

A Tracer Study of Master of Science in Library and Information Science Graduates from the National University of Science and Technology, Bulawayo, Zimbabwe

Tinashe Mugwisi

*Department of Information Science
University of South Africa
Pretoria, South Africa
Mugwit@unisa.ac.za*

and

Lawton Hikwa

*Faculty of Communication and Information Science
National University of Science and Technology
Bulawayo, Zimbabwe
Lawton.hikwa@nust.ac.zw*

Abstract

The purpose of this study was to investigate the job market of Master of Science in Library and Information Science (MSc-LIS) graduates from the National University of Science and Technology (NUST), Zimbabwe between the period of 2006 and 2013. The study sought to establish where the graduates worked, what they did, their competencies, whether their education and training met the employers' expectations and how they impacted on the existing curriculum. Quantitative and qualitative methods were used to collect data through a questionnaire and literature review. Data were analysed using the Statistical Package for Social Sciences (SPSS) software, and content analysis. A total of 33 responses were received and used for the study. The majority of respondents were employed in universities. Although satisfied with the curriculum, more of ICT related and Knowledge Management courses were recommended by the majority of respondents.

Introduction and Background to the Study

An essential aspect of quality in higher education is the quality of the outcomes achieved. Higher education adds value by developing job-related skills and competencies that prepare students for the workplace (Ojedokun and Moahi, 2005). Haider (2008) and Burnnet (2013) opined that institutions of higher education have the primary responsibility for equipping individuals with advanced knowledge and skills required for positions of responsibility in government, industry and other sectors. It is essential for any programme of study to constantly evaluate its curriculum to ensure that its content remains relevant, of high quality and is in tune with the demand of the job market and one of the ways institutions do this is through tracer studies (Zainab, Edzan and Rahman 2004; Shongwe and Ocholla, 2011). According to Schomburg (2003), tracer studies, also known as graduate studies, alumni research or follow-up studies, target graduates of an institution of higher education to get information that indicates possible deficits in a given educational programme and to serve as a basis for future planning activities. Schomburg (2003) further asserts that the information on the professional success (career, status, income) of the graduates are needed as well as information on the relevance of knowledge and skills, for example, relationship between knowledge and skills and work requirements, area of employment professional position, etc.

At its independence in 1980, Zimbabwe had one university campus – the University of Zimbabwe (UZ). Ten years into independence, the UZ had been positively responsive to the development needs of the country and was playing a vital role in the development of human capital. However, there were

important gaps in the provision of university education in Zimbabwe. Consequently, there was a need for further expansion (Williams, 1989). The establishment of National University of Science and Technology (NUST), therefore, was occasioned by the urgent need to expand university provision in the country. This need for expansion of university education was chiefly informed and influenced by the increased “output of qualified people from the education and training system” (Williams, 1989).

The Department of Library Science and Archives (later renamed the Department of Library and Information Science) came into being in 2000, the same year it enrolled its first undergraduate students. The Department was surrogated to the Faculty of Commerce. In 2004, the Faculty of Communication and Information Science was established, and it comprised two departments, namely: Journalism and Media Studies and Library and Information Science. Later in 2004, the Department of Records and Archives Management was added. The Department of Publishing Studies was later added in 2008.

The Faculty envisions itself as an academic centre of excellence. Its mission is to contribute towards the economic and social advancement of humanity through the provision of knowledge-based solutions to national, regional and global challenges through:

- exercising excellence in teaching and learning in order to produce innovative and entrepreneurial graduates;
- engaging in excellent theoretical and applied research in order to solve national, regional and global challenges; and
- creating linkages with communities, industry and commerce, local and central government, and, civil society in order to collectively attend to social and economic challenges (National University of Science and Technology, Faculty of Communication and Information Science 2015)

The MSc-LIS programme commenced in 2006, with the first group of 15 students graduating in the same year. Since then, 94 students have graduated from the programme as at the time of this study. The major objectives of the Programme are to train information personnel in libraries, archives, records

departments and information centres in order for them to acquire and master information management skills and to produce graduate personnel capable of teaching information science at various tertiary and higher education institutions.

In addition to the major objectives mentioned above, the programme is also designed to:

- i) prepare students to develop an in-depth level of scholarship through the provision of opportunities for staff development at graduate level;
- ii) produce high quality graduates who can competently facilitate the satisfaction of the information needs of various clientele in all of the segments of the information services industry; and
- iii) enable students to understand, articulate and master the information phenomenon and apply it to national information needs (National University of Science and Technology, 2012).

This study sought to ascertain the relevance of the current MSc Library and Information Science programme from the perspective of past graduates in order to continue improving the quality of graduates. The objectives were to:

- i) establish where the destination graduates after leaving the LIS School (are they employed, type of institutions/employer?);
- ii) establish what the graduates were doing in the work environment (job specifications, title, responsibilities);
- iii) find out whether the training they had received had helped them meet the employers’ expectations and job requirements; and
- iv) ascertain the challenges experienced by graduates and their implications on the curriculum.

Related Studies

Various tracer studies with the objective of ascertaining among other issues the relevance of the curricula to the job market, employment prospects, as well as graduate satisfaction with the academic programmes undertaken. Lutwama and Kigongo-

Bukenya (2004) focused on first degree and master's LIS graduates in Uganda, establishing that the most common employers were academic, government, banking and NGOs libraries. Lutwama and Kigongo-Bukenya (2004) established that employers were not satisfied with the calibre of students, with the Uganda Library Association being called to have a say in the training of information professionals. Students were generally found to have limited ICT skills due to the poor infrastructure within the LIS schools. Kavulya (2007) assessed the status of the job market of LIS professionals in Kenya and the relevance of the curricula and appropriateness training resources. The study found that the LIS programmes did not adequately address the job market requirements, with shortcomings in the areas of ICT content, inappropriate course content, as well as insufficient length of industrial attachment.

Shongwe and Ocholla (2011) looked at the employability of LIS graduates, relevance and their perceptions of the curriculum. The study established that the graduates were mainly employed by government and were generally satisfied with the knowledge and skills learnt at university. The respondents however had reservations on the overall curriculum, particularly information science graduates who had studied mostly ICT modules but found themselves employed in libraries; even though their course content had not covered this area in depth. Noko and Ngulube (2013) traced records and archives management (RAM) graduates from the NUST for the purpose of establishing where they were and the relevance of skills acquired during university to the requirements of the job market. The study established that most graduates were employed in parastatals and were satisfied with the programme except in areas of industrial attachment and training and limited ICT focus/coverage in the curriculum.

In Malaysia, Zainab, Edzan, and Rahman (2004) traced LIS graduates in order to ascertain curriculum relevance to the job market and their satisfaction about the programmes. Unlike in most literature highlighted in this section, the study revealed that graduates were satisfied with the courses, particularly those with more practical orientation, including ICT related modules like information retrieval, and computer applications in library and information systems. Library and

information science curricula in the context of the Indian job market was the focus of the study by Baruah and Hangsing (2012), and they established an immediate need to restructure the curriculum across LIS schools in order to align course contents with the job descriptions/requirements of the job markets. Baruah and Hangsing (2012) observed that unless ICT was made an integral part of the LIS curricula, there was a risk of LIS professionals being replaced by IT professionals, particularly in library IT related jobs.

Aina and Moahi (1998) looked at the relevance of training to employment tasks and the perceptions of LIS graduates from the University of Botswana. The study established that The National Library Service of Botswana and the university libraries in the region were the major employers. As with the study by Shongwe and Ocholla (2011), the training was considered to be relevant to the required job skills, although there was need to reinforce/strengthen the ICT component of the curriculum. Kamba (2011) observed that due to the demand for ICT competencies in the job market, LIS schools in Nigeria had responded through considerable efforts in integrating ICT courses in their traditional curriculum. Efforts in implementing these modules were however hampered by poor ICT infrastructure (including Internet) in the majority of the LIS schools.

Warraich and Ameen (2011) explored the perceptions of LIS graduates about their learning and employment outcomes in Pakistan, establishing that the majority had joined LIS programmes through encouragement from family and better job prospects. In contrast to the studies mentioned above, the graduates were satisfied with ICT related modules, with less satisfaction in the areas of cataloguing and classification, hence the need to bridge the gap between theory and practice. Mahmood (2012) indicates that LIS curriculum review in Pakistan has largely been in response to concerns from large universities and special libraries who felt that LIS schools were not keeping in touch with technological developments as reflected in the graduates' competencies. Using focus group interviews of employers in Pakistan, Mahmood (2012) established that ICT, leadership and communication skills were the most needed competencies the employers expected the graduates to possess. Chikonzo, Bothma, Kusekwa and Mushowani (2014) conducted an assessment of the changing needs of information

professionals in Zimbabwe observing that ICTs had greatly influenced LIS profession and the expected roles of librarians. The study also established that the current LIS curriculum in LIS schools fell short of the work/market expectations as the graduates lacked ICT skills.

Noh and Ahn (2014) compared the views of both students and librarians on desired employment and employment readiness, job market, and employment prospects in Korea. The study observed that cultural programming (library cultural events) and electronic information services were ranked highest as subjects needed in the university curriculum while internship or fieldwork training was considered the most important employment requirement. Mentoring and internships were considered vital in bringing practical knowledge and experience into the curricula.

What is however worrying from literature is that from early studies such as Aina and Moahi (1999), Kavulya (2003), Lutwama and Kigongo-Bukenya (2004), Aina (2005), through to recent studies by Shongwe and Ocholla (2011), Kamba (2011), Noko and Ngulube (2013), and Chikonzo, Bothma, Kusekwa and Mushowani (2014) among others, ICTs competencies have been reportedly found wanting among the major findings. Are LIS schools failing to be responsive to these findings?

Research Methodology

The survey method was applied in the study. The instrument for data collection was the questionnaire. Copies of the questionnaire were sent to 91 students who had graduated between 2006 and 2013. Four

graduates reportedly passed on after their studies. The research instrument was modified from the study by Shongwe and Ocholla (2011) and Schomburg (2003). Details of the students' contacts were obtained from the NUST LIS Dean's Office. Owing to the changing nature of contacts, the study also utilised social media (Facebook), namely the Zimbabwe Library Association and the Progressive African Library and Information Activists (PALIACT-Zimbabwe) to announce the study and updated contact details of potential respondents. In the study by Shongwe and Ocholla (2011) for example, additional contact details of graduates were obtained from relatives, friends and from anyone who could provide such information (snowballing). A total of 33 copies of the questionnaire were completed and returned, giving a response rate of 36%. Data was then analysed using Statistical Package for the Social Sciences (SPSS).

Findings and Discussion

The following section presents the findings and the discussion of the study.

Characteristics of the Respondents

Out of the 33 respondents, 23 (70%) were male and 10 (30%) were female. Table 1 below indicates the number of graduates enrolled in a particular year and the number who responded (frequency). Low response rates have been observed in studies by Shongwe and Ocholla (2011), Noko and Ngulube (2013). Schomburg (2003) indicates that quite often the response rate is less than 50%, at sometimes below 25%.

Year	Number of graduates	No. of Respondents	Percentage
2006	14	6	18.2
2007	14	2	6.1
2008	14	8	24.2
2009	7	4	12.1
2011	13	5	15.2
2012	11	6	18.2
2013	18	2	6.1
Total	91	33	100

Employment Status, Sector and Type of Organisation of Respondents

All the 33 respondents indicated that they were employed, which was a contrast to Noko and Ngulube (2013) who had previously carried out related studies on Records and Archives Management graduates from the same Faculty at NUST. The majority of respondents (28; 84.8%) were employed in universities, One graduate was employed in the public sector in a government ministry, three respondents were employed in the private sector- being the aviation industry, a private school, and a private financial institution. One did not indicate the organisation.

Employment Movement after Graduating

Corresponding with the period of employment, 20 (60.6%) respondents mentioned that they had been

promoted since attaining the MSc qualification with 13 (39%) indicating in the negative. Table 2 shows the graduates' year of completion and whether they have been promoted.

The study indicates that 2 (6.1%) graduates who completed their studies in the first output (2006) were yet to get promoted, and 2 (6.1%) who completed studies in 2008. Four (12.1%) graduates who had not been promoted however indicated that they had assumed additional responsibilities to which they got financial allowance. The number of respondents who had not been promoted highlights the plight of LIS graduates, as 3 senior library assistants who mentioned that despite attaining their MSc-LIS, they still found themselves in the same job grade before the masters' degree which they were appointed with a National or Higher National Diploma.

Table 2: Job Promotion Trends among Graduates

Year of completing MSc programme	Promotion since attaining postgraduate (MSc LIS) qualification N=33					
	Yes	%	No	%	Total	%
2006	4	12.1	2	6.1	6	18.2
2007	2	6.1	0	0	2	6.1
2008	6	18.2	2	6.1	8	24.2
2009	3	9.1	1	3	4	12.1
2011	2	6.1	3	9.1	5	15.2
2012	3	9.1	3	9.1	6	18.2
2013	0	0	2	6.1	2	6.1
Total	20	60.6	13	39.4	33	100

Eighteen (54.5%) respondents further indicated that they had changed organisations/jobs since attaining the MSc-LIS qualification while 15 (45.5%) indicated that they had not done so. In terms of how

the respondents found their new jobs, 18 (54.5%) respondents indicated that they had applied for the advertised vacancies.

Table 3: Reasons for Changing Employer/Organisations

Reasons for changing employer/employment N=18	Frequency	%
In order to use the qualification acquired (MSc)	12	36.3
To perform desirable professional tasks	11	33.3
In order to get a better position	10	30.3
In order to obtain a higher income	9	27.2

*Table indicates multiple responses

The graduates indicated that their change of organisations was motivated by the reasons stated in table 3. A sizeable number of respondents changed their jobs (36.3%) in order to use qualification of M.Sc. already acquired and another 33.3% claimed that they did in order to be able to perform professional tasks.

Job Titles and Leadership Levels

A variety of job titles were mentioned by the respondents. On the academic side, five (15%) respondents indicated that they were lecturers, one was a department chairperson. Two (6%) respondents mentioned that they were university librarian/director of library services; three (9%) respondents were deputy university librarians, while two (6%) indicated that they were systems analysts/librarian. Other titles mentioned were acquisitions librarian, information resources manager, knowledge and communications manager, library manager–client services, head of technical services, faculty librarian, assistant librarian, client services librarian, bibliographic librarian, librarian, senior librarian, senior assistant librarian, and special collection librarian. Only one respondent was involved in archives and records management as a principal archivist. The lowest ranked title was the senior library assistant. As observed by Shongwe and Ocholla (2011), Kamba (2011), Baruah and Hangsing (2012), among other authors, the advent of the Internet led to the creation of new job titles such as: LAN administrator, webmaster, knowledge manager, systems librarian and technology librarian.

In terms of managerial and leadership levels, the majority of respondents (16; 48.5%) were in the middle management, 11 (33.3%) were in the top management, and 5 (15.2%) were in lower management. One respondent mentioned no management and leadership role.

Major Tasks Performed by the Respondents

The majority of respondents worked in university libraries. Others were employed as lecturers and

archival workers. The library tasks are reflective of the “traditional duties” that revolved around library administration, technical services, client services, library acquisition and library IT administration. In bibliographic and technical services, the respondents were involved in all aspects of library acquisition and processing of materials (cataloguing and classification), dealing with gifts and exchanges, as well as identifying material for repairs. Client services ranged from user education, SDI, marketing of library resources, Information literacy training circulation and collecting usage statistics. Library administration involved managerial duties like finance and budgeting, strategic planning, human resources, and attending meetings. Graduates were also involved in systems analysis. Responsibilities included managing the IT department of the university, coordinating institutional repositories, database management and website design, managing electronic resources, among other duties.

Appropriateness of Professional Position and Qualification

The graduates were asked whether they considered that their professional positions to be adequate/aligned to their qualifications. Twelve respondents mentioned that they were quite appropriate, 11 (33.3%) indicated that it just appropriate, while 10 (30.3) % graduates were not satisfied with their positions given their qualifications. Further analysis showed that of the 10 (30.3%) who were not satisfied, 7 (21.2%) graduates had indicated that they had not been promoted since attaining the postgraduate qualification.

Satisfaction with LIS Profession

The respondents were further asked to indicate their level of satisfaction with LIS profession, in particular, work environment, income, and other variables as shown in table 4.

Table 4: Level of Satisfaction with LIS Profession N=33

Attribute	Very high extent	%	Satisfactory	%	Not satisfied	%	Undecided	%
Contents of work and professional tasks	12	36.4	17	51.5	3	9.1	1	3
Working atmosphere/environment	6	18.2	20	60.6	7	21.2	0	0
Possibility to use qualifications acquired during studies	13	39.4	14	42.4	6	18.2	0	0
Amount of income	3	9.1	12	36.4	18	54.5	0	0
Prospects of promotion	8	24.2	14	42.4	11	33.3	0	0
Chance to obtain further professional qualification	17	51.5	9	27.3	3	9.1	4	12.1
Professional position achieved	8	24.3	11	33.3	13	39.4	1	3

*Table denotes multiple responses

The graduates expressed satisfaction with LIS profession with regards to content of work and professional tasks. The possibility to use qualifications acquired and chances of obtaining further professional qualifications were considered very high. Eighteen (54.5%) of the graduates were not satisfied with their job remuneration.

Study Conditions

The learning environment could influence the performance of learners in terms of availability of resources, quality of content and teaching staff

among other factors. The study sought to establish how the graduates rated the study provision and study conditions experienced. Computer and Internet access were rated the poorest by 19 (57.6%) respondents. This was followed by equipment and library services, mentioned by 16 (48.5%) respondents. Postgraduate students generally require access to these facilities in order to use e-resources and other databases to support their studies. The NUST library provides on and off-campus access to a variety of e-resources. These resources need to be marketed widely to this category of students. Table 5 provides a summary of the findings.

Table 5: Rating of Study Provisions and Conditions N=33

Attribute	Very good	%	Good	%	Poor	%	Undecided	%
Academic advice offered in general	14	42.4	14	42.4	4	12.1	1	3
Assistance/advice for final examinations	6	18.2	24	72.3	3	9.1	0	0
Course content	6	18.2	23	69.7	3	9.1	1	3
Variety of courses offered	5	15.2	18	54.5	5	15.2	5	15.2
Design of degree programme	3	9.1	22	66.7	3	9.1	5	15.2
Testing/grading system	9	27.3	18	54.5	3	9.1	3	9.1
Opportunity to choose courses and areas of specialization	6	18.2	10	30.3	14	42.4	3	9.1
Practical emphasis on teaching and learning	4	12.1	20	60.6	7	21.2	2	6.1

Teaching quality	6	18.2	23	69.7	3	9.1	1	3
Research emphasis of teaching and learning	4	12.1	25	75.8	2	6.1	2	6.1
Provision of work placements and other work experience	2	6.1	13	39.4	10	30.3	8	24.2
Opportunity for out of class contact with teaching staff	8	24.2	19	57.6	5	15.2	1	3
Research project guidance	12	36.4	19	57.6	2	6.1	0	0
Contact with fellow students	13	39.4	17	51.5	3	9.1	0	0
Equipment and library services	2	6.1	14	42.4	16	48.5	1	3
Computer and internet access	1	3	11	33.3	19	57.6	2	6.1
Supply of teaching materials	4	12.1	17	51.5	9	27.3	3	9.1

*Table denotes multiple responses

The graduates also felt that opportunity to choose courses and areas of specialisation was poor due to limited options available. Areas of specialisation in LIS may include medical librarianship, public libraries, academic, children's libraries, etc. As mentioned above, within the Faculty of Communication and Information Science, the Department of Records Management also offers a postgraduate programme. Provision for work placements/industrial attachment was rated poorly by 10 (30.3%) respondents. This concern has also been raised in studies by Kavulya (2007), Shongwe and Ocholla (2011), Noko and Ngulube (2013), Burnett (2013), among others. Industrial attachment helps the students to put theory into practice and acquire work experience during their training period. This may also entail being attached to a different institution from one's current workplace, given that some are already employed when they enrolled for

this programme, while others may need to be rotated within their organisations. Academic advice offered, contact with other fellow students, and research project guidance were highly rated by the graduates, while examination advice, course content, design of degree programme, practical emphasis on teaching and learning, and research emphasis of teaching and learning were also found to be good.

Perceptions of LIS Career Choice

Given all the responses provided by the graduates and in terms of career choice, the study sought to find out if the respondents were to choose again, their likelihood of making choices with regards to: choosing the same course, the same area of study, and the same institution. The majority of respondents were unanimous in indicating that they would likely

Table 6: Likelihood of graduates to repeat career choice: N=33

Attribute	Very likely	%	Likely	%	Very unlikely	%	Undecided	%
Choose the same course of study	10	30.3	18	54.5	5	15.2	0	0
Choose the same area of major	7	21.2	18	54.5	4	12.1	4	12.1
Choose the same institution of higher education	16	48.5	11	33.3	5	15.2	1	3

choose the same course of study and area of major, and NUST as the institution of study. As shown in table 6 some would rather engage in a totally different career and at a different institution.

Additional comments from the respondents

From the qualitative data the following were the findings:

- MSc taught courses give graduates an added advantage when looking for employment.
- The MSc programme will enable one to register for PhD studies in future.
- Information and knowledge sectors are constantly changing and department needs to be responsive to change.
- MSc programme at NUST is good but needs to focus on current trends in the development of libraries.
- NUST is the university to be but management should help their students in securing good jobs
- Some of the teaching staff during my period of study were not serious in supervising projects.
- The programme needs to be reviewed to meet the needs of information industry in line with new trends.
- Very grateful for being a pioneer of MSc LIS programme.
- The study environment was not very encouraging.
- The Department should introduce a doctoral programme in LIS.

The above issues by the respondents need to be seriously attended to.

Conclusion and Recommendations

Despite the low response rate, the study has highlighted the positive areas and the limitations of the MSc-LIS programme that could help guide further developments of the programme courses. The study has shown that the graduates were employable and capable of assuming senior positions

and responsibilities in the various sectors. Some of them are: university librarian/director-library services, deputy directors, knowledge and communications manager, information resources manager, among others. The graduates were also able to diversify into ICT positions, for example systems analyst/librarian.

ICT application is so prevalent in the job environment, thus the graduates need to be equipped with such skills when they leave university. These tasks have also redefined the job titles on the market. The study points to the inadequacy of the curriculum and the need for a review of content to be aligned with the job market. The graduates had learnt some new skills on the job which were not taught at the library school, and they felt that these should be incorporated in future curriculum reviews. The study environment, particularly computer and Internet access and library services, were found to be inadequate. Curriculum evaluation is necessary in order to align the LIS programmes with the job market requirements. The programmes should fuse theory and practice by incorporating hands-on exercises, as well as promoting internship during the training period.

This study contributes to the LIS curriculum policy and development. By sharing the results of the study with the university authorities at NUST, it is hoped that some of the findings will, in the long term, be considered. The findings of this study will also buttress the findings of an earlier study by Noko and Ngulube (2013). The study recommends an all stakeholders' involvement in the curriculum review of which should include the employers, the past students and the national library association.

The study recommends that further research which reflects market-driven demands through job advertisements be undertaken periodically in order to validate the findings of this study. Despite these challenges, the positive aspect is that some of the graduates have enrolled for doctoral programme, which shows that the MSc-LIS programme indeed prepared Students for higher degrees.

References

- Aina, L.O. (2005). Towards an Ideal Library and Information Studies (LIS) Curriculum for Africa:

- Some Preliminary Thoughts, *Education for Information*, 23: 65–185.
- Aina, L.O. and Moahi, K. (1999). Tracer study of the Botswana Library School Graduates. *Education for Information*, 17 (3) 215-244.
- Baruah, B.G. and Hangsing, P. (2012). Relevance of the Rising Job Market for LIS Professionals Versus Competencies Needed with Reference to Indian context. *Trends in Information Management*, 8 (2) 54-74.
- Burnett, P. (2013). Challenges and Problems of Library and Information Science Education in Selected African Countries. Paper Presented at IFLA WLIC Singapore, 2013. Available: <http://library.ifla.org/175/1/199-burnett-en.pdf> Accessed: 04/08/2014.
- Chikonzo, A., Bothma, T., Kusekwa, L. and Mushowani, A. (2014). An Assessment of the Changing Needs of Information Professionals in Zimbabwe. *African Journal Library, Archives and Information Science*, 24 (1) 107-118.
- Haider, S. Z. (2008). Challenges in Higher Education: Special Reference to Pakistan and South Asian Developing Countries. *Nonpartisan Education Review, Essays*, 4 (2) 1-12.
- Kamba, M.A. (2011). ICT Competency Framework for Library and Information Science Schools in Nigeria: The Need for Model Curriculum. *International Journal of Library and Information Science*, 3 (4) 68-80.
- Kavulya, J.M. (2003). Challenges Facing Information Literacy Efforts In Kenya: A Case Study of Selected University Libraries in Kenya. *Library Management*, 24 (4 &5) 216-222.
- Kavulya, J.M. (2007). Training of Library and Information Science (LIS) Professionals in Kenya: A Needs Assessment. *Library Review*, 56 (3) 208-223.
- Lutwama, E. and Kigongo-Bukenya, I.M.N. (2004). A Tracer Study of the East African School of Library and Information Science Graduates 1995–1999 Working in Uganda. *South African Journal Libraries and Information Science*, 70 (2) 99-109.
- Macatangay, L. (2013). Tracer Study of BSCS Graduates of Lyceum of the Philippines University from 2004–2009. *Academic Research International*, 4 (5) 361-377.
- Mahmood, K. (2012). LIS Curriculum Review Using Focus Group Interviews of Employers. *Library Philosophy and Practice*. Available: <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1830andcontext=libphilprac> Accessed: 04/08/2014.
- National Council for Higher Education (Uganda). (2006). Graduate Tracer and Employers' Expectations Studies. Available: <http://ahero.uwc.ac.za/index.php?module=cshandaction=downloadfileandfileid=36807145012072991798320> Accessed: 04/08/2014
- National University of Science and Technology Act, (1990). Harare: Zimbabwe Government.
- National University of Science and Technology (2012). Yearbook 19 2011/12 incorporating Numbers 13 – 18. Bulawayo: NUST.
- National University of Science and Technology. (2015). Faculty of Communication and Information Science. Available: <http://www.nust.ac.zw> Accessed: 08/01/2015
- Noh, Y. and Ahn, I. (2014). A Study of the Differences between Students' and Librarians' Expectation of the Korean Library and Information Science Job Market. *Journal Of Librarianship and Information Science*, 46 (2) 1-5.
- Noko, P., and Ngulube, P. (2013). A Vital Feedback Loop in Educating and Training Archival Professionals: A Tracer Study of Records and Archives Management Graduates in Zimbabwe. *Information Development*, 20: 1-14.
- Ojedokun, A.A. and Moahi, K.H. (2005). The Emerging Market for Information Professionals in Botswana, and the Skills Requirements. *Education for Information*, 23:129–139.
- Schomburg, H. (2003). Handbook for Graduate Tracer Studies. Available at: <http://Www.Uni-Kassel.De/Wz1/Proj/Edwork/Handbook.Ghk> Accessed 04/08/2014.

Shongwe, M. and Ocholla, D. (2011). A Tracer Study of LIS Graduates at the University of Zululand, 2000–2009. *Mousaion*, 29 (2) 227—245.

Warraich, N.F. and Ameen, K. (2011). Employability Skills of LIS Graduates in Pakistan: Needs and Expectations. *Library Management*, 32 (3) 209-224.

Williams, P.R.C. [Chairman] (1989). Report of the Commission of Inquiry into the Establishment of a Second University or Campus.. Harare: The Commission.

Zainab, A.N., Edzan, N.N. and Rahman, S.S.A. (2004). Tracing Graduates to Ascertain Curriculum Relevance. *Malaysian Journal of Library and Information Science*, 9 (1) 27-37.

Tinashe Mugwisi is Postdoctoral Research Fellow in the Department of Information Science, University of South Africa, Pretoria, South Africa.



Lawton Hikwa (PhD) is the Dean of the Faculty of Communication and Information Science at the National University of Science and Technology (NUST), Bulawayo, Zimbabwe.

