowledge about the skills requirements of the LIS profession, in general and with regard to LIS university graduates.

Two employers from each library sector (public, academic and special) were telephonically interviewed in order to ensure that respondents were representative of different types of library employers and that they had been exposed to different types of work environments. Two individuals per sector also

allowed comparison of data from different sectors and increased the validity of data.

Employers were questioned about what they perceived to be the competencies entry-level LIS graduates should possess when entering the labour market and whether the South African context calls for any additional competencies. The content of the questions were mainly based upon the data uncovered in the literature. Interviewing allowed personal insights and perceptions, of persons directly involved with the issues, to be captured.

The telephonic interviews were semi-structured. A list of questions were used to guide the interviewer, allowing all the respondents to be treated and questioned in the same manner. Answers and descriptions were jotted under the relevant topics in the interview schedule. Notes were made during and immediately after the interview. This method of data collection assisted with organizing, understanding and analysing the data.

The responses of interviewees are described in the data analysis and commonalities and differences are identified. Themes in the data are identified and competencies mentioned by employers are categorized according to predefined categories identified in the documentary analysis. Direct quotes, descriptions and text found in the interview notes are used in the analysis. Data from the interviews and the documentary analysis are compared.

According to Teichler (1999: 293) in this type of study employers' statements about competencies needed by graduates are often interpreted as being objective and universally applicable. He states however that almost all employers often tend to overemphasise competencies that are in short supply, generic skills and skills that are evaluated in the recruitment process. This has been noted during the interviewing and data analysis process. As indicated above employers' views are subjective and represent personal insights about competencies required by graduates. These views are compared to the more widely gathered documentary data.

1.9 Chapter outline

Chapter One: Introduction

This chapter provides introductory information about the topic, how it is dealt with in the study and an overview of how the mini-thesis is structured:

- Background of the topic and rationale for its selection.
- Clarification of the main research problem, aims, objectives and scope of the study.

- Description of the research framework for the study.
- Definition of key terms and concepts.
- The research design, methods and research methodology.
- The outline and structure of the mini-thesis, indicating the chapters to be included.

Chapter Two: The paradigm shift within the LIS environment

Literature is reviewed to identify and describe the changes taking place within the LIS profession and workplace:

- The development of the information society with its proliferation of ICTs.
- How this has affected and changed the LIS workplace and our information management and dissemination tools.
- How the information age has transformed the role of the LIS worker.
- The implications for LIS education and skills development.

Chapter Three: The South African LIS environment

This chapter contains a description of the South African LIS environment and recent developments which have taken place within this arena:

- The transformation of LIS services in South Africa.
- Diverse users and user needs of LIS services.
- Key areas of involvement for libraries and librarians

Chapter Four: Competency requirements of the entry-level, LIS graduate

This chapter focuses on identifying what the competency requirements are for the entry-level, LIS graduate. This involved examining various graduate tracer studies, employer surveys, and general literature on competencies for entry-level graduates and practitioners. The chapter includes:

- Categorizing graduate competencies.
- Describing the main categories of competencies that are required by graduates, and why these are seen as being crucial for graduate employment.
- Identifying competencies that are specifically required (or especially needed) within the South African context.

Chapter Five: Perceptions of employers

In this chapter employers are interviewed to obtain their input on the topic. This section includes:

- Reasons for the research methodology, design and data collection methods.
- A description of the interview schedule.
- A description of the sampling process, the interviewing process and how the data is analysed.
- Description of the main results of the interviews.
- Comparison of the documentary data and interviewing data

Chapter Six: Conclusion

This chapter includes:

- A summary of the main findings of the study.
- Concluding remarks
- Recommendations by the author



Chapter 2: The paradigm shift within the library and information science environment

2.1 Introduction

This chapter examines the development of the information society and its implications for the profession, setting the scene for discussion on LIS competencies for graduates. It focuses on how the librarian's world of work and traditional functions have been impacted and how the library profession will position itself in the new information age. Lastly, it focuses on the implications for library and information science education.

2.2 Growth of the information society

The term 'information society' is often used, in the library literature especially, to characterise a post-industrial society in which the centrality of information has brought about key fundamental changes in all areas of people's lives. Terms such as 'information age', 'knowledge economy/society', 'global information economy', and many more, are used to describe the development of this information-rich society.

Authors Daniel Bell and Fritz Machlup, often cited in the literature, are described as pioneers in developing the concept of the information society.



Machlup (1962), as referred to by Webster (2003: 1341), tries to identify or measure the information society in economic terms. He identifies five broad information industries:

- Education (e.g. schools, universities, libraries)
- Media of communication (e.g. radio, television, advertising)
- Information machines (e.g. computers)
- Information services (e.g. law, medicine)
- Other information activities (e.g. research and development)

Machlup assigns economic values to these categories in order to identify how these contribute to the gross national produce (GNP) of the United States. If the trend is for these industries to account for an increasing proportion of the GNP then this could be interpreted as the emergence of an 'information economy' (Webster, 2003: 1341).

Daniel Bell, as referred to by Webster (2003: 1343) and Cilliers (1984:12), also in the 1960's defined the post-industrial society in terms of occupational change. According to Bell the main feature of an information society is the shift of a country's workforce from labour-intensive and manufacturing industries to service and information industries.

A more recent proponent of the information society is Manuel Castells. As referred to by Webster (2003: 1346), Castells, in his book *The Information Age* (1996-1998), emphasises the spatial elements of the information society. He states that information networks that connect locations allow for information to be used and distributed in an unprecedented manner. These networks allow for social and economic issues to be dealt with on a global scale, facilitating globalisation within all aspects of society.

Mary Nassimbeni (1998: 155) includes Frank Webster's summary of what constitutes an information society:

- Knowledge and information activities absorb more of society's activities than the production of goods.
- Social organisation is around information rather than material production.
- There is a shift in economic activity.
- Information and communication technologies (ICTs) are the key resources in the information economy.
- The function of these resources is to amplify mental labour.
- The leading industries are knowledge industries.

Many debates and criticisms about these theories are contained in the literature, and speculation may exist about the extent to which specific countries meet these various criteria. However, it is clear that we are living in a global information society where some, or perhaps even all, of these information society indicators are becoming an increasing reality.

We live and work in information-intensive environments where the clichéd 'information explosion' has become a reality. The proliferation of ICT's, developed to facilitate the management and high-speed dissemination of information, has contributed to its explosive growth. According to Johnson (1998: 53) it is no longer just librarians and publishers who are talking about the key role information plays in economic and social development. Politicians and business leaders have become aware of the critical role of information in a country's development. They have made significant investment in this area and are formulating key policy and legislation around the information and communication industries.

In South Africa many policy and legislative documents include the premise that South Africa is to be developed, economically and socially, to join the global information economy. The Provincial Government of the Western Cape (PGWC), for example, in its White Paper entitled 'Preparing the Western Cape for the Knowledge Economy of the 21st Century' points out the importance and need for easy access to government information and services and identifies information as a key factor contributing to the growth and development of the region (Provincial Government of the Western Cape, 2003: online).

The document states, " In the knowledge economy, information is in many ways the key resource. The introduction of world-class systems for the collection, analysis, management and dissemination of information is widely seen as an indispensable pre-condition for the development and implementation of effective and competitive strategies for regional economic growth and development."

The principles stated here have led to the recent development of the Cape Gateway, an initiative of the PGWC. The purpose of the gateway is to provide pertinent government information and services in an easily accessible manner via online, call centre and walk-in services.

It is clear that the current global 'information age' has been facilitated, over time, by the following factors:

- Development of the printing press, which allowed for the rapid dissemination of information.
- Development of the computer, and its subsequent convergence with telecommunications. Electronic networks were created, which allows for instantaneous dissemination of information on a global scale. Roberto Gualtieri (1998: 7) states that the speed, user-friendliness, ease of access and low cost of ICTs have increased its growth. He cites Beale (1997) stating that world-wide, during the previous few years, the number of host computers connected to the Internet has doubled each year. The Internet then connected more than 50 000 public and private networks, providing access to between 50-60 million people (Gualtieri, 1998: 7). Bridges.org (2003/4: online) cites Telecordia Technologies estimating, in May 2001, the number of Internet users at 440 million. The International Telecommunications Union (2004: online) estimated, in 2004, app. 872 million Internet users worldwide.
- The rise of democracy across the world. Many theorists such as Yuri Misnikov (2003: online) for example, argue that ICTs have increased civil society participation in government and access to information. It could also be argued that the spread of democracy itself has increased access to information. This is clearly evident in South Africa, where, in post-1994 South Africa, access to information is considered a basic human right. The new Constitution places an obligation on government bodies to disseminate information as widely as possible, "Transparency must be fostered by providing the public with timely, accessible and accurate information" (Constitutional Assembly of South Africa, 1996: online).
- Increase in prosperity and access to education allowing for an increase in information and knowledge production all over the world (Martell, 2003: 2527; Johnson, 1998: 52).

Clearly librarians have to function in a rapidly changing, increasingly complex work environment. Access to a wider range of information requires more sophisticated information retrieval and information management skills from both the librarian and the user. Technology and tools for managing and

retrieving information are constantly changing. Libraries also now have to compete with a whole host of other information providers. In response to these changes new roles and tasks are being developed within the profession. It is within this context that we examine the changes taking place in the Librarian's workplace.

2.3 The new world of work

The rapid development of ICTs and the increase in knowledge and information have impacted on all aspects of society, including how we organise and perform our work. Career paths are less certain, with employers demanding flexibility and diverse work skills from their employees. Employees are advised to constantly update their skills to remain employable in an increasingly unpredictable labour market.

Valerie Bayliss (2001: 14) cites a 1998 UK Royal Society Report entitled *Redefining Work*, which had researched how work and working patterns would change in the years up to 2020. A few of the predictions include:

- An increase in part-time and contract work, with traditional full-time jobs on the decrease.
- High proportions of the workforce will have "portfolio" careers. This is described as mixing and matching skills in different positions, times and places. For example, a worker may, after a series of contracts, assess his/her career to identify skills most needed for a prospective job assignment, or perhaps for a particular gap in the job market. He or she will then market this portfolio to prospective employers. The portfolio worker may often be managing more than one career.
- In keeping with these entrepreneurial work patterns, there will be an increase in self-employment.
- Flexible work arrangements will be more common, where the focus will be on outputs (e.g. delivering a fixed package of tasks) rather than on where or how the work will be done. This of course means that more work will be done from home.
- Within the flexible working environment ICTs will be a dominant feature. The majority of the workforce will be required to possess some kind of computing skill.

Certainly in many professions some of these predictions are a reality. It is not uncommon for librarians to hold two or three part-time jobs at any given time. Short contract assignments are also very common in the library environment. Librarians may often develop specialised portfolios to work within various areas in the information environment. For example, a librarian may be hired for a series of short contracts such as establishing a resource centre for an organisation, working as an information consultant on a short project, cataloguing a collection of material or designing a website for an organisation.

Blair (2000: 176) iterates the same type of observations when she summarizes what is contained in the literature about the workplace of the new millennium:

- One third of workers will be doing work from home.
- Part-time work will be prevalent.
- There will be a range of highly skilled, short-term project workers.
- No set job descriptions.
- There will be a number of modules/units of work.
- Workers have to navigate the labour market by possessing multiple competencies and multi-tasking, as opposed to one industry/skill/organisation.
- Lifelong, continuous learning is essential to keep up with new requirements and changes. Workers will have to take responsibility for their own careers.

Braun (2002: online) identifies the “flattening of the organisation” as a key aspect of the new library working environment. Traditionally, in order for staff to develop their skills, they would need to work their way through the formal hierarchical systems of the library. According to Braun this system trained too few people. Nowadays the increased use of project teams requires that library staff, from various levels and areas within the library, learn to manage and be part of teams. Also libraries may use and place staff in different areas in the library, depending on the patterns of usage. This practice allows staff to learn new skills and increase their job options and employability.

Career planning and lifelong learning are two key aspects of surviving this continuously changing and unpredictable labour market. The employee is responsible for managing his/her career and for ensuring that he/she possesses the correct skills-set to match jobs available. This is especially important for the librarian, as increased career paths and options become available for all information professionals.

2.4 Changes to traditional functions in the library

The traditional functions of the library have essentially remained in place:

- Collection development and acquisition of library material: - Selecting material that is relevant for users of the library, and ordering these materials from publishers, subscription agents or other sources.
- Cataloguing and classification: - Classifying an item according to a particular subject, assigning descriptors to the item and entering its details into the library catalogue so that users may locate the item within the collection.

- Reference work: - Interacting with users to identify what information they require, and then guiding and assisting users in finding information in the collection.
- Circulation of library material: - Lending materials to users of the library, reserving items for users and ensuring the correct and safe return of an item to its place in the collection.
- Preservation: - Ensuring perpetual access to selected items in the collection.

However, the development of ICT's has changed the way in which we perform these functions. Listed below are a few examples from the author's own personal experiences with working in libraries:

- Collection development and acquisition of library material: - Obtaining publisher and pricing information has been made easier with the availability of online selection databases which provide bibliographic information, pricing, abstracts, reviews and even, in some cases, chapters of books. Most well known publishers also provide bibliographic and ordering information via their websites. Books or periodicals may be ordered directly via their website. While ordering has been made easier the selection and acquisition of electronic materials are much more complex than for print titles. When ordering an electronic resource the library has to take into account the following kinds of issues:
 - o Types of access available (e.g. site-wide access or limited user access)
 - o Pricing models (e.g., very often pricing is based on the number of users requiring access, or it may be negotiated via a consortium model where pricing is based in the number of organisations participating in the deal)
 - o Format (e.g. the resource could be available in multiple formats such as print plus electronic or electronic only, online or CD Rom)
 - o A vast array of licensing issues (e.g. are walk-in users allowed to access the resource, may downloaded items be used for interlibrary loan, will the publisher provide perpetual access once the subscription has expired)
- Cataloguing and classification: - The classification schedules used by libraries, such as Dewey Decimal Classification (DDC) and Library of Congress (LOC) are now available online. The cataloguing process is automated, with users accessing the online catalogue from remote locations. Users may link to full text electronic resources and websites via the catalogue, and search holdings of other libraries via shared catalogues. Libraries may also buy and download electronic catalogue records from commercial suppliers.
- Reference Work: - Librarians have had to increase their information literacy efforts due to the increasing complexity and number of electronic databases and journals available to users. Online tutorials and user

guides are provided via library websites. Many libraries are now providing federated searching facilities for users, whereby users search all electronic resources, including the catalogue, via one gateway or portal. Virtual reference services have been developed whereby libraries answer reference queries and guide users via online services such as online chat, email and website forms.

- Circulation: - libraries allow users to reserve and renew items via their automated catalogue. Users are able to sign in to their personal account to view their account details.
- Preservation: - Unlike print, online resources are often hosted off-campus at publishers' sites and remain the property of the publisher. The Library only subscribes to access the resource for a period of time. Usually once the online subscription expires libraries no longer have access to the resource. Many publishers allow libraries to archive items, or they provide licensed material to the library on CD or DVD once the subscription expires.

To keep up with the use and development of technology within all functional areas in the library, librarians and users require new skills to stay informed and up-to-date on how to access and use the library's resources. New positions such as electronic resources librarian, training librarian or systems librarian have been created within the library as a result of the increasing complexity of these functions.



2.5 New roles for librarians

2.5.1 Disintermediation

It is often stated that within this highly technological society, where information is available at the touch of a keyboard, the role of the librarian will become obsolete. Why go to the library when you have the Internet at home, in the office or at cafés? Some department stores are even offering free Internet access in their stores in order to lure shoppers through the door.

Downie (1999: online), and many other writers, describe this as 'disintermediation', "The act of bypassing information intermediaries in the age of ubiquitous information retrieval systems." Disintermediation is not only limited to the library profession, but could affect any information provider, such as a doctor, sales person or a lawyer. People often use the Internet to obtain medical information for example, or to find information about a new product they would like to purchase.

A common response to this argument is that without the librarian as intermediary the user is faced with a glut of information, and does not possess the librarian's specialised information skills to properly manage and filter relevant information for his/her needs.

However, according to Downie (1999: online), key to the disintermediation process is the idea of perception. What the user may see as a successful search may not be perceived as such by the librarian. Users searching the Internet, for example, may obtain hundreds of irrelevant and poor quality search results, but may consider the search to be a success. The librarian is therefore operating in an environment where his/her skills are not being valued by those who pay for it. Downie sums this up as, "No Value, no market. No market, no jobs."

2.5.2 Redefining the profession

It is within this context that many writers call for a review of the library profession. It is stated that librarians should reposition themselves, remarket their skills and redefine their role within the information profession. In 1984 Cilliers (1984: 12) observed the following trends to revitalise and redefine the profession:

- The profession is reviewing its service delivery philosophies and mechanisms. Librarians have becoming increasingly proactive in delivering high quality, relevant and innovative services to their users.
- The profession is moving towards a marketing approach. Librarians are increasing marketing efforts and developing user programmes that increase the visibility of the information service they offer, e.g. user education programmes, quality assurance surveys, library websites etc.

Librarians today constantly push the limits to provide value-added services to users, such as developing online digitised collections of core material, developing online gateways, repackaging information for users in the form of summaries, literature reviews and bibliographies and developing in-house knowledge management systems.

Cilliers (1984: 12), within the context of this call for a redefinition of the profession, calls for a new corporate role where librarians are not tied to the traditional information unit, and use their unique knowledge and specialised skills to voyage into related information professions.

It is evident today that librarians have done just that. Today it is not uncommon for Librarians to take on roles outside of the traditional library sphere, such as Webmaster or Knowledge manager. New jobs are being created within the traditional information units, for example, Training Librarian and Electronic Resources Librarian. Existing jobs are being redefined, for example, Information Consultant, Knowledge Consultant, Information Manager etc.

The types of jobs being advertised within the library profession are good indicators of the new dimensions being added to the traditional librarian role. Dolan and Schumacher (1997: 4), in an attempt to gauge the job market for librarians, monitored an essential American job searching website that listed

classified ads from 29 major newspapers. She also examined various newspapers and journals. They identified new jobs for librarians, including Network Librarian, Geographic Information Systems Librarian and Research Librarian. Sixty-seven percent of the ads were for new jobs and thirty-three percent were for redefined jobs.

The following is a job posting for a position within a well-known South African research council library. The words library and librarian are not mentioned anywhere within the advert. The position requires a high level of ICT literacy, with a focus on web literacies. This person will be responsible for developing and maintaining knowledge management systems across the organisation.

Information Management Consultant

Key responsibilities will include:

Managing the development of an Intranet to provide an effective platform for knowledge sharing across the organization.

Improving data quality for ongoing operations and legal aspects of the organisation's activities to ensure good information governance and adherence to the relevant legislation.

Improving the efficiency of information retrieval and dissemination and improving the quality of management information.

Key requirements include:



Qualifications in information management, content management and project management are essential. A knowledge of relational data modeling and the concepts of knowledge management would be advantageous.

At least 5 years of experience as a constructive user of information systems is required with significant exposure to, and knowledge of, the major data assets and information flows of the organisation. Extensive experience in the development of web technologies and of developing taxonomies is required.

Excellent IT and Internet skills, including hands-on knowledge of graphic design, HTML programming.

2.5.3 New roles

The following key areas have been identified in the literature where librarians are required to take on new roles and responsibilities:

2.5.3.1. Electronic information provision

The development of the Internet has influenced all areas of library information provision. The library is required to provide more of its user services via its website. User guides, tutorials, databases, digitised collections etc. are all brought together via the library's online gateway. In addition to providing local content, librarians focus on providing content housed outside of the library, for example, links to online journals, free web resources, other library catalogues etc.

Braun (2002: online) sees this as "building the virtual branch", an aspect of the librarian's job which has become increasingly important, especially within libraries serving a national or international user base.

Downie (1999: online) and Creth (1996: online) both identify the Librarian as playing a key role in the organisation and development of networked resources. The Librarian has the expertise to better organise what is available via the Internet. This includes cataloguing in-house and online resources within the library's catalogue, developing specialised subject gateways for targeted users and assisting with the development of search engines. A successful example of the library profession assisting with the organisation of electronic resources is the development of the Dublin Core metadata scheme developed by OCLC (Online Computer Library Cooperative) to facilitate the cataloguing of electronic resources in libraries.

The librarian is also increasingly being called upon to play a role in the electronic publishing process. According to Creth (1996: online) the librarian is able to use his/her expertise to develop online sites for developing and archiving electronic publications. In the higher education sector for example librarians are involved with placing digitised journals or conference papers online and developing institutional repositories of research and other information published on campus.

Librarians are promoting and facilitating the open access publishing of their institution's online journals. The University of the Western Cape Library, for example, has obtained institutional membership to two open access initiatives, BioMed Central and Public Library of Science (PloS). This enables researchers to obtain a publication charge waiver whenever they publish in PloS and BioMed Central open access online journals.

The view is that, with the rising cost of journals and other published material, librarians may use open access models to reverse the price trend. A few academic libraries are now cancelling some of their subscriptions with fee-based publishers to increase their efforts in providing open access, scholarly content for their user community.

2.5.3.2. Knowledge management

According to Creth (1996: online) another area in which librarians may use their skills is within the knowledge management arena. She cites Lucier as defining knowledge management as an area that "... embraces the entire information-transfer cycle, from the creation, structuring and representation of information to its dissemination and use".

Specialised information management and retrieval skills, and knowledge of electronic storage and retrieval mechanisms, allow the librarian to broaden their involvement in this area. Knowledge management usually involves developing and integrating organisational databases and other electronic resources (an organisational Intranet for example), in order to manage information and knowledge being created and used within an organisation. This usually requires teamwork and collaboration as library staff would have to work with IT professionals and a host of other stakeholders within the organisation.



2.5.3.3 Information policy development

According to Creth (1996: online) librarians have a responsibility to contribute towards and remain vocal on information policy issues such as intellectual property rights, access to information and use of electronic resources.

With the development of the information society has come the digital divide, that is, a new class structure that has developed between the information rich and information poor. The rate of ICT development and production of knowledge has left whole communities and countries lagging behind.

Now more than ever the basic principles of librarianship, such as freedom of information and equitable access to information, should be uppermost in our minds. The development of policies that encourage worldwide access to information will assist in narrowing this gap.

2.5.3.4. Educational role

Much of the literature acknowledges the development of the librarian's role as a teacher or educator. (Rader, 1996: online; Donnelly, 2003: p1345 and Creth, 1996: online) Librarians have always, at some level, been involved with some kind of user instruction, such as bibliographic or library instruction. According to Donnelly (2003: 1548) this task has become increasingly complex with the development of teaching information literacy within

libraries. Information literacy involves teaching users how to access, understand and use information effectively.

In the higher education environment especially, the teaching of information skills is a core part of the library's function on campus. The number of students in relation to library staff necessitates that students learn to use resources and information effectively and independently. Also within the university environment the fundamental aims of information literacy are supported by higher education's goals of lifelong learning and knowledge production.

Information literacy teaching may be part of the user education programme of the library or it may be offered as a module within an academic course. Many academic librarians may find themselves working with academic staff to develop the content of these information literacy modules. The trend now is for librarians to take the leadership role in integrating information literacy within the curriculum, by developing campus-wide information literacy courses for inclusion in all curricula on campus. This would involve working with university management and academics to structure a course that would fit with all academic departments on campus.

Many writers argue against the development of the teaching role within librarianship. Donnelly (2003: 1548) highlights some of the main arguments:

- The librarian often needs to juggle both the teaching and librarian workload, often leading to burnout or poor service delivery.
- For this, and other reasons, librarians may reject the teaching role. They may also feel that they are not trained, or do not possess the credentials, to take on this role.
- In some cases, depending on the institutional climate, librarians may not be accepted as teachers. In academic institutions, for example, librarians may be denied full teaching equality.

Whatever the arguments may be, the reality is that the librarian's role in the information seeking process is changing from mediator to facilitator of information. The librarian's role is to empower users by developing information skills so that users may find, evaluate and use information. Since information is available anywhere and everywhere it is critical that users possess the skills needed to select and filter the information they require. Librarians possess specialised information skills which are required by all citizens of the new information age. They should therefore be proactive by marketing their skills and taking the lead in developing these skills within their user community.

2.6 Deinstitutionalisation of library professionals

Now more than ever, with the vast array of information and ICT's available, with the changes in work roles and careers, with the blurring of boundaries between professions, it is important for librarians to define their unique and special role within the information society. To ensure a role in the information society Cilliers (1984: 20), Creth (1996: 2) and Martell (2003: 2526) all share the view that, within this rapidly changing and unpredictable environment, the librarian should emphasise the expertise of librarians, as opposed to focusing on the library as an institution.

Creth sums this up aptly, "The challenge for Librarians is to rethink and recreate their place in this process, and to move the focus away from the library as a physical space to a new reality of the library providing knowledgeable people who offer a variety of essential and timely services." The librarian's skills are too valuable to be tied to any one institution. According to Cilliers (1984: 21) only a small part of the information economy pertains to traditional library activities. However the skills that the librarian possesses are critical in the broad information environment. It is up to librarians to now market those skills. The strength of libraries is not in the symbol of the institution, but the expertise of the people working in the institution (Martell, 2003: 2526).



2.7 Library and information science education

According to Dolan and Schumacher (1997: 8) graduates require a high level of technical expertise, as well as critical thinking skills and communication skills. Many authors list competencies required by students and translate this into potential curriculum requirements for library schools. It is not the purpose of this chapter to identify specific curriculum or course content for the graduate (this will be discussed in later chapters). However, suffice to say, the changing labour market and rapidly evolving library profession demand that library schools constantly update and revitalise their curricula. Schools need to equip graduates with vital skills so that they are able to work in many different areas within the information environment.

In 1998 and 2000 the Kellogg Foundation funded a project for the Association of Library and Information Science Education (ALISE) to examine "...curricula of today and needs for tomorrow." The KALIPER (Kellogg-ALISE Information Professions and Education Reform) Project report identified six trends that are shaping curricular change in the United States:

- LIS curricula are addressing broad information environments and situations. Schools are now preparing students to work outside of the traditional library unit.
- Core curricula are distinctly user-focused, that is, understanding users and meeting their needs.

- Increased infusion of the use of technology into the curricula.
- Schools are experimenting with offering specialisms within the curricula, for example, archiving, medical librarianship or records management.
- Instruction is offered in different formats, allowing opportunity for distance education and increased collaboration with other departments.
- Curricula are expanding into related degrees. New undergraduate programmes are growing especially rapidly.

(Tenopir, 2002: online)

The increase of technology in the curriculum, growing specialisms and collaboration with other departments are often mentioned in the literature as key methods for schools to give new life to their programmes and keep up-to-date with labour market requirements. Both Johnson (1998: 55) and Tenopir, (2002: online) encourage the use of providing specialisms, but both agree that the library school cannot be everything to everybody. Johnson and Tenopir recommend that schools should collaborate with other departments in order to provide students with relevant study options.

2.8 Conclusion

The development of the information age has influenced all aspects of how libraries work and operate.



The proliferation of ICTs, the expanding range and volume of information, as well as the increased accessibility of technology has changed the way in which people view and value the profession. In order to ensure that other information professions and services do not absorb their key function, librarians repositioned themselves and their role within the information profession as a whole. Many new career paths and professional roles are developing within the profession.

Librarians are being called upon to make use of their unique skills, to focus on the crucial relevance of their skills and expertise in the information age and market these accordingly. Their skills are too valuable to be tied to any one institution.

In order to provide a relevant curriculum that takes into account new roles and labour market changes library schools should continually examine and give new life to their curriculum. Including technology within the curriculum is vitally important, as librarians require ICT expertise in all areas of their work profession. Schools should partner with other academic departments to provide specialised courses for students. This is especially relevant for students who do not enter the traditional library unit.

Chapter 3: The South African Library and Information Science Environment

3.1 Introduction

The previous chapter focuses on global changes and trends in the profession and how this has impacted on the role of the librarian. This chapter focuses on the South African LIS situation and illustrates how changes within library services and within the wider society call for specific skills requirements for the LIS professional. In most instances this chapter tends to focus on public libraries specifically, as this sector tends to reflect the library and information needs of the general, South African user community.

3.2 Transforming LIS services in South Africa

The South African apartheid system has touched all aspects of our society and has led to a multitude of social problems within the country. The Group Areas Act and other apartheid legislation resulted in very little revenue being spent on Black, Coloured and Indian municipalities and libraries. This inequity is still evident. In Limpopo for example the number of people per public library is 112 000 whereas in the Western Cape there are 7807 people per public library (Anderson, 2005: online).



In 1994 the African National Congress (ANC) adopted the Reconstruction and Development Plan (RDP) to guide its efforts to unify and develop the country. The RDP's key programmes included:

- Meeting basic needs
- Developing human resources
- Building the economy
- Democratising the state and society
- Implementing the RDP

The ANC recognised that access to information and knowledge plays a key role in the development of a democratic society and building a better life for all (African National Congress, 2005: online). Within the context of the changing political climate in South Africa LIS professionals started to re-examine their mission and the role of libraries within society (Hart, 2004: 112). Libraries and librarians were increasingly being called upon to act as agents of development within society.

This is particularly evident in the literature on public libraries, a sector where the client user base changed considerably within the new dispensation. There was a call for a rejuvenated public library system that meets the needs of the local South African community. Public library systems in Africa were criticised

for being based on a western model, developed to serve the mostly recreational needs of a wealthy, educated elite (Hart, 2004: 112; Lor, 2000: 219 and Davis, 2004: 3).

Davis cites Isaak (2002), author of an INASP* report entitled *Public Libraries in Africa: a report and annotated bibliography*, as stating that public libraries failed to make any impact on society and that they did not take into account the local socio-political and socio-economic situation of African people. Public libraries are now transforming themselves into 'community libraries'. These libraries provide community information that assists with alleviating social problems, such as unemployment or poverty, and assists the community in meeting their basic needs (Davis, 2004: 5).

According to Rosenberg (2002: online) for an information service to be sustainable "it needs to arise out of the socio-economic and cultural conditions of the country. Libraries need to be organic, an integral part of the community which they serve".

The following section examines the role of community or development librarianship and then describes types of community information needs.

3.3 Community or developmental librarianship

As indicated above librarians and libraries are being called upon to provide information services that directly play a role in social, economic and community development. Mokgaboki describes community libraries as community services that provide their community with educational, informational, recreational and cultural information, documents or resources. The community library provides information and resources that enable the community to participate meaningfully in their socio-economic development, to provide a better life for all (Mokgaboki, 2002: online). The emphasis is placed on information that the community can use to meet their basic needs (such as obtaining food, shelter and employment) and to raise their standard of living or assist in their social and economic development.

In 1987 a study was conducted by the Department of Library and Information Science at the University of South Africa (UNISA) into using libraries for promoting social, economic and political development in South Africa. Several areas of development were repeatedly stressed in the study as being critical for South Africa:

- Educational development
- Manpower development (human resources development)
- Business and industrial development, particularly in the small and informal business sectors
- Rural development (which will be discussed in more detail later)

* International Network for the Availability of Scientific Publications (INASP)

- Urbanisation
 - Political development
- (Roux and Zaaiman, 1989: 9)

The areas mentioned above are especially important against of the backdrop of problems prevalent within SA society. A large percentage of the SA population live in rural areas without access to basic services. Many South African citizens are illiterate or semi-literate, unemployment and crime are rife, HIV/AIDS is rampant and the daily abuse of women and children are ongoing.

3.3.1 Information needs of developing communities

The re-examination of the Library's role came about, not only due to the political climate, but also due to major restructuring within the LIS arena. Due to apartheid, library and information services were concentrated in white, affluent communities. Underprivileged, black communities had access to very few libraries and other services. In rural areas information services were almost non-existent. After the 1994 South African elections a process was started to restructure and integrate library services. The aim was to redress past imbalances and to eliminate the high administrative and running costs of maintaining separate information services under the apartheid system.

With the restructured LIS landscape, libraries opened their doors to a changed user base. The demographics, and hence user needs, of library clients changed drastically and began to reflect the multi-cultural and multi-ethnic society in which SA libraries operate.

Mayer (2002: online) identifies the information needs of these developing communities as being:

- Provision of study facilities (many users do not have adequate space, electricity or privacy to study at home)
- Provision of information and communication technologies (ICTs) such as the Internet and word processing facilities
- Provision of information and computer literacy skills.
- Provision of literacy education and programmes
- Provision of community-based outreach activities, focusing on educational support, arts and culture.

Roux and Zaaiman (1989: 58) state that information needs in developing communities often correspond to the lower level's of Maslow's Hierarchy of needs: physiological needs, safety needs, belongingness needs, esteem needs and cognitive needs. Historically in South Africa library services were aimed at satisfying the higher order needs on Maslow's hierarchy, that is, self actualisation needs, aesthetic needs, esteem needs and belonging needs. A book on interior decoration (most likely an aesthetic need), for example, may

be less useful in a rural township than say a book on learning to produce fertiliser materials from organic waste (most likely a physiological need).

Bekker and Lategan (1988: 64) cautioned that information needs might differ according to the local context and circumstance of the community in question. However they stated that information needs articulated by black urban communities centred around general community needs and issues such as access to the labour market, housing, transport (access to transport to work and shops) and community and educational services.

Rosenberg (2002: online) states that the library's existence can only be justified if they are playing a relevant role in the information transfer process. "In rural areas there already exists an indigenous knowledge transfer system. Print media is not necessarily the most effective in a rural community. Those who cannot read or write also have information needs."

The situation is intensified by the following factors:

- The digital divide: the proliferation of ICTs has given rise to a situation where poorer communities are lagging behind in terms of access and ICT skills. Library users often use the library to access the Internet, to use computers for word processing and to learn ICT skills.
- A lack of functioning school libraries. Scholars often use the library to obtain information for school projects and as a space for studying.
- An emphasis by the SA government and education sector for students and other learners to learn information literacy skills.
- An emphasis by the SA government on transparency and access to government information in order to develop a democratic society. Users are increasingly turning to libraries to access government information.
- The emphasis on lifelong learning for continuous development

The following section will explore a few of these key areas.

3.4 Key Areas of involvement for libraries

3.4.1 Bridging the digital divide

The digital divide refers to the disparity that exists between those who have access to ICTs (such as the Internet, computers, radio, telephones etc.) and those who do not. The American Library Association (ALA) refers to the digital divide as disparities in access to information (via the Internet and other ICTs) and disparities in the skills, knowledge and abilities to use ICTs (Lor, 2003: 63). According to Bridges.org (2003/4:13), an organisation dedicated to narrowing the ICT gap, the term may refer to inequalities between nations or countries (international digital divide) and between groups or communities within countries (domestic digital divide).

According to Bridges.org (2003/4:15) the following criteria are used to measure ICT disparities:

- Number of users of computers
- Infrastructure, access: telecommunication lines, Internet access, web-enabled phones etc.
- Affordability of ICTs
- Training: access to training in schools, affordability of training etc.
- Relevant content: is the content locally relevant and available in local languages
- IT Sector: The size of the ICT sector and how well it is integrated into existing industries
- Poverty: what issues exist that hamper widespread access to ICTs, e.g. illiteracy, crime, illness/disease such as HIV/AIDS, no access to basic services such as sanitation or water
- Geography, race, age, religion, gender and disability: How easy is it to access ICTs across these demographic lines. For example, in certain communities people do not use ICTs as it is thought to be for use by younger people, males only or for highly educated people.

There is a deluge of statistics that support the concept that a digital divide exists within South Africa, as well as between Africa and the rest of the developed world:



- One in two Americans is online, compared with only one in 250 Africans (Bridges.org, 2003/4: 13).
- More than half of primary-age children in Sub-Saharan Africa receive only a rudimentary primary education and less than one third go to secondary school (Bridges.org, 2003/4: 16).
- Fifty percent of the SA population are living below the breadline (Central Intelligence Agency, 2005a: online).
- Forty three percent of the SA population live in rural areas (World Bank, 2005: online).
- Twenty-one and a half percent of the population are living with HIV/AIDS – making us one of the top five countries in the world with the highest prevalence of the disease (Central Intelligence Agency, 2005b: online).
- SA has 3,1 million Internet users, compared to the US with 206 million Internet users (Central Intelligence Agency, 2005c: online).
- SA has only 68 Internet users per 1000 people (World Bank, 2005: online).
- SA has 73 PCs per 1000 people (World Bank, 2005: online).
- SA has 177 TV sets per 1000 people (World Bank, 2005: online).
- Four million, eight hundred thousand telephone lines are in use in South Africa, compared to two hundred and sixty three million lines in China (Central Intelligence Agency, 2005d: online).

One of the main reasons for the existence of the digital divide in South Africa is the previous apartheid system. In the past blacks were provided with inferior services, facilities and education and lacked opportunities for development and growth. Large parts of the population still stay in historically disadvantaged and under-resourced areas where the general infrastructure is very poor.

Various public and private initiatives exist to spread the use of ICTs to improve people's lives, to develop the country and to boost economic growth. One such initiative is the City of Cape Town's Smart City Strategy. The initiative has won various awards including the African ICT Achiever's Award for eGovernment and the US\$1million Gates Foundation Access to Learning Award (Ntuli, 2005: online). The aim of the initiative is to empower local government to develop citizens to effectively use ICTs.

The City of Cape Town has undertaken a number of library-related projects to infuse ICTs within Cape Town communities. This includes the Smart Cape Access Project, which aims to provide public libraries in economically disadvantaged areas with computers and free Internet Access. As part of this initiative the UWC LIS department trained librarians within these libraries to use ICTS. Each library member now has the opportunity to use the facilities at no charge for up to 45 minutes per day, and can prepare and print documentation such as letters and CVs, send email and search the Internet. All users are allocated an email address for their permanent use. The Smart Cape website provides citizens with links to key government information and resources. It plays a role in local business development by providing software for preparation of business documents and links to relevant business sites and current tender information (Bridges.org, 2002: 23).

In January 2002 the City of Cape Town undertook a major assessment of the digital divide in Cape Town. It found that the majority of people in the Western Cape live below the poverty line, do not have access to telephones, Internet or computers and cannot afford to pay for basic services such as water, sanitation and electricity (Bridges.org, 2002: 6). A key finding of the study was that, overall, schools and libraries were seen as the best possible venues to provide communities with ICT access (Bridges.org, 2002: 10).

These are examples of how libraries are strategically located to play a key role in narrowing the digital divide. The library's location within its user community and its existing role of facilitating access to information makes it an ideal champion for transmitting and expanding local community access to ICTs. However libraries are not just passive players in this scenario, to be seen as "venues" for community access to ICTs. Libraries should, and are, key roleplayers. Libraries currently provide training on using computers, searching the Internet and searching electronic databases. Within the higher education sector specifically, consortia are formed to facilitate the purchasing of software and other electronic resources. Libraries should also play an advocacy role by consistently lobbying local government for funds to improve

ICT access for their user community and by actively contributing to key government strategies and legislation to expand access to ICT.

3.4.2 Education

Education and training has undergone tremendous transformation since 1994. New qualification structures and curricula have been put in place. With the restructuring, lifelong learning has been identified as a key outcome for all sectors of education. The South African Qualifications Authority (SAQA) has adopted several cross-field critical outcomes viewed as essential for lifelong learning. These outcomes include the expectation that a student should graduate from higher education with the following summary of competencies:

- Identify and solve problems displaying critical and creative thinking
- The ability to work as part of a team, group or community
- Organise and manage oneself effectively
- Collect, analyse, organise and critically evaluate information
- Communicate effectively
- Use science and technology effectively
- Cognitive problem-solving abilities

(De Jager and Nassimbeni, 2003: 109)

The majority of these competencies are components of, and form the basis for, information literacy. Libraries and Librarians have traditionally been at the forefront of information literacy training within all sectors of the profession. The fourth competency 'collect, analyse, organise and critically evaluate information', specifically, is at the heart of what libraries teach to their users. According to Genevieve Hart (2004: 110) this provides opportunities for libraries to play a key role within the education arena, and therefore in social development in South Africa.

Librarians within the higher education sector, for example, are increasingly being called upon to contribute to curricula and teach on information literacy courses within their institution. One such example is at UWC where the Library and Information Science department collaborated with the library, and other units on campus, to develop an Information Literacy course for Arts students. The department and the library are currently developing a campus-wide information literacy course for the institution.

Information literacy in South African higher education is especially important, as all students have not had equal access to resources and learning (De Jager and Nassimbeni, 2003: 108). Many school-leavers enter higher education without ever having accessed the Internet, or without ever having used an encyclopaedia or thesaurus. Providing students with the relevant skills and resources to successfully complete their studies is a key goal for all libraries within this sector.

Hart (2004: 110) cautions however that Librarians have a choice of becoming agents of change within education, or playing a passive, more supportive role. Librarians should examine their credibility within the educational arena, and play a more proactive role with regard to curriculum and educational policy development.

In addition, as mentioned under 3.1, due to a lack of functioning school libraries, public and academic libraries are increasingly being used as a study space for scholars. This is compounded by the new resource-based education model used within education. This approach sees education in terms of "active discovery, problem solving and knowledge construction," where "libraries...are the sites where much of this independent learning is taking place" Hart (2004: 110).

3.4.3 Rural information services

As indicated previously approximately 43% of the SA population live in rural areas (World Bank, 2005: online). A major concern is that the majority of SA community and public libraries are clustered around urban areas and more affluent suburbs (Lor: 2004: 48). In addition to playing a role in narrowing the digital divide between disadvantaged and advantaged communities, libraries should also prioritise and customise information and learning programmes for under-resourced and rural areas.

Lor (Lor: 2004: 48) states that public libraries should become 'true community resource centres' providing various online and print media, providing learning resources for all ages and community information for and about the community. Davis (2004: 10) calls for "imaginative and socially responsive programmes" to increase opportunities for individuals and to bring about social and economic development for the community. Many public libraries for example provide literacy training for adults in their communities. It is important for library staff to work and partner with members and organisations within the community to assess what needs exist and how the library may play a role in meeting those needs.

According to Mokgaboki (2002: 78) librarians in rural areas need to be imaginative and creative in developing programmes, as they will have to compete for funding with much needed social services such as water and electricity. The challenge is for libraries to show how library and information services can uplift communities and make a concrete difference to individuals' lives.

3.5 Additional challenges facing SA libraries

South African libraries face many additional challenges. Some of these include:

- Acquiring resources in local languages.
- A poor reading culture within the country
- Insufficient funding to acquire materials, equipment and facilities

According to Hendrikz (2002: online) the country's reading culture received special emphasis during 2001, and this is still continuing with an initiative called Masifunde Sonkwe. This is a campaign to engage the whole nation to build a sustainable reading and writing culture that supports the various South African languages and cultures.

Insufficient funding and a lack of resources still remain a problem, within the public library sector especially. This scenario is described by Anderson (2005: online), "Schedule 5 of the 1996 constitution demarcated 'libraries other than national libraries' as areas of exclusive Provincial competence but no funding for this function was granted to the Provinces and as a result, when the Local Government Municipal Structures Act, No 77 was passed in 1998, it excluded libraries from the responsibilities of municipalities. Usually, when a function of government is shifted from one sphere to another, as happened here, the money for the function is expected to move from the first sphere, in this case the municipal government, to the new sphere, in this case the Provincial government. However, there is, understandably, no mechanism for shifting own-revenue from a municipality to a province. The constitution does allow provinces to assign functions to municipalities but the provinces must then ensure that the necessary budget is available for this. It is a catch 22 situation. Currently libraries are the responsibility of the provinces but there is no national government funding for them. Among a number of other services, which have been similarly shifted, public libraries are known as 'unfunded mandates.'"

This has led to library budget and service cuts and even library closures. Librarians need to improve their visibility and market the role and function of library services to politicians and other key roleplayers. They also need to be creative about sourcing funding for library resources and equipment.

3.6. Conclusion

It is clear that libraries in South Africa face extra challenges. Libraries are serving a very diverse user group, and have to provide services to communities who have access to very little or no infrastructure and basic services and facilities.

Librarians need to be proactive and imaginative when developing programmes for under-resourced and rural communities. They need to be willing to take on new roles and to go into communities to partner with relevant organisations or individuals. They need to be skilled in using ICTs, in training and teaching and be excellent communicators. They need to constantly update their skills and be aware of social and other factors affecting their user community.

They need to be skilled in fund-raising and lobbying for funds for rural and other under-resourced communities. Furthermore they need to ensure that they contribute to educational and ICT policy and programme development within the country to ensure that libraries fulfil their key roles within these areas.

Before ending this chapter it must be noted that, with all the above challenges that SA libraries are facing, one that remains constant is the lack of funding for community and public libraries. Libraries are currently on an 'unfunded mandate', where local provinces, responsible for libraries, are not obtaining funding from central government to take care of libraries. Library professionals need to be able to strategise and act on a national level, via their professional groupings/bodies and association, to improve the image of the libraries, increase their visibility and provide evidence of the real benefits of libraries.

Chapter 4: Competency requirements of the entry-level, LIS graduate

4.1 Introduction

This chapter includes competencies, mentioned in the literature, that LIS graduates should possess upon entering the profession. The studies and literature focus specifically on the beginning, entry-level library and information professional. The literature includes graduate tracer studies, employer studies and articles by individual theorists. The studies are not limited to or focusing on a specific sector or area of librarianship e.g. academic or special libraries. They specifically focus on competencies for the generalist, entry-level librarian.

4.2 The literature

Section 4.2 provides a brief overview of the literature used to identify competencies discussed in this chapter. The actual competencies are discussed in section 4.3.

4.2.1 Graduate and employer studies

- During 1987 Buttlar and Du Mont (1989) conducted a graduate tracer study at Kent State University School of Library Science in order to identify competencies essential for new graduates. Graduates were asked to rate 53 competencies. In 1996 Buttlar and Du Mont (1996) then published the results of a follow-up study, which compared the findings of the two studies.
- Michael Middleton (2003: 42) undertook a survey of graduates from various library courses at Queensland University of Technology in Australia. One of the main objectives of the study was to establish a picture of the library profession's expectations of graduates. The majority of responses came from more recent graduates. Middleton identified 189 skills. Respondents were asked to rank skills for commencing graduates (Middleton, 2003: 42).
- Quarmby, Willet and Wood (1999: 147) surveyed students graduating from the MSC Information Management Programme at the Department of Information Studies at the University of Sheffield in the years 1994-1996. The study focused on identifying students' jobs after graduating from university. This included students' duties and their views on the relevance of the Masters programme.

- Cole, Willard and Wilson (2003: 209) surveyed graduates of the Library and Information Studies (LIS) programmes of the University of New South Wales from the years 1997-2001. Graduates were asked to indicate the major functions of their first positions after graduating. The majority of respondents cited searching and information retrieval. Database design and management was the next most frequently cited duty (Cole, Willard and Wilson, 2003: 209).
- Ocholla (2000: online) conducted a graduate tracer study mainly to review and revise the LIS curriculum at the University of Zululand. He surveyed graduates and interviewed their employers. The majority of graduates worked in the public sector, were bachelor degree graduates and had recently graduated (between 1996 and 1999). Ocholla's paper contains a listing of duties of new graduates. Also included is a listing of knowledge and skills learnt on the course that graduates say they are currently using and knowledge and skills they say they required upon graduation but were lacking. Ocholla also scanned advertisements to assess which skills and attitudes employers require. These adverts however were mainly targeted at experienced workers rather than new graduates and are therefore not included in this mini-thesis.
- In their literature review Buttler and Du Mont (1989: 2 & 3) cited a few studies dealing with competencies for entry level vs. experienced librarians. Marchant and Smith (1982) surveyed American Research Library directors on what knowledge library school graduates should possess for their first job. DeVinney and Tegler (1983) identified activities performed by beginning librarians at SUNY University. They also identified key skills that should be learnt in library school, that is, answering reference questions, searching, bibliographic verification, selection and cataloguing.
- Gregory and Perez's (1998: online) article deals with library and information science education for the 21st century information professional. It presents the results of a survey of several library leaders in Florida about the skills they regarded as important for future librarians.
- Karim et al (1998: online) in their study tried to identify sets of competencies for undergraduate and postgraduate LIS education. A list of seventy competencies was used to gather responses from managers of libraries in the Gulf region. The only competency significantly favoured for undergraduates was 'acquiring materials' (ordering, receiving, claiming, invoicing etc). The study showed twenty-one common competencies to be imparted at both levels (included in the tabulation). Another forty-eight competencies were preferred for more extensive treatment at postgraduate level (not included in this paper).

- Kigongo-Bukenya and Lutwama (2004: 100) undertook a study of East African School of Library and Information Science (EASLIS) graduates working in Uganda. Two of the main objectives were to identify competencies demanded by the work they do and to identify which areas of the EASLIS curriculum needed to be improved. The study focused on graduates who graduated from 1995-1999. They also interviewed employers and LIS educators.
- Raju (2004: 9) surveyed employers, past students and LIS educators regarding first-level LIS qualifications and their relevance to the LIS work environment.

4.2.2 Individual theorists

- Thapisa (1999: 91) launched a 'competence-based-product' vision to produce job-ready students in all the programmes of the Department of Library and Information Studies at University of Botswana. The exercise involved overhauling the entire curricula and opinion was sought internationally and regionally via email and the 'African Libraries Listserv'. The opinions of individual library professionals are included in the findings.
- Dixon and Newton (1999: online) argue that it is vital for new entrants to the profession to be aware of the context of changes taking place in the library and information science arena. In addition to being able to use new technologies they should understand the manner in which the profession has developed and been affected by these technologies. This is vital to forming a strategic and informed view of the future.
- Downie (1999: online) argues that, in response to threats of disintermediation, 'system-centred' skills (knowledge of information retrieval systems, indexing and abstracting) need to be incorporated into library school curriculums. This will provide students with a deeper understanding of all types of information systems.
- Johnson (1998: 52) warns library schools against the danger of inertia. He states that the major challenges facing library professionals within the information society call for a broader range of specialist skills, drawn from other sectors of the information industry such as publishing or IT. He says that collaboration with other departments or disciplines are key.
- Ashcroft (2004: 82) states that developing 'personal, transferable skills' such as marketing and evaluation are vital within the changing information environment. Ashcroft reports on a research project conducted at Liverpool John Moore's University into the marketing and management of eJournals.

- Roggema-van Heusden (2004: 98) discusses developments in the Netherlands with regard to developing a competence-oriented curriculum for LIS students. The focus has changed from teaching students factual knowledge to teaching students personal and behavioural competencies. Roggema-van Heusden describes an integrative competence framework being developed in the Netherlands that links specific core tasks with professional expertise and “behavioural repertoire”.

4.2.3 ALA Task Force on core competencies

- The Core Competencies Task Force was created by the American Library Association (ALA) Executive Board in 1999. The group developed a draft statement of core competencies, in response to recommendations from the ALA Steering Committee of the 1st Congress on Professional Education. This document is entitled ‘Congress on Professional Education: Focus on Education for the First Professional Degree’. The task group continues to finalise and revise the document.

4.3 The findings: competencies for the beginning librarian: (See Appendix 2, Tables 1-4, for the lists of competencies)

Within this section we will explore some of the main competencies emphasised by graduates, employers, theorists and the ALA Task Force on Core Competencies will be explored. These are competencies listed and mentioned within the literature detailed in the previous section. It must be emphasised that these skills sets are not prescriptive and only serve to give us an overview of what the literature says. Many graduates will enter the library profession with some or many of these skills, at varying levels of competency. In many instances this will be influenced by the courses and curricula of the library school at which the graduate studied.

Appendix 2, tables 1 to 4, list the competencies mentioned in the literature. Appendix 2, table 1, shows competencies listed/mentioned by graduates. Appendix 2, table 2, shows competencies listed/mentioned by employers. Appendix 2, table 3, lists individual theorists’ input on the topic and Appendix 2, table 4 shows competencies recommended by the ALA Task Force on Core Competencies. Each author/study has been allocated a number to easily identify their recommendations or suggested competencies within the tabulation. See Appendix 1, table 1 for the author key table.

Appendix 2, tables 1 to 4, include:

- Competencies listed by authors.
- Curricula identified as most relevant for the beginning librarian.
- Skills/competencies entry-level librarians say they are currently using.
- Skills/competencies entry-level librarians say they need but are lacking.

As mentioned previously this document focuses specifically on the beginning library and information professional. Within the South African, and other developing country contexts, this refers mainly to professionals who hold an undergraduate LIS degree. Within the UK or US the 'beginning librarian' mainly refers to postgraduate degree holders (e.g. M.Sc, M.A or M.L.S etc.). In many instances, within developed countries, undergraduate LIS degrees are completely done away with (Karim et al 1998: online). This trend is becoming increasingly common in South Africa.

Competencies have been categorised within Appendix 2, tables 1-4, using a combination of the same categories used in the Buttler and Du Mont (1996) and Middleton (2003) studies. These categories encompass the broad main areas of LIS skills, knowledge and attitudes (competencies) required within the profession today. These are:

Collection building and management
Information Services
Information organisation
Management
Communication and interpersonal skills
Information systems
Facilities and equipment
Marketing
Research



A 'Behavioural Competencies' category has been included to include additional personal behavioural characteristics such as innovation or flexibility.

It should be noted that within these tables competencies may overlap specific categories. For example, Appendix 2, table 4, 'demonstrate the ability to collaborate with customers in defining and solving their information needs' is included in the information services category but may also be included within the interpersonal and communication skills category.

Many authors use diverse terms for similar-meaning or overlapping concepts or competencies. Within the tables, tasks are combined where the meaning is explicitly the same. Very often a skill/competency is provided without a full definition or description, e.g. inter-library loan or circulation control. In other cases very broad terms are used to encompass a whole set of skills or competencies, e.g. communication skills or management skills. These terms have been included in the tables as is.

4.3.1 Frequency count of categories

A frequency count of the categories is shown in Table 1 below, with categories ranked according to the number of times competencies within these categories are listed/mentioned in the literature. **Information services, information systems, communication and interpersonal skills** are emphasised most in the literature. **Research, marketing and facilities and management** are mentioned least frequently. **Information systems** and **communication and interpersonal skills** are ranked the same. Analyses of the various categories are included below.

Category	Rank
Information services	1
Information systems	2
Communication and interpersonal skills	2
Behavioural competencies	3
Management	4
Information organisation	5
Collection building and management	6
Research	7
Marketing	8
Facilities and management	9

Rank 1: category mentioned most frequently in the literature

Rank 9: category mentioned least frequently in the literature

4.3.2 Information services

Providing an efficient and effective information service for users is one of the foundations of the LIS profession, and is mentioned most frequently in the literature. All of the traditional aspects of providing an information service are emphasised. This includes conducting an effective reference interview (interacting with the user to identify information needs and effectively obtaining information), knowledge of sources and tools to retrieve and locate information (in print and electronic formats) and evaluating and repackaging information. (American Library Association, 2002: online; Buttler and Du Mont, 1989: 10; Buttler and Du Mont, 1996: 51; Johnson, 1998: 57; Karim et al, 1998: online; Middleton, 2003: 29; Ocholla, 2000: online)

Information literacy training/teaching is also emphasised as a key skill for librarians (American Library Association, 2002: online; Gregory and Perez, 1998: online; Ocholla, 2000: online; Thapisa, 1999: 95). In South Africa and internationally libraries have become key role-players in developing lifelong learning and facilitating access to learning and knowledge. Teaching and training information literacy have become key components, within all sectors of LIS, of providing services to users. The vast number and types of

resources available make it imperative for librarians to teach information skills and to train users on how best to use library resources and services. This competency is stressed and detailed within the ALA document. They include learning theories and methodologies, developing educational programmes, assessing learning needs, presenting and identifying delivery methods as key competencies for facilitating learning within the profession (American Library Association, 2002: online).

Thapisa (1999: 95) recommends that the library science graduate needs to understand African community information needs and how African communities access information and meet those needs. This correlates with the previous chapter that deals with community librarianship and the role that libraries play in terms of social and economic development within South Africa.

Additional specialisms are mentioned mainly by Karim et al. These include providing specialised information services such as archival services, government publication services and services for special groups (e.g. children or young adults). It is also mentioned that LIS professionals should understand the basic concepts and terminology in the areas of specialisation for a special library (Karim et al, 1998: online). It is highly debatable whether these kinds of specialised skills should be required of a beginning librarian. Very often certain specialised modules may be incorporated within the LIS syllabi of postgraduate courses. Many LIS courses are not able to incorporate all, or even some, of these specialisms. Some would argue that LIS schools should concentrate on equipping graduates with generic, traditional skills, which will provide students with a strong knowledge base to enter any specialised area of LIS.

Implicit in providing an effective and efficient information service are good interpersonal and communication skills. The library professional also needs to be able to navigate networks and use online and other electronic resources. These specific competencies will be discussed further on in this section.

4.3.3 Information systems

The knowledge and application of ICT's are inherent in most aspects of librarianship and is ranked 2 in the frequency table. As shown in Chapter 2, ICT's have changed the way in which libraries perform traditional library and information science functions and are used within most library functions and activities.

The beginning librarian needs to be fully computer literate, know how to use word processing and other standard Windows packages. They should be able to use electronic information resources such as databases and e-journals and be proficient in using the Internet for information retrieval. Graduates should know how library ICTs are applied and managed to handle the organisation, acquisition, dissemination and retrieval of information. They should

understand computer and information science concepts and terminology. They should be able to design and manage library databases. (American Library Association, 2002: online; Gregory and Perez, 1998: online; Johnson, 1998: 57; Karim et al, 1998: online; Ocholla, 2000: online; Thapisa, 1999: 93)

According to the American Library Association (2002: online) beginning librarians should possess knowledge about why and how ICTs have influenced the LIS environment and profession and about relevant ICT standards and ICT trends within the profession. They should be able to create web-based information resources, such as websites. Graduates should be able to evaluate and assess the benefits and appropriate applications of technology within the library.

It is not sufficient for beginning librarians to only be computer literate. They should be advanced users of technology and understand how ICTs may be harnessed to develop and provide a state-of-the-art information service.

4.3.4 Communication and interpersonal skills

Ranked third in the frequency table, a whole host of interpersonal and communication skills have been emphasised in the literature. This includes written and oral communication, interviewing skills, flexibility and versatility, ability to work and interact with a diversity of people, working in a team environment and self-supervision/management. (Ashcroft, 2004: 82; Buttler and Du Mont, 1996: 51; Gregory and Perez, 1998: online; Karim et al, 1998: online; Middleton, 2003: 29; Ocholla, 2000: online; Thapisa, 1999: 95) The new graduate should also be enthusiastic, with a sharp desire to serve (Kigongo-Bukenya and Lutwama, 2004: 100).

Ashcroft (2004: 82) cites Biddiscombe as stating that library professionals need to continue acquiring the traditional library and information skills and retain a flexible approach, "There is a need to maintain those essential skills that have always made librarians respected in their communities; they will need to retain their flexible working skills, their openness to new ideas and their caring approach to user needs."

Ashcroft (2004: 86) also emphasizes negotiation and collaboration as core communications skills needed within the networked environment, "The advent of electronic resources means that purchasing publications is no longer a simple process, with subscriptions to e-journal 'bundles' increasingly the norm. Information professionals need to be able to negotiate the best deal for their user needs, bearing in mind access to relevant information whilst obtaining the best price." Libraries are increasingly collaborating and forming consortia to purchase electronic resources. Librarians should know how to effectively collaborate with partners and publishers to ensure that their library is able to benefit from the cooperative.

It is obvious that strong interpersonal and communication skills are core requirements for LIS professionals. Dealing and interacting successfully with clients and colleagues and creating a professional, welcoming environment for patrons are intrinsic to providing an effective information service. The dynamic and changing profession requires graduates who are flexible and versatile and who are able to continually develop and learn. Changing organisational structures require staff who are able to work successfully within projects and teams. They should be excellent communicators and should be able to create positive, pleasant information environments. They should also be able to network and create partnerships with the community.

4.3.5 Management

General management competencies and knowledge of management principles are emphasised by all. In some cases theorists or studies tend to be vague in this area and mention “managerial abilities” or “management of libraries” (Ocholla, 2000: online; Kigongo-Bukenya and Lutwama, 2004: 100). Others mention competencies such as developing policies and procedures, defining the mission and objectives of the library, decision-making, financial management, planning and forecasting (American Library Association, 2002: online; Buttlar and Du Mont, 1996: 51; Karim et al, 1998: online; Kigongo-Bukenya and Lutwama, 2004: 100; Ocholla, 2000: online; Raju, 2004: 16).

Karim et al (1998: online), the American Library Association (2002: online) and Raju (2004: 16) include managing staff performance, human resources management and motivating others towards accomplishing their goals. This is surprising, as beginning librarians, according to the author’s experience, are not usually placed in charge of staff. This may be said of many of the other management competencies/skills mentioned in the literature, such as financial management and budgeting. Perhaps it is assumed that many LIS graduates will hold management or supervisory positions sooner or later in their career, and a good grounding in management theory will prepare graduates for this.

4.3.6 Behavioural competencies

Several personal, general skills and attitudes were mentioned in the literature, that do not fall within the main categories above. These include critical thinking and analytical skills, engaging in visionary thinking, forecasting, being innovative, problem-solving abilities and systematising work (Buttlar and Du Mont, 1996: 51; Gregory and Perez, 1998: online; Kigongo-Bukenya and Lutwama, 2004: 100; Ocholla, 2000: online; Roggema-van Heusden, 2004: 98).

An enquiring mind, adaptability, willingness, the ability to learn and an “historical consciousness” of how the profession has developed and what may lie ahead for the future is also mentioned. (Dixon and Newton, 1999: online; Johnson, 1998: 57; Roggema-van Heusden, 2004: 98; Thapisa, 1999: 95)

These are core abilities that should enable the new LIS professional to keep up with the growth of the profession.

Gregory and Perez (1998: online) include a very apt quote by Sally Reed about the need for personal qualities and skills, "It is clear that the qualities librarians possess become even more important than skills. The rapidity with which technology changes can make any set of skills obsolete almost instantly. What is more important is the ability for librarians to understand and interpret trends in information management and delivery, the vision for planning future library services, the flexibility to make changes in the library quickly, and the ability to assess the cultural environment in which the library operates, and to reflect diversity in services and staff."

Roggema-van Heusden (2004: 98) characterises this as a shift from being required "to know" to "to be capable".

4.3.7 Information organisation

Cataloguing, classification, indexing and abstracting are emphasised by both employers and graduates. The American Library Association includes knowledge of metadata and bibliographic standards (American Library Association, 2002: online). Professionals should understand how knowledge is organised within specific disciplines and subject areas. They should understand the relationships between subjects and disciplines in order to navigate information systems and resources, and to better facilitate retrieval of information. Library professionals should be able to use their information organisation skills to create, develop and improve information retrieval systems (American Library Association, 2002: online; Downie, 1999: online; Gregory and Perez, 1998: online; Karim et al, 1998: online; Ocholla, 2000: online; Raju, 2004: 16; Thapisa, 1999: 95).

According to Downie (1999: online) these specialised information management skills should be taught and emphasised within library schools. Downie describes an environment where library professionals are under threat of 'disintermediation', of being bypassed by the user. Library professionals therefore should harness these key specialised skills which may be used to develop sophisticated information retrieval systems. In Raju's study (2000: 16) cataloguing and classification receive high percentage relevance by both employers and past students. Even though, according to Raju, these courses are overlooked by LIS schools because of an increase in use of copy cataloguing services, cataloguing and classification provide unique knowledge about the analysis and synthesis of information and how information collections are organised (Raju, 2004: 16).

Designing and maintaining databases and other retrieval systems are key functions that are usually included in the duties of library and information professionals. The development of information repositories, for example, for dissemination of research and knowledge has become a hot topic within the

profession. Within all sectors librarians are called upon to develop information systems with which to harness intellectual capital and information. It is imperative that LIS graduates are equipped with a solid foundation of how information and knowledge may be organised effectively and according to specific standards and principles.

Only in Raju's study (2004: 16) both employers and past students mention knowledge management as a skills requirement for LIS graduates. It is evident however that many skills within this category, and other categories such as information systems, include knowledge management skills. This includes skills such as designing and maintaining databases and developing information retrieval systems.

4.3.8 Collection building and management

Collection building and management encompass developing, maintaining and managing a collection of materials for information service users. The American Library Association Task Force (2002: online) sees these skills as those that "define the core of librarianship – connecting users with information". Both employers and graduates emphasise collection management skills such as selection, acquisition, weeding, preservation and shelving. (Buttlar and Du Mont, 1989: 10; Buttlar and Du Mont, 1996: 51; Ocholla, 2000: online; Karim et al, 1998: online) Serials management and selection is also listed in the Karim et al study as a competency required by undergraduates of LIS programmes (Karim et al, 1998: online). This is especially important today with the increasing complexity of selecting, subscribing and accessing online and print serials.

In addition to the more traditional collection management activities, employers and the American Library Association Task Force indicate that the beginning librarian should possess knowledge about publishing and information creation and dissemination. They should be aware of the changing information environment and its effect on the profession. (American Library Association, 2002: online; Karim et al, 1998: online) The new librarian should possess knowledge about the current open access debates, new forms of accessing published and unpublished information, digitising of information and the creation of digital repositories. New forms of publishing and information access are fundamentally changing the LIS profession. It is crucial that new graduates entering the profession are aware of the issues and are able to contribute to the debates.

4.3.9 Research

It is recommended that beginning librarians should be able to conduct basic research and write research reports (Ocholla, 2000: online). The American Library Association (2002: online) goes further to say that graduates should be able to evaluate the validity of research, design research studies, make decisions and solve problems based on research findings and maintain a

current awareness of relevant LIS research. Research skills are especially important in terms of user studies and for developing locally relevant services.

Ashcroft (2004: 85) states that information professionals should have the skills to evaluate resources, particularly electronic resources. Libraries are spending an increasingly sizable portion of their budgets on electronic resources. Evaluating these resources using user studies and usage statistics has become a highly relevant and key issue within libraries and within the LIS sector.

Thapisa (1999: 96) stresses that the LIS syllabus should include knowledge of specific African community ways of using libraries and accessing information. He states that, as there is no readily available knowledge-base where this is concerned, African specifics should take the form of action learning. Students should learn this part of the syllabus by research design and field research, as opposed to learning by being trained.

It is essential that LIS professionals are able to understand and contribute to their profession's research knowledge base. Johnson (1998: 57) states that including research within the LIS syllabus is essential for stimulating the interests of LIS students' in change and for producing future leaders of the profession.

4.3.10 Marketing



Beginning librarians should be able to develop and implement a public relations campaign for specific library programmes such as user education programmes. They should be competent in creating displays and should be able to organise community activities. (American Library Association, 2002: online; Ocholla, 2000: online)

Ashcroft (2004: 84) states that the advent of fast-developing technologies makes marketing and promotion of resources even more important within the networked environment. She cites Kent as stating, 'In today's extremely competitive environment, the public library director has realised that the newest techniques of marketing, branding, public relations and merchandising can be utilised to position the public library as a valued and valuable institution.'

Even though 'marketing' as such is not emphasised within the literature, it is assumed that many of the skills mentioned within this section will enhance and contribute to the way in which a librarian markets and 'sells' information services and information literacy to clients. This especially includes strong interpersonal and communication skills and effective management skills. In addition, research skills may also form a key component of marketing, as LIS professionals would need to perform user studies and needs analysis in order to develop and design effective marketing strategies and public relations activities. Ashcroft (2004: 84) states that evaluation of marketing activities is

essential in order to ensure that marketing and promotion effectively reaches target markets.

4.3.11 Facilities and equipment

This category was not emphasised much, except for knowledge about the library's security issues and needs and evaluating and using hardware and computer networks (Ocholla, 2000: online and Thapisa, 1999: 93). It is assumed that technical services staff, which may include mostly para-professional library staff, perform most facilities and equipment tasks in the library.

4.4. Conclusion

Thapisa (1999: 98) cites Jean Jack who sums up, quite effectively, the competencies required of special librarians. Even though this mini-thesis does not refer to any one LIS sector specifically, Jack's summation perfectly sums up our findings. He states that the two main types of competencies include:

- Professional competencies that relate to the librarian's knowledge in the areas of information resources, information access, technology, management, research, and the ability to use this knowledge as a basis for providing library and information services.
- Personal competencies, which include skills, attitudes and values that enable the librarian to operate effectively, be good communicators, to engage in lifelong learning, to demonstrate the value of libraries and to navigate the world of work.

The beginning librarian needs to be a well-rounded, versatile individual, comfortable with change and technology and able to communicate and interact with a diversity of people. He/she needs to be in touch with local information needs, networking and partnering with community members and organisations.

It is obvious that LIS schools are not able to equip new graduates with all of these skills and competencies. One strategy is for schools to partner with other departments on campus in order for their graduates to be able to enrol for additional general modules within other disciplines, such as management or computer science courses.

Chapter 5: Perceptions of employers

5.1 Introduction

This chapter provides the results and analyses of interview data from interviews with employers of library science graduates.

Documentary analysis is the main method of data collection used within this mini-thesis. The main findings of the documentary study have been collated within the previous chapters. During this chapter I will round off the study by comparing and integrating the main findings uncovered thus far, with the views of a few employers. The respondents are referred to as employers or public, academic or special librarians. They will remain anonymous.

5.2 Research methodology

A qualitative research design has been used to collect and interpret information. According to Collins et al (2000: 134) qualitative research focuses on meaning, experience and understanding. In qualitative research interviews are often used and the researcher is given the opportunity to interact with respondents whose experiences or opinions the researcher wants to understand. A qualitative approach will be used to describe, in detail, the views of employers and analyse how these views contrast with or compare to the documentary findings.

5.2.1 Data collection

Semi-structured, telephonic interviews were used to collect data. Collins (2000: 181) lists the following advantages of interviews:

- Interviews are flexible and they provide the researcher with rich, detailed insight
- The researcher may clarify unclear questions
- Additional information may be obtained by asking follow-up or probing questions, especially where responses are unclear or ambiguous

In addition Collins (2000: 181) states that telephonic interviews have definite advantages:

- No expensive travelling, duplication or postage costs
- Data may be collected quickly
- Responses may actually be more accurate as respondents do not have time to re-think answers

The interviews were conducted over a period of one week from 20 to 26 October 2005. Interviews were conducted telephonically and lasted approximately 30-45 minutes each. Interviews were semi-structured and an interview schedule was used to guide the researcher in asking questions and collecting interview data (see Appendix 4 for the sample interview schedule). Answers were jotted under the relevant topics and questions. The interview schedule ensured that all respondents were treated in the same way.

The interview schedule was constructed according to predetermined categories and themes identified in the findings of the documentary analysis. The main categories of competencies identified in the previous chapters include:

- Collection building and management
- Information Services
- Information organisation
- Management
- Communication and interpersonal skills
- Information systems
- Facilities and equipment
- Marketing
- Research
- Behavioural competencies
- Additional skills needed within the SA LIS environment



The interview data will be described and analysed according to these categories in order to compare and contrast interview data with previous findings. In addition to the set questions, additional probing questions were also asked to obtain in-depth information and views from respondents.

5.2.2 Sample

Purposive or judgemental sampling was used to ensure that meaningful data was collated. According to Collins (2000: 159) purposive sampling is when the researcher selects respondents judged to be a representative sample of the population. Sampling is based on the researcher's own knowledge of the field. To ensure representativeness, employers from the public, academic and special library sectors were interviewed. To increase the validity of the data two librarians from each sector were interviewed. In order to ensure that valid and relevant data was collated, all respondents were required to be working within libraries, in a managerial capacity and employing LIS graduates.

5.2.3 Limitations

Limitations of the study include:

- Full recordings or transcripts of the responses are not available as these were telephonic interviews.
- Verbal cues could not be observed.

5.3 Results and Analysis:

The following section provides the results and analysis of the interviews with employers.

5.3.1 Respondent information

All respondents work in managerial positions within libraries or library organisations. Table 2 shows the positions and qualifications recorded during the interview:

Table 2: Respondent data			
Employer Positions	Number of years in current position	Number of years in managerial position	LIS qualification
Public libraries			
1. Chief Librarian	18	20	Postgraduate diploma in Library and information science
2. Head of Library Services	9	9	BBibl
Academic libraries			
3. Deputy University Librarian	10	20	BBibl Honours
4. Manager: Cataloguing, IT Systems and Archiving and Records Centre	10	10	Postgraduate diploma in Library and information science
Special libraries			
5. Director	5	15	BBibl Honours
6. Chief Librarian	6	11	BBibl Honours

All employers have been employed in managerial positions for more than five years and all possess LIS qualifications. Employer 1 is employed within the local municipality's library services and is responsible for, amongst other things, staff recruitment within the municipality libraries. Employer 2 is responsible for managing a public library and is Head of Library Services for that local municipal district. Both are employed in different municipal districts.

5.3.2 Employing LIS Graduates

This information relates to questions 7, 8, 9 and 10 of the interview schedule, which deals with employment of LIS entry-level graduates within the employers' respective libraries. All employers employ and manage LIS graduates. Five employers indicate that they have employed 'entry-level' graduates in their library. The reasons cited include that graduates have the professional knowledge, values and cognitive skills required for working within a library setting.

"Graduates have the theoretical background required for the public library sector. They learn to think at university."

"It is important to hire graduates in the library, as they understand the value of information services. They deliver a professional service and understand the significance of the profession."

Another reason cited is that graduates are employed to give them an opportunity to enter the labour market and gain experience. Employers see themselves as assisting the profession and expanding the job market for librarians. Even in cases where graduate level positions do not exist, graduates are being hired in positions where no qualifications are required. The reason cited is to provide opportunities for new graduates entering the profession. One public library employer comments:

"Unfortunately the local government does not make much provision for graduates. In most cases the only positions requiring a LIS qualification are 'Heads of Libraries' positions. Graduates are therefore mainly hired as library assistants, even though these positions only require a matric certificate. Even though this is not an ideal position I hire graduates within these positions as I feel that the current system undermines the profession and contributes to job scarcity for LIS graduates. Hopefully we are able to accommodate new graduates entering the profession."

Hopefully this is not indicative of the entire public library job market, as many new graduates entering the public library sector would find themselves working in positions where they are over-qualified or where they are not required to use the professional skills acquired at university.

One librarian within the special library sector indicates that they have not hired entry-level graduates due to a lack of new positions being created in the library.

5.3.3 Key competencies required by entry-level graduates

This section relates to question 11 of the interview schedule, where employers were asked which two or three key competencies, in their opinion, are required of the entry-level graduate when entering the profession. The core competencies mentioned by employers are categorised, in Table 3 below, according to predefined categories identified within the previous chapter's documentary analysis. These are not direct quotes as some sentences have been shortened to include only succinct information. For the purposes of identifying frequency counts of categories, skills may be listed more than once if mentioned by different librarians.

Table 3: Core competencies identified by employers
Information Services
<ul style="list-style-type: none"> - Be good at reference work, conducting interviews and be able to assess what people are looking for. (public librarian) - Ability to conduct information literacy training. (public librarian) - Eclectic book knowledge – knowledge of various types and genres of materials, extremely well read. (public librarian) - Information literacy training skills. (academic librarian)
Information Organisation
<ul style="list-style-type: none"> - A background of cataloguing and classification. (public librarian) - Background of Dewey and AACR2. (academic librarian) - Understanding of the standards that exist for the area in which they want to work (e.g. standards for cataloguing). (academic librarian)
Management
<ul style="list-style-type: none"> - Understanding of the way in which a library operates – its practices, policies, procedures and general management. (academic librarian)
Communication and Interpersonal Skills
<ul style="list-style-type: none"> - Ability to effectively speak to people. (public librarian) - Good communication skills – verbal and written. (public librarian) - Interpersonal and customer service skills. (public librarian) - People skills. (special librarian)
Information Systems
<ul style="list-style-type: none"> - ICT skills. (academic librarian) - ICT skills are key. (special librarian) - They need a good understanding of how information systems work and how they talk to each other. (special librarian) - ICT skills. (special librarian)

Table 3 continued: Core competencies identified by employers: ranked by category

Behavioural competencies

- Geared towards self-development and learning. (special librarian)
- Ability and willingness to learn about the contents of the collection and subject area. (special librarian)
- Good thinking and memory skills. (special librarian)
- Be meticulous. (special librarian)
- Be a generalist who is able to work in all areas of the special library. (special librarian)
- Be multi-skilled. (special librarian)
- Flexibility. (special librarian)
- Very confident attitude. (special librarian)
- Inquisitive. (special librarian)
- Attention to detail. (special librarian)
- Interest in the profession (e.g. attended regional, professional association meetings, they should know the terms and jargon of the profession). (academic librarian)

One public librarian emphasises training information literacy within the public library sector as these skills are often lacking within the public library user community. According to public library employers only a basic knowledge of cataloguing and classification is required as these activities are done externally, at a centralised office. One public librarian expresses her concern at the lack of book knowledge and good reading habits amongst entry-level graduates.

One of the special librarians emphasises the ability and willingness to learn within the special library set-up:

'Graduates entering a special library set-up especially need to be geared towards self-development and learning. A big gap, when a graduate starts working within a special library, is that, in most cases, they don't have the knowledge of their Library's specialised subject area. These new Librarians need to be able to learn about the contents of the collection and subject area. So in terms of their attitude they need to be willing to learn. They should have good thinking and memory skills.'

The learning curve is especially steep within this environment where the graduate has to learn about a specialised subject area and be able to assist users with specialised and detailed research and information queries. Very often librarians within special libraries are required to repackage information for users, which also requires in-depth knowledge of the subject area or discipline.

Flexibility and adaptability are also emphasised within the special library set-up, as very often library staff have to perform several functions within the library. These libraries are not as departmentalised as, say, the bigger academic libraries.

'It is important for the new librarian to be a generalist who is able to work in all areas of the special library. Very often in the special library graduates are required to do varied tasks and are not restricted to one 'department' as in larger libraries. So these librarians need to be multi-skilled. They may be required to do ordering, information services, shelving etc. In a one-person library for example the librarian may be required to do all functions within the library.'

5.3.3.1 Frequency counts of categories – key competencies:

Behavioural competencies, information services competencies, information systems competencies and interpersonal and communication skills are identified most frequently by employers as being core competencies for entry-level graduates. Table 4 shows categories ranked according to the number of times competencies within these categories were listed/mentioned by employers.

Table 4: Core competencies identified by employers: categories ranked by frequency	
Category	Rank
Behavioural competencies	1
Information services Information systems Communication and interpersonal skills	2
Information organisation	3
Management	4

Note: Rank 1= category mentioned most frequently by employers

Note: Rank 4= category mentioned least frequently by employers

Mainly the special library employers identify behavioural competencies as key competencies. Of the eleven behavioural competencies identified as key competencies by all of the employers, the special librarians identify ten of these. The public librarians mention communication and interpersonal skills and information services skills most frequently. The public library employers do not see information systems (ICT) skills as a key competency requirement.

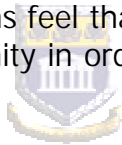
5.3.4 Additional competencies required by entry-level graduates: (See Appendix 3, table 1)

This section relates to question 11 of the interview schedule, where employers were asked to identify any additional competencies that they felt entry-level graduates need. See Appendix 3, table 1, for a list of competencies identified by employers. Appendix 3, Table 1 contains direct quotes as some sentences have been shortened to include only succinct information. For the purposes of identifying frequency counts of categories, skills may be listed more than once if mentioned by different librarians.

5.3.4.1 Collection development and management

In terms of collection development and management, there seems to be an emphasis on the more technical skills such as shelving, weeding and preservation. It is felt that entry-level graduates require work experience within the library to gain knowledge about the collection and user community before they would be able to contribute towards building the collection. One public librarian indicates that, as selection and acquisition are done centrally, they are not required to perform selection nor acquisition. However he did indicate that librarians should be able to recommend new titles for selection.

Both academic and public librarians feel that entry-level librarians would need to get to know their user community in order to be able to perform collection development.



“The entry-level librarian in the academic sector needs to be aware of academic programmes and how academic library collections are informed by the programmatic needs of the university.”

They also need to be familiar with the different formats of materials available today.

“They need to be aware of different formats of materials, how these formats complement each other and its implications on collection development.”

5.3.4.2 Information services

The traditional information services activities are identified, such as conducting a reference interview, reader guidance, search strategies, knowledge and use of sources, training etc. One public librarian indicates that, within the public library, SDI skills and repackaging of information are not required, but reference interviews and reader guidance are the main functions of a public librarian. One academic librarian indicates that entry-level graduates should have a strong knowledge of search strategies, and should have lots of practice in developing search strategies for searches of a difficult nature.

5.3.4.3 Information organisation

There seems to be mixed opinions on the level and amount of cataloguing and classification skills required by entry-level graduates. One public librarian feels that only a basic introduction to the subjects is required as cataloguing and classification are done externally by a centralised office. Both an academic and special librarian indicate that in many instances librarians are only required to perform a quality assurance role and update records, as copy cataloguing is very common in many libraries.

Others feel that a strong background and practical experience of cataloguing and classification is required.

“This is especially important within the special library set-up where one has a small complement of staff who have to perform a variety of functions in the library – have to catalogue, classify, index.”

“Graduates need the theoretical and practical background of cataloguing and classification. This is especially important within the special library environment. Copy cataloguing may not be used as intensively as in other libraries as the items being catalogued are specialised or unique sources that you may not find on the centralised systems. In addition, in many special smaller libraries library staff are required to develop their own retrieval system which may be geared towards their specialised users or specialised materials. This requires a solid background of cataloguing and classifying.”

5.3.4.4 Management

There is consensus that entry-level graduates should be familiar with and possess knowledge of all the principles of management. One librarian however states that “too much’ of these types of skills are problematic.

“ ...If they know too much, without correct experience, it could become problematic. These new employers then start questioning management’s techniques without having the proper background or experience base.”

Leadership skills are emphasised, as well project management. One special librarian feels that, within this sector, project management is essential.

“Project management skills are essential within the special library set – up. Entry-level librarians may likely be employed as contractors and placed in charge of projects, e.g. cataloguing projects.”

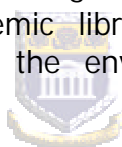
Financial management and administration are emphasised within the special library sector.

“They should learn the principles of management and principles of business management. It is important for them to know what is involved in managing a library and managing income and expenditure.”

“Financial administration skills. Know how to maintain a budget. Manage a financial entity – keep record and track income and expenditure”

5.3.4.5 Communication and interpersonal skills

Good communication and interpersonal skills are emphasised for all sectors, such as teamwork skills, interviewing skills, customer service skills and presentation skills. One academic librarian mentions that these skills requirements are influenced by the environment or area in which the graduate ends up working.



“Their skills requirements here depend on the area in which they end up working. E.g. interpersonal skills may not be high up on a list for cataloguers. For information librarians and front-line staff this is very important. Perhaps library schools need to offer specialised courses in the third or fourth year, where students may be able to specialise in cataloguing for example, or collection development. They can then strengthen expertise required to work in these specific areas.”

5.3.4.6 Information Systems:

It is felt that the more ICT skills the entry-level graduate possesses the better. ICT skills may increase the graduate's employability and not limit them to any one particular sector or type of library.

“Having strong ICT skills will ensure that the graduate is able to navigate various jobs and be more employable within various libraries. Not limited by their skills or lack of knowledge about a library's system.”

Internet skills are emphasised. Some librarians within the academic and public sector feel that only basic computer literacy is required, and advanced ICT skills, such as web development, are not required.

Other special and academic librarians feel that competencies such as basic web design and maintenance, database design and management and knowledge of Internet technologies are very useful.

“Digitisation and digital preservation have become a growing priority within the profession. Libraries are increasingly storing their information digitally. The new graduates should at least have been exposed to XML, web development and other Internet technologies. They must be advanced users of the Internet.”

5.3.4.7 Facilities and management

It is felt by most employers that graduates do not require facilities and management skills upon entering the labour market as these skills, if necessary, may be learnt on the job. It is also stated that, in many instances, these types of skills are performed by para-professionals. Understanding the importance of securing the library's collection, and various methods that may be used, is mentioned by one employer.

5.3.4.8 Marketing



Creating displays is mentioned often. One public librarian feels that good display skills are very useful for the new employee.

“They should know how to create effective, attractive displays. This is a way for the new professional to market him/herself in a unique way within a public library. It shows initiative and impresses the library manager.”

Other competencies mentioned include understanding marketing principles, being able to compile a marketing plan and being able to organise events. Graduates should have some knowledge of marketing strategies for libraries, and use their initiative and creativity to explore new marketing methods for the library, e.g. online marketing. On the whole this is seen to be an area in which the entry-level graduate requires some basic knowledge of in terms of strategy and method. While they would not be required to drive marketing strategies or initiatives, they would be required to provide creative and productive input and assistance.

5.3.4.9 Research competencies:

Public and academic librarians indicate that this is not a pre-requisite for the entry-level graduate. Other librarians state that knowledge of basic research skills for the purpose of conducting user studies is a useful competency for graduates. This includes data analysis and conducting surveys. One public librarian indicates that there is a shortage of such skills within the public library sector.

“There is a lack of research skills within the public library sector staff. In cases where Heads of libraries have these skills they do not have the time to conduct user studies and other research. It would be good if new graduates could enter the sector with these skills in order to conduct user studies within the public library community.”

5.3.4.10 Behavioural competencies

Networking skills are seen to be crucial. Adaptability and flexibility are identified, as well as accuracy, being methodical and organised. The new librarian should be creative and innovative.

“Within the changing profession the new graduate should be flexible and willing to learn. The ‘not my job’ syndrome is killing the profession.”



5.3.4.11 Frequency counts of categories – additional competencies:

In this section **information services competencies, information systems competencies, communication, interpersonal skills and management competencies** are identified most frequently by employers. Table 5 shows categories ranked according to the number of times competencies within these categories were listed/mentioned by employers.

Table 5: Additional competencies identified by employers: categories ranked by frequency	
Category	Rank
Information services	1
Information systems	2
Management, Communication and interpersonal skills	3
Collection building	4
Marketing	5
Behavioural competencies	6
Research	7
Information organisation	8
Facilities and management	9

Note: Rank 1= category mentioned most frequently by employers

Note: Rank 9= category mentioned least frequently by employers

5.3.5 Competencies emphasised within the SA LIS environment

This section relates to questions 13, 14 and 15 of the interview schedule where employers were asked if any of the skills they mentioned in the previous sections are particularly necessary for the SA LIS environment and whether they could identify any additional competencies required for the SA environment. Table 6 shows the competencies mentioned.

Table 6: Competencies required within the SA environment
Information Services
<ul style="list-style-type: none"> - Information literacy training skills (academic librarian) - Be able to identify local information needs and develop services to meet those needs (public librarian) - Understand local information needs and dissemination information to meet these needs. (special library)
Information Organisation
<ul style="list-style-type: none"> - Develop information retrieval systems (public librarian)
Management
<ul style="list-style-type: none"> - Project management (public librarian)
Communication and Interpersonal Skills
<ul style="list-style-type: none"> - Writing funding proposals (public librarian) - Cultural awareness and sensitivity (public librarian) - Be able to work with diverse groups and be aware and sensitive to differences (academic librarian) - Understanding of diversity issues and be able to deal with diverse users (academic librarian)
Information Systems
<ul style="list-style-type: none"> - ICT skills (special librarian) - ICT skills (special librarian)
Marketing
<ul style="list-style-type: none"> - Fundraising (public librarian)
Behavioural Competencies
<ul style="list-style-type: none"> - Flexibility and adaptability (academic librarian) - Being innovative (special librarian) - Be creative (public librarian)

According to an academic librarian information literacy skills are especially needed within the SA academic sector:

“Many of our students have not been exposed to a library culture and have no information skills. Librarians should be able to train users and impart information literacy skills.”

Being able to identify local SA information needs and developing systems and services to meet those needs are additional skills mentioned by public and academic librarians.

“They should be innovative and be aware of what the pertinent needs are of local communities. The MRC Aids portal is a key example of the library meeting vital information needs within the local environment.”

This special librarian uses the example of the MRC's online portal, which disseminates HIV/AIDS awareness and other information. Creativity and innovation are also mentioned here, as well as the ability to create retrieval systems that suit the needs of the local community.

“Public libraries are not the only method for taking information to the people. Librarians should be able to be creative, be proactive and develop their own systems that fit with your own budget and with the community's needs. They should use and adapt the formal principles of library and information to create their own systems of disseminating information.”

Cultural awareness, sensitivity and the ability to deal with diverse groups of people is emphasised by public and academic librarians.

“They should be sensitive to a diverse group of users e.g. within one library they may have users who are highly literate and know what they want as well as users who are not literate and cannot express what their needs are, and have never been exposed to a library service before.”



“South African librarians deal with diverse clientele with very different backgrounds and information needs. Librarians should be able to deal with this and be able to provide information services for all users.”

According to one public librarian fundraising is becoming increasingly important within the public library. Graduates should know how to source donor funding, write funding proposals and manage projects for which they receive funding.

“Fundraising and writing proposals are becoming increasingly important. In terms of the local government structures different local government departments are encouraged to source donor funding. Within this context project management is also key.”

ICT skills are seen as especially important within the context of bridging the information gap and taking information to communities that do not have any infrastructure.

“Professionals may apply technology to bridge information gaps.”

“There are large areas and sectors of SA where ICTs are scarce and the basic infrastructure is poor. Libraries play a key role in disseminating information to these areas.”

5.3.6 Discussion

Behavioural competencies, information services competencies, information systems competencies and interpersonal and communication skills are identified most frequently by employers as being **key** competencies for entry-level graduates. Similarly, where employers are asked to identify additional competencies they identify **information services competencies, information systems competencies, communication, interpersonal and management competencies** most frequently.

This shows a similarity with the documentary analysis conducted in the previous chapter where **information services, information systems, interpersonal and communication skills** and **behavioural competencies, respectively**, are mentioned most frequently in the literature. **Facilities and management** competencies are mentioned least frequently in the literature and during the interviews.

The importance of behavioural competencies is evident both within the documentary analysis and the interview data. As indicated above this category of competencies is mentioned most frequently as being key for entry-level graduates. The emphasis is on being a highly capable professional who is prepared for a rapidly changing environment and is able to exercise good thinking skills. Within the South African context they need to be creative and proactive in developing new information retrieval and dissemination methods for local communities.

Both within the documentary analysis and the interview data interpersonal and communication skills are ranked highly. It is evident that the entry-level graduate should be a confident and effective communicator. One of the foundations of providing an effective and successful information service is the ability of the information professional to be able to successfully interact with clients, and the ability to create an environment where clients are able to meet their information needs. Customer service principles are key.

Within the South African context, cultural awareness and sensitivity is seen as an important interpersonal skill. Entry-level graduates need to be aware of cultural differences and be able to successfully deal with diverse user groups. The ability to fundraise and the ability to write funding proposals are also mentioned.

As in the previous chapter, a multitude of information services competencies are identified. This is the core of the profession. Being able to conduct a reference interview, reader guidance, being familiar with search strategies and knowledge of sources are key competencies that the graduate requires. General book knowledge is especially emphasised within the public library arena.

Information literacy is emphasised due to a lack of these types of skills within South African user communities. Within the academic and public libraries librarians often have to deal with users who have never used a library before. It is important for the entry-level librarian to be capable of teaching information skills.

Identifying local South African information needs has been noted both within the interviews and the documentary analysis. It is important for the graduate to be knowledgeable about local information needs and how libraries may assist with meeting those needs.

Information system skills are mentioned frequently in both the interviews and documentary analysis. Within this chapter employers identify ICT skills as key skills. Some employers feel that only basic computer literacy is required. Others feel that advanced skills such as web development and web maintenance are required competencies. It is stated that strong ICT skills would increase graduates' employability and would facilitate their ability to navigate the LIS labour market. Employers feel that ICT skills are particularly useful to bridge the information gap within the South African information environment. Librarians may be able to assist communities with ICT training and to assist communities with harnessing technology to meet basic information needs.

Whereas the literature emphasises a wide range of collection management and building activities, within the interview data there tends to be an emphasis on the technical collection management activities such as weeding, acquisition and preservation. Employers feel that collection management activities may not, initially, be required from entry-level graduates. They state that graduates need to be aware of the various formats of materials and options for purchasing and subscription. They should also be capable of becoming aware of community information needs and programmes and be able to suggest material based on this knowledge. Thapisa (1999: 96) indicates that, as no readily available knowledge base exists, LIS students should identify African information needs via action learning research methods.

In terms of information organisation, there is mixed opinion on the level of knowledge and skills required for information organisation competencies. Here, interviewed employers tend to focus on cataloguing and classification, unlike in the literature where authors focus on a variety of information organisation capabilities such as knowledge of metadata and using information organisation skills to develop repositories and other systems. A few employers felt that, with the increase in use of copy cataloguing and centralised cataloguing by para-professionals, that librarians need only basic skills in cataloguing and classification in order to perform quality assurance roles and update records.

As in the documentary analysis, general management principles are identified. Financial management and administration skills are also identified. Research skills are seen, by some employers, as not being a required skill for entry-level graduates. Others indicate that there is a shortage of research skills within the profession and that graduates possessing these skills would add value to the library. As indicated above, identifying local information needs seems to be emphasised within the South African context. Knowledge of research methods and techniques would therefore most likely benefit the new professional.

Facilities and management competencies, both within the documentary analysis and the interviews, are hardly ever identified as required competencies for entry-level graduates, except for knowledge about library security needs and methods.



Chapter 6: Conclusion

6.1 Main findings

The first main objective of this study is to identify, through the literature, generic and discipline-specific competencies required by South African, entry-level, LIS graduates. By exploring the literature the author identifies that library and information workers are required to possess sophisticated information and behavioural skills. Within the profession an emphasis is being placed on lifelong learning and self-development. Librarians are being called on to redefine their roles within the information profession and to take on new roles in areas such as electronic information provision, knowledge management, teaching and information policy development.

Within the South African context the library and information worker has to take on new roles and provide additional services to cater for a unique and diverse user base. Within the changed political and social climate libraries are being called upon to play a developmental role and to assist individuals and communities with developing and improving their way of life. Libraries and librarians are ideally located to assist with bridging the information gap in South Africa. Their existing role of facilitating access to information makes them ideal champions for transmitting information technology and skills to communities.



Within the current SA education climate, priority is being placed on cross-field critical outcomes, some of which form the basis of information literacy. Librarians have traditionally been at the forefront of information literacy training and should therefore take this opportunity to be agents of change within this arena. A large section of the SA population live in rural areas. South African libraries are therefore required to play a key role in rural information provision. Libraries and librarians should be geared to developing unique and innovative services to meet needs within poorly resourced environments. The South African librarian is required to be proactive, creative and innovative in developing services for this unique user base. They need to be in touch with local information needs.

The documentary analysis shows that the entry-level graduate requires traditional professional competencies, which enable them to deliver an effective information service to their users. This includes information services competencies, information systems competencies, information organisation competencies, research, management, collection building and management competencies. Graduates also require behavioural, communication and interpersonal skills that enable them to work and operate effectively within their profession. This includes values, attitudes and skills that enable them to deal successfully with their clients and colleagues and to adapt and grow in their rapidly changing professional environment. Information services

competencies, behavioural competencies, communication, interpersonal skills and ICT skills are mentioned most frequently in the literature as competency requirements for the entry-level graduate.

The second main objective of this mini-thesis is to explore employers' perspectives about what competencies are required by entry-level graduates. This is conducted mainly to substantiate the documentary findings. Interviewed employers mention behavioural competencies, information services competencies, ICT skills, communication and interpersonal skills as being key skills for entry-level graduates. These findings show a strong similarity between the documentary and interview data. Employers state that flexibility, adaptability, willingness, the ability to learn and strong ICT skills will increase the graduate's employability and will enable them to flourish within the profession. Graduates also require a strong foundation in traditional LIS functions such as cataloguing, classification, information sources and conducting a reference interview.

Within the SA context employers emphasise information literacy skills, understanding local information needs, cultural awareness and sensitivity, ICT skills, flexibility and adaptability. The librarian should understand local information needs and be able to develop services and systems that meet those needs.

In conclusion, the literature and interviews conducted for this mini-thesis show that the LIS graduate entering the turbulent and dynamic world of work described above, needs to be a well-adjusted individual, armed with a broad range of behavioural and professional competencies. The profession requires graduates who are not afraid of change, who are versatile and who are able to learn and adapt at a rapid pace. The profession is not suited to people who want to work according to rigid job descriptions.

6.2 Recommendations

Students studying library and information science should ensure that the academic programmes they enter address some, or as many as possible of the kinds of key competencies mentioned in this mini-thesis. They should acquire and strengthen competencies that enable them to navigate within different types of libraries and information services. LIS schools should try and address these types of competency requirements within a broad range of information environments, not all necessarily within the traditional library. They could offer specialised courses, as was suggested by one employer. However they cannot be all things to all students. Schools should partner with other departments on campus to offer specialised modules or courses if they do not have the required expertise to offer certain specialisms.

LIS professionals working in the profession need to engage in lifelong learning in order to keep up-to-date with developments and changes, to be able to adapt to these changes and to be able to contribute to the profession's growth and development. They may be able to use these lists of competencies to identify areas where they may need to acquire new skills. Employers and institutional skills facilitators may also be able to use these competencies to develop staff development and training programmes for their library and information staff.

6.2.1 Recommendations for further research:

The Library and Information Association of South Africa (LIASA) should work with library professionals (practitioners and educators) to research and develop a comprehensive list of core competencies for the profession, similar to the ALA Task force competencies mentioned in this mini-thesis. Professionals may then use the instrument for various purposes, such as:

- Developing training and development programmes
- Identifying skills needs/gaps within organisations
- Developing job specifications and requirements
- Recruitment based on competencies
- Managing performance
- Developing library school curricula

South African library schools should also conduct regular tracer studies to identify the sectors within which their graduates are working, to identify the types of duties and tasks these graduates are required to perform and whether or not their library school curricula has adequately prepared them to perform these tasks. In this way library schools may keep their fingers on the pulse of what competencies are required within the LIS labour market. They may also contribute to a national body of knowledge on competency requirements for the profession.

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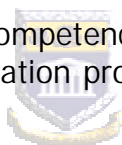
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Appendices:

Appendix 1

Table 1: Author key	
Buttlar and Du Mont (1989: 10)	1
Buttlar and Du Mont (1996: 51)	2
Middleton (2003: 29)	3
Quarmby, Willet and Wood (1999:150)	4
Cole, Willard and Wilson (2003: 217)	5
Ocholla (2000: online)	6
Marchant and Smith (1982) cited by Buttlar and Du Mont (1989: 2)	7
DeVinney and Tegler (1983) cited by Buttlar and Du Mont (1989: 3)	8
Gregory and Perez (1998: online)	9
Karim and Rehman (1998: online)	10
Kigongo-Bukenya and Lutwama (2004: 100-104)	11
Smith (1990) cited by Kigongo-Bukenya and Lutwama (2004: 100)	12
Preschel (1988) cited by Kigongo-Bukenya and Lutwama (2004: 100)	13
Thapisa, (1999: 92-95)	14
Dixon and Newton (1999: online)	15
Downie (1999: online)	16
Johnson (1998: 55-57)	17
American Library Association (ALA) Task Force on Core Competencies (2002: online)	18
Raju (2004: 16)	19
Ashcroft (2004: 82-88)	20
Roggema-van Heusden (2004: 98)	21

Appendix 2

Table 1: What the graduates say
Collection Building and Management
<ul style="list-style-type: none"> • Collection management skills (selection, deselection, development, preservation) (1, 2, 8, 6) • Apply appropriate principles to weed and inventory materials and equipment (2, 6) • Acquisition of materials (6) • Shelving and shelf reading (6)
Information Services
<ul style="list-style-type: none"> • Conduct an appropriate reference interview (1, 2, 3, 6) • Effectively assess user needs (3) • Reader/user guidance (1, 6) • Knowledge of sources and tools, in all formats, to answer typical reference questions and to locate and retrieve information (1, 2, 3, 8, 6) • Select and evaluate print and non-print materials for information use (2, 6) • Effectively search different databases, and other online sources, to locate the information required (3, 8, 6) • Determine a search strategy that is consistent with available resources and is cost-effective in meeting user needs (3) • Provide direct user assistance in accessing information (3) • Navigate various computer networks, use computers to locate the information required (3, 6) • Interlibrary Loan (6) • Library orientation (6) • Circulation control (6) • User education/information literacy (6) • Writing book reviews (6)
Information Organisation
<ul style="list-style-type: none"> • Cataloguing (6, 19) • Classification (6, 19) • Indexing (6) • Knowledge management (19)
Management
<ul style="list-style-type: none"> • Develop selection policies (2) • Management of libraries (6) • Budgeting (19) • Human resource management (19)

Table 1 continued: What the graduates say

Communication and Interpersonal Skills

- Effective interpersonal skills with patrons (1)
- Communicate effectively in writing reports, proposals, procedure manuals, correspondence etc. (2,3)
- Apply effective human relations in group processes (2)
- Effectively communication using verbal and presentation skills (2, 3)
- Manage own work load effectively using proper time management skills and seeking assistance when necessary (3)
- Take the initiative to continually develop own skills and knowledge (3)
- Communication skills (6)
- Interviewing (6)

Information Systems

- ICT skills (11)
- Computer skills/literacy – Internet, email etc. (6, 19)
- Using statistical software packages (6)
- Database management (6, 19)
- Web design (19)
- Library ICTs (6)
- Digital libraries (19)
- Systems management (19)

Facilities and equipment

- Awareness of the library's security issues (6)

Marketing

- Create displays (6)

Research

- Writing scientific reports (6)
- User studies (6)

Behavioural Competencies

- Apply critical thinking skills to library problems (2)

Table 2: What the employers say
Collection Building and Management
<ul style="list-style-type: none"> • Acquiring materials (ordering, receiving, claiming, invoicing etc) (10) • Managing the functions of weeding, storage and gifts etc. (10) • Understanding the processes of printing, publishing and book distribution (10) • Assessing the capabilities of book jobbers, distributors and sellers (10) • Using bibliographic sources for serials acquisition and management (10) • Managing serial operations (ordering, claims, invoicing, renewals etc.) (10)
Information Services
<ul style="list-style-type: none"> • Book reviews (6) • Knowledge of general reference and general bibliography (7, 10) • User instruction and information literacy (9) • Understanding the primary concepts and terminology in the areas of specialisation of a special library (10) • Assisting users with searching the OPAC and other sources (10) • Providing an archival collection information service (10) • Providing a government collection information service (10) • Designing services for special groups (e.g. children, young adults, vocational groups etc) in a public library (10)
Information Organisation
<ul style="list-style-type: none"> • How information is organised and how different disciplines present the knowledge (9) • Analysing the content of documents to determine class numbers and subject headings (10, 19) • Original and copy cataloguing (including non-print, specialised materials (e.g. maps), government publications, archival materials) (10, 19)
Management
<ul style="list-style-type: none"> • Financial management, budgeting (6, 19) • Decision-making (6) • Defining the mission, roles and objectives of a library (10) • Managing circulation and collection management operations by applying relevant policies, developing procedures and monitoring staff performance (10, 19) • Developing policies and managing photocopying services (10) • Managerial abilities (12, 11) • Knowledge management (19)
Communication and Interpersonal Skills
<ul style="list-style-type: none"> • Human relations skills (7, 9) • Flexibility and versatility (9, 11) • Self-supervision (11) • Personality (11) • Communication skills (11) • Report-writing (6)

Table 2 continued: What the employers say
Information Systems
<ul style="list-style-type: none"> • Application of ICTs to library systems, management of ICTs (9) • Word processing, spreadsheets and similar housekeeping packages (10) • ICTs (11)
Facilities and equipment
<ul style="list-style-type: none"> •
Marketing
<ul style="list-style-type: none"> • Organising activities for the community such as displays, talks, video shows, puppetry etc. (10)
Research
<ul style="list-style-type: none"> • Conduct basic research (9)
Behavioural Competencies
<ul style="list-style-type: none"> • Systematising work (6) • Foresight and the ability to engage in visionary thinking (9) • Problem-solving abilities (12, 11) • Competence (11) • Innovation (11) • Ability to conceptualise (11)



Table 3: What the individual theorists say
Collection Building and Management
<ul style="list-style-type: none"> • Acquiring access to information (14)
Information Services
<ul style="list-style-type: none"> • Knowing how, what and where to access information cost-effectively and efficiently (14, 17) • Information retrieval (14) • Provide community-oriented services (14) • Knowledge of various search strategies and search engines (14) • Teaching information literacy (14, 20) • Knowledge of specific African community ways of using libraries and accessing information (14) • Evaluation of information (14, 17) • Analysing and repackaging information (17)
Information Organisation
<ul style="list-style-type: none"> • Organising information (14) • Cataloguing and classification (14, 16) • Shelving (14) • Indexing and abstracting (16) • Developing information retrieval systems (16)
Management
<ul style="list-style-type: none"> • Understanding of management principles (14) • Managerial abilities (12) • Planning and forecasting (13)
Communication and Interpersonal Skills
<ul style="list-style-type: none"> • Enthusiasm (13) • Flexibility (13, 20) • Customer service – desire to serve (13) • Ability to work with people and in a team (14, 21) • Attitudes (14) • Negotiating and collaboration (20)
Information Systems
<ul style="list-style-type: none"> • ICT skills – to handle the dissemination, packaging and acquisition of information, for managing and digitising information (14, 17) • Creating, maintaining and using databases (14) • DTP skills for repackaging and producing in-house publications (14) • Internet skills (14, 15) • Computer literacy (13)
Facilities and equipment
<ul style="list-style-type: none"> • Evaluating and using hardware, software and computer networks (14)
Marketing
<ul style="list-style-type: none"> • Marketing and promoting information resources (20)

Table 3 continued: What the individual theorists say
Research
<ul style="list-style-type: none"> • Research design and field research (14, 17) • Evaluating marketing initiatives (market research skills) (20) • Evaluate usage of resources, including usage statistics and qualitative research (20)
Behavioural Competencies
<ul style="list-style-type: none"> • An enquiring mind (14) • Historical consciousness (history of libraries, past, present and future of libraries) (15) • Problem-solving abilities (12, 13, 21) • Intelligence (13) • Ambition (13) • Good judgement (13) • Hard work (13) • Logical, orderly mind (13) • Analytical (13) • Willing and able to learn (17, 20, 21) • Strategic sense (14) • Adapting and responding to changing professional environments (21)



Table 4: What ALA says

Collection Building and Management

- Demonstrate understanding of how information is created, disseminated and used – effects of information dissemination and use on society, the changing information environment (publishing, media etc.), effects on the profession
- Select appropriate information resources and formats
- Demonstrate an understanding of the issues and techniques associated with preservation and conservation of information

Information Services

- Demonstrate understanding of information seeking behaviour
- Demonstrate knowledge of information sources
- Evaluate the quality and appropriateness of information
- Synthesise disparate information sources to satisfy users' needs
- Demonstrate knowledge of information retrieval techniques and their appropriate use
- Practice effective interviewing skills to best determine the customer's actual information needs.
- Analyze and evaluate the diverse needs of customers for the purpose of adapting, tailoring, and improving services.
- Demonstrate the ability to collaborate with customers in defining and solving their information needs.
- Use active listening techniques and respond to information requests in a manner that encourages further customer inquiry.
- Act as a user advocate during the development of information products and systems.
- Provide instruction in basic information gathering and research skills, including how to evaluate information sources; and assess if learning outcomes match the instructional objectives.
- Demonstrate proficiency in examining the local and global information environments for societal changes and service opportunities.
- Apply different learning theories and methodologies.
- Assess learning needs.
- Design and develop educational/instruction programs appropriate to the identified needs.
- Select appropriate delivery methods.
- Continuously evaluate learning and revise programs as appropriate.

Information Organisation

- Cataloguing, indexing, classification, abstracting, metadata etc. to facilitate retrieval of information
- Knowledge of bibliographic and intellectual control principles and standards
- Ability to evaluate the effectiveness of the systems of organisation used in an information setting
- Develop alternative tools to help users manage their specific information needs

Table 4 continued: What ALA says

Management

- Lead effective strategic and operational planning, evaluation, and marketing processes.
- Employ ethical and legal decision-making.
- Develop and implement essential information policies and procedures.
- Practice effective human resource management.
- Inspire, motivate, and guide others toward goal accomplishment.
- Foster collaborative community-based partnerships and networks.

Communication and Interpersonal Skills

- Demonstrate proficiency in effective interpersonal communication techniques.
- Operate successfully in a team environment in flexible and creative organization structures.
- Promote an environment embracing diversity.

Information Systems

- Demonstrate the ability to scan the environment for technological trends relevant to library and information services.
- Describe how and why electronic information technologies have affected library services.
- Demonstrate understanding of the nomenclature, principles and application of electronic information handling hardware and software (including adaptive technologies).
- Demonstrate proficiency in creating accessible web-based information resources
- Demonstrate knowledge of relevant technical standards and standard-setting bodies.
- Demonstrate proficiency in evaluating technology products for their appropriate application.
- Read with comprehension functional and evaluative descriptions of advanced technologies.
- Assess the economic and service benefits derived from the application of technology to library and information services.
- Maintain a positive environment and present welcoming behaviours
- Demonstrate effective presentation skills using appropriate technologies

Facilities and equipment

-

Marketing

- Develop and implement an effective public relations program that communicates the value of information literacy.

Research

- Evaluate the validity of research studies and methodologies.
- Design appropriate research studies.
- Use data-based decision-making and problem solving.
- Maintain a current awareness of applicable LIS research.

Appendix 3

These are not direct quotes as some sentences have been shortened to include only succinct information.

Table 1: Employer interviews
Collection Building and Management
<ul style="list-style-type: none"> - They need to understand the community in which they work, its nature and composition, in order to be effective in collection development activities and to identify materials for their users. (public librarian) - They are required to assist with collection development e.g. identify gaps in the collection and recommend titles for selection. (public librarian) - They are required to know weeding and shelving. (public librarian) - They perhaps should understand the principles of collection building. (special librarian) - Technical aspects of collection development and management such as shelving, acquisition, weeding and preservation. (special librarian) - Must have knowledge of weeding and understand why weeding is important. (special librarian) - They may be required to have shelf-reading skills as this will assist them to get to know the collection better. (academic librarian) - The entry-level librarian in the academic sector needs to be aware of academic programmes and how academic library collections are informed by the programmatic needs of the university. (academic librarian) - Need to be aware of different formats of materials, how these formats complement each other and its implications on collection development. (academic librarian) - Preservation techniques. (academic librarian)
Information Services
<ul style="list-style-type: none"> - Reference interview and reader guidance. (public librarian) - Search strategies, they should have knowledge of information sources, they should be able to guide users to find information. (public librarian) - They should be able to train users on using resources. (public librarian) - Reader guidance. (public librarian) - They need the theoretical understanding of how to provide an effective information service. (special librarian) - How to assess/identify a user's information needs and search strategies. (special librarian) - They also require some knowledge of information sources and how these are used. (special librarian) - They require strong information literacy skills as they will need to assist users within this area, e.g. searching for information, writing bibliographies etc. (special librarian) - Knowledge and ability to conduct a reference interview. Understand the importance of a reference interview. (special librarian) - Knowledge of sources – where to go for information. (special librarian)

Table 1 continued: Employer interviews

Information Services continued

- Guiding users to find information is important. (academic librarian)
- They must be able to do good searches – they should be able to do searches of a difficult nature – develop search strategies and use sources. (academic librarian)
- Interviewing techniques. (academic librarian)
- How to guide users to information. (academic librarian)
- SDI services. (academic librarian)

Information Organisation

- They should know how knowledge is organised – including a basic understanding of DDC and classification. (public librarian)
- Graduates need the theoretical and practical background of cataloguing and classification. (special librarian)
- Cataloguing and classification – the principles and practices thereof. They should be able to develop information retrieval systems. (academic librarian)
- Basic understanding and possess knowledge of the practice of cataloguing, classification and indexing. (special librarian)
- Entry – level librarians should have a strong cataloguing and classification skills. (academic librarians)

Management

- They require an understanding of management issues. (public librarian)
- No not for entry-level librarians (public librarian)
- They should learn the principles of management and principles of business management. It is important to them to know what is involved in managing a library and managing income and expenditure. (special librarian)
- Leadership qualities. (special librarian)
- Able to take charge. (special librarian)
- Able to delegate. (special librarian)
- Good decision-making. (special librarian)
- Good project management skills. (special librarian)
- Leadership skills are very important. (academic librarian)
- Principles of management. (academic librarian)
- They should know how to manage and work with a diversity of people. (academic librarian)
- Financial administration skills. Know how to maintain a budget. Manage a financial entity – keep record and track income and expenditure. (special librarian)

Communication and Interpersonal Skills

- Team work is very important (public librarian)
- Reference interview skills are key. (public librarian)
- Customer service skills are very important. (special librarian)
- They should be able to interact successfully with people, be able to deal with difficult clients and get people to cooperate. (special librarian)
- Interviewing skills. (special librarian)

Table 1 continued: Employer interviews

Communication and Interpersonal Skills continued

- Strong communicator – they need to be able to interact with users one-on-one and over the telephone, do presentations, train users, run induction programmes etc. (special librarian)
- Listening skills. (special librarian)
- Dealing with people. (special librarian)
- Good communication skills – especially writing skills. (academic librarian)
- Good conflict resolution skills. (academic librarian)
- Good listening skills. (special librarian)
- Know when to empathise. (special librarian)

Information Systems

- The more ICT skills the better. (public librarian)
- Internet usage skills are key. (public librarian)
- Basic computer literacy skills. Very basic understanding of ICT concepts and terminology. (public librarian)
- Need to know how to use the Internet. (public librarian)
- Basics of database and design and maintenance. (special librarian)
- Also the basics of website development and maintenance. Providing information services in an online environment is key. (special librarian)
- Internet usage skills are very important. (special librarian)
- Possess skills to be able to maintain a website (not advanced web development skills). (special librarian)
- Use the Internet and online sources. (special librarian)
- Basic database design and maintenance skills. (special librarian)
- Understanding of ICT concepts and terminology. (special librarian)
- They must be confident users of technology – not be afraid of computers and other ICTs. (special librarian)
- The new graduates should at least have been exposed to XML, web development and other Internet technologies. (academic librarian)
- They must be able to be advanced users of the Internet. (academic librarian)

Facilities and equipment

- Understanding the importance of securing the library's collection of materials. (special librarian)

Marketing

- They should know how to create effective, attractive displays. (public librarian)
- They should also be able to organise events (public librarian)
- Creating displays. (public librarian)
- Also addressing groups of users to speak about the library services, or conducting orientation for new users. (public librarian)
- They need to understand the importance of marketing. (special librarian)
- How to compile a marketing plan. (special librarian)
- Knowledge of various marketing strategies and initiatives. (special librarian)
- Explore new methods of marketing the library's services, e.g. online marketing. (special librarian)
- Marketing skills– creating displays and principles of marketing. (academic librarian)

Table 1 continued: Employer interviews**Research**

- It would be good if new graduates could enter the sector with these skills in order to conduct user studies within the public library community. (public librarian)
- They should know the theory of data analysis. (special librarian)
- They should know how to do a survey, how to develop a questionnaire – these are important skills for conducting user studies, understanding whom their audience is, what their information needs are. (special librarian)
- Know how to analyse data and conduct basic research, e.g. user studies. (special librarian)
- Make recommendations based on findings and write reports. (special librarian)
- Research skills should be a prerequisite for the entry-level librarian. (academic librarian)
- Basic understanding of the various research techniques that may be used. (academic librarian)

Behavioural Competencies

- Networking skills are critical for making people see the value of the library (public librarian)
- Accuracy (public librarian)
- Adaptability (public librarian)
- Within the changing profession they should be flexible. (academic librarian)
- They should be methodical and systematic. (academic librarian)
- Have strong organising skills. (academic librarian)
- Show innovation and creativity. (special librarian)
- Be professional and focus on your work. (special librarian)

Appendix 4: Interview Schedule

MBibl mini-thesis research: Competencies required by South African, entry-level, library and information science graduates

**Renee Reagon
Interview Schedule:**

Date and time:

Questions:

1. What type of library do you work in, e.g. public, special or academic?
2. What is your current position?
3. How long have you been in this position?
4. How long have you been working at a managerial level?
5. Do you possess a LIS qualification? Yes/No
6. If yes, which qualification?
7. Do you employ LIS graduates? Yes/No
8. Have you employed entry-level graduates within your library? Yes/No
9. If yes, why?
10. If no, why?
11. In your opinion, which two or three key competencies (skills, knowledge or attitudes) does the entry-level graduate need?

12. Identify additional competencies within the following categories:

Collection Building and Management, e.g. selection, acquisition, shelving, weeding, preservation etc.

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Information Services, e.g. conducting a reference interview to identify and assess the user's information needs, knowledge of information sources, knowledge of search strategies, guiding users to find information, training information literacy, SDI services, repackaging information etc.

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Information Organisation, e.g. cataloguing, classification, indexing, understanding how knowledge is organised, design and improve information retrieval systems etc.

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Management Skills e.g. principles of management such as planning, control, leadership, delegating, decision-making etc.

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Communication and Interpersonal Skills, e.g. dealing effectively with people, effective written and oral communication skills, ability to work in a team, self-management, interviewing skills, presentation skills etc.

--

Information Systems (ICT skills), e.g. web development, windows proficiency, using the Internet, database design and management, management of library ICT's, understanding ICT concepts and terminology etc.

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Facilities and equipment e.g. library security issues, managing and procuring hardware and other equipment in the library, technical services etc.

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Marketing, e.g. creating displays, organising community events, publicising the library's services etc.



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Research, e.g. conducting basic research, user studies, writing research reports, analysing data, making decisions based in research findings/data etc.

--

Behavioural competencies, e.g. adaptability?

--

13. Are any of these competency requirements particularly emphasised/needed within the South African LIS environment?

14. If yes, which competencies and why are these emphasised?

15. Does the SA LIS environment call for any additional competencies?

