A Decade of Formal Library and Information Science Education in Malawi: the Case of Mzuzu University

Winner D. Chawinga
Lecturer
Department of Library and Information Science, Mzuzu University, Mzuzu, Malawi
Email address: winnchawinga@gmail.com

Abstract:

It is well documented in the literature that Library and Information Science (LIS) schools in Africa especially in South Africa and West Africa have existed since the 20th Century. However, in Malawi, the only LIS School was established in 2003 in the Faculty of Information Science and Communications at Mzuzu University (MZUNI). The School enrolled its first diploma and undergraduate degree students in 2003 and 2005 respectively. The study investigated trends and roles, the relevance of the core LIS courses and the challenges that the Department of LIS at MZUNI faces. Qualitative and quantitative designs had equal status by collecting data using various methods including questionnaires, document analysis and interviews. Two notable developments that have taken place in the Department include the introduction of a Master's degree in LIS whose curriculum development was funded by International Network for the Availability of Scientific Publications (INASP) and the training of a total of 103 and 269 LIS professionals at diploma and degree level respectively. Information Literacy, Database Management Systems, Computer and Communication Technology, Computer Networks, Cataloguing and Classification, Information Storage and Retrieval, Collection Development and Digital Librarianship are the most important courses in that order according to the LIS professionals. Between 54.2% and 91.7% LIS professionals and most lecturers want the Department to introduce new degree programmes in Information Technology for LIS, Records Management and Publishing and Multimedia. The results show further that 91.7% LIS professionals and six lecturers want the name of the Department changed from LIS to Information Science (IS). Limited funding, lack of appreciation of the LIS profession by policy makers and lack of working relationship between the Department and the industry remain the key problems affecting LIS education in Malawi.

Keywords: Lecturers, Library and Information Science, LIS Education, LIS Professionals, Malawi, Mzuzu University

Introduction
In recent times, Library and Information Science (LIS) schools have been emerging in most developing countries including Africa despite sad reports that some are slowly ceasing to

operate in some countries. It is common knowledge that the success of university libraries, public libraries and all other types of libraries including various information centres have their success dependent on LIS schools which are slowly but surely being accredited for producing capable and efficient librarians. Ultimately, Abioye (2013) argues that LIS professionals are gatekeepers and brokers of information which is essential for knowledge acquisition, decision-making and national development. In this complex and interconnected global economy, it is inevitable to have a well-trained human resource that can ably and efficiently source, retrieve and disseminate information which is increasingly becoming available in various formats to support the complex economical, educational and research activities of organisations and individuals. Thus, this study assessed the role of and challenges affecting the LIS education in Malawi.

Historical perspectives of LIS education in Africa and Malawi
Literature shows quite clearly that there are no exact years when LIS education first emerged on the African continent. Various years have been mentioned and they include 1933, 1938 in South Africa (Van Aswegen, 1997:53; Ocholla, 2008), 1944 in Ghana (Mammo, 2007:146) and 1950s in Ethiopia (Mathew, 2014: 3388). Nevertheless, most authors independently indicate that formal LIS schools were established in the last half of the 20th Century. Gupta and Gupta (1997: 96), Ocholla and Bothma (2007:56), Okello-Obura and Kigongo-Bukenya (2011) and Mathew (2014) all claim that the first LIS schools in Africa have existed since 1960s. Ocholla (2008) indicates further that South Africa which has 12 LIS schools (the largest in Africa) remains the only African country with the longest history of LIS education, dating back to 1938 although Van Aswegen (1997:53) dates this record to 1933.

LIS education in Malawi dates back to 1978 following the formation of the Malawi Library Association (MALA). Without doubt, the Association has substantially contributed to the development of the LIS education in Malawi through the offering of an informal one year certificate course in Library and Information Science. The certificate is perceived informal because according to Chipeta and Chawinga (2012:61) the Association itself is not recognised by the Malawi Government. It was not until the establishment of the Department of LIS at MZUNI a decade ago, that a certificate in LIS remained a key entry point into librarianship for many years in Malawi.

The Department of LIS at MZUNI: some brief facts
According to Phiri (2010), "Mzuzu University was established by an Act of Parliament in May 1997 and admitted its first students in January 1999" as the second public national university after the University of Malawi. Its mission is to provide high quality education, training, research and complementary services to meet the technological, social and economic needs of individuals and communities in Malawi (Mzuzu University, 2015). Currently, the University has five faculties which include Education, Information Science and Communications, Health Science and Hospitality Management and Tourism.

Primarily, two factors led to the establishment of the Department of LIS: first, to address the acute shortage of personnel in the information sector and to meet the information and technological needs of Malawi (Mzuzu University, 2015) and second, to provide affordable LIS education to Malawians who apparently, could not manage to pay for LIS training in countries such as Botswana, South Africa and the United Kingdom where most of them went for training. Upon its establishment, the Department was tasked to perform various core functions such as to train individuals aspiring to become LIS professionals in Malawi, to conduct short courses in LIS and allied fields, to conduct cutting-edge research in Information Science and related fields, to provide consultancy services and expert advice

about the LIS sector and allied fields and to review the LIS curriculum in response to requirements of stakeholders. Although the Department was established in 2003, it graduated its first diploma and degree cohorts in 2005 and 2010 respectively.

Problem statement

In Malawi, the proliferation of public and private colleges and universities in the past decade has propelled the flourishing of college and university libraries which clearly, are numerically more than other types of libraries. More importantly, as is the case in South Africa (see Ocholla, 2008:467), it appears that more and more, the private and the public sectors in Malawi are starting to appreciate the pivotal role that librarians play and are increasingly seeking their services. The quality in terms of efficiency and effectiveness of human resource to provide library and information services to Malawians is dependent on the LIS School at MZUNI. However, despite several studies (Ocholla & Bothma, 2007; Burnett, 2013) that have been conducted to demystify the role of LIS education at continental and regional level, it appears that no similar studies have been conducted in Malawi, hence this study. Although the Department is considerably new, having been established in 2003, it is possible to speculate that it has registered some successes and possibly faces some challenges. In this study therefore, the researcher investigates a wide range of issues about the School which include the trends, its roles and the challenges. Specifically, the study addresses the following specific three objectives:

- To identify the trends and roles of LIS Department at MZUNI;
- To determine the relevance of the core LIS courses offered by the LIS Department MZUNI; and
- To ascertain the challenges that the LIS Department at MZUNI faces.

An overview of related literature

Since the birth of some LIS education in 1933 in Africa (see Van Aswegen, 1997:53) there have been various trends worth highlighting. Notably, common trends according to Minishi-Majanja and Ocholla (2004) include the growth of LIS Schools, review and revision of curricula, increased use of Information and Communication Technologies (ICTs), rise and fall of student numbers, amalgamation and re-orientation of LIS programmes, relocation of the academic administration of LIS schools and expansion and closure of some of the schools. It is well documented in the literature that while South Africa has experienced the closure of LIS schools in the last decade from 18 to 11 (Ocholla & Bothma, 2007:62) the continent has witnessed the emergence of LIS schools in other Southern African countries such as Malawi, Mozambique and Zimbabwe. The emergence of these new LIS schools may be attributed to the fact that training individuals outside those countries is relatively expensive. Change of department names has become a norm in LIS Schools. At Jimma University and Haramaya University in Ethiopia for example, the nomenclature has changed from Information Studies to become Information Science (Mathew, 2014:3388). Hitherto, what remains unanswered clearly is whether the changes have had any meaningful impact especially taking into account that opponents of the name change argue that despite the changes, most LIS courses (apart from the integration of ICT courses (see Chaputula 2014:583)), have not changed much. The literature is further replete with developments about the diversification of the courses offered by LIS schools such as multimedia, information technology, knowledge management (Ocholla & Bothma, 2007:64; Okello-Obura & Kigongo-Bukenya, 2011). Seemingly, the library is not only target workplace for LIS graduates as has been the scenario previously. Rather, LIS schools are slowly expanding their market base by producing graduates who can multitask. This is important especially considering that upsettingly, "hardly any new libraries are built" (Ocholla & Bothma,

2007:64) and in Malawi, libraries have not recruited any MZUNI LIS graduate between 2012 and 2014 (Chaputula 2014:579).

The literature shows that LIS schools are faced with a new paradigm shift from the traditional information environment to a fast-paced digital environment. Burnett (2013) observes that "it is widely acknowledged that LIS schools in many developing countries are not keeping abreast of the rapidly changing digital environment and are facing new knowledge and skills demands from employers". Burnett's sentiments lead us to a conclusion that as trainers of LIS professionals, LIS schools have only one choice: to respond to the rapidly changing needs of the information sector driven by technological innovation or face extinction. In Malawi, "the employment prospects of MZUNI LIS graduates look bleak" (Chaputula, 2014:579) as they are not being employed by the LIS sector. Thus, although the LIS curriculum may look relevant in the eyes of LIS schools, it is high time the schools cautiously started equipping their graduates with multidimensional skills and knowledge that can enable them to work in other sectors which have higher employability rates. For this to turn out to be a success, Ocholla and Bothma (2007), Chow *et al*. (2011) and Burnett (2013) propose the need for LIS Schools to create solid partnership or dialogue with the industry or employers in a wide range activities including curriculum development, research, publication and experiential learning.

Diverse challenges confronting LIS schools are widely reported in the literature. Predominantly, the challenges include poor funding, scarcity of resources, rapid technological changes, lack of LIS educators, complexity of information landscape and the relevance of the curricula (Ocholla & Bothma, 2007; Virkus, 2008; Okello-Obura & Kigongo- Bukenya, 2011; Al-Suqri, Al Saleem & Gharieb, 2012). For example, some key challenges identified by Okello-Obura and Kigongo-Bukenya (2011) in Unganda include lack of recognition and appreciation of the LIS professions by policy makers and an alarming poor status of technology infrastructure in LIS schools. The issue of lack of appreciation of the LIS profession by policy makers is further observed in other countries such as Ethiopia (Burnett, 2013; Mathew, 2014:3390) and Malawi (Phiri, 2010). Shortage of LIS academic staff has been reported in some countries such as Ethiopia, Kenya and Uganda (Burnett, 2013). Worse still, it is widely reported that LIS Schools receive little funding as compared to other disciplines such as natural sciences, health and information technology (Ocholla & Bothma, 2007). Although this is a sad development, it is a wakeup call for the LIS schools to change the status quo by introducing courses and projects which are innovative and donor appealing.

Data collection
In an attempt to meet the objectives of the study, both qualitative and quantitative data were collected using various techniques in two phases. These data gathering techniques and procedures include questionnaires, interviews and review of relevant documents and appropriate curriculum and were used in similar studies by Mammo (2007), Chow *et al*. (2011) and Hysa and Južnič, (2013). In phase one, a questionnaire (Connaway & Powell, 2004:146) with only open-ended questions was sent to six full-time and six adjunct lecturers in the Department of LIS MZUNI. Of the six full time staff, four have master's degrees, one is studying towards a master's degree and the other is currently pursuing a PhD. The adjunct staff are mainly members of staff from the MZUNI Library holding Master's degrees in LIS. A web-based questionnaire with a mix of open-ended and closed-ended questions was self-administered to LIS professionals in Malawi most of whom have been trained by this LIS School. This was the best option because most of the LIS professionals are working in organisations which are scattered across the country. Documents including student's records and the curriculum were also analysed. Analysis of data in phase one was followed by

conducting follow-up interviews with the Head of LIS Department. McNamara (1999) claims that interviews are usually very useful as follow-up to questionnaires to further investigate responses. Based on this premise, the questions were formulated in light of the inconsistencies and gaps that were identified after analysing the data collected using other data sets. The lectures are the implementers of the core functions of the Department hence a justification for their inclusion. On the other hand, the LIS professionals were included in the study because most of them are applying the theoretical and practical knowledge that they gained at this School and it is the expectation of the researcher that they could provide relevant information about how the LIS education is crafted to meet the needs of the employers.

Results and discussion
In this section, the researcher reports the results from three data sets which include information collected from the LIS professionals and MZUNI LIS lecturers using a questionnaire, information collected through an analysis documents in the Department of LIS and outcomes from the follow-up interviews conducted with the Head of Department of LIS. Although these data sets were collected individually, they were collectively triangulated. Flick (2011) highlights that the process of triangulation involves the combination of data collected from different sources, different times, different places and different people. Apart from the background information of the respondents, the findings are reported and discussed along the following lines:
- The trends and roles;
- Relevance of LIS courses/ subjects and programmes; and
- Challenges.

Background information
Using emails, Facebook and Twitter, the researcher shared an online questionnaire developed using Google forms and deployed on Goodge Drive to 93 LIS professionals in Malawi. Forty eight (51.6%) responded to the questionnaire of whom 40 (83.3%) were males and 8 (16.7%) were females. See figure 1 below. Similarly, a questionnaire was sent to 12 full time and adjunct staff in the Department and 10 (83.3%) responded. Of these, 9 (90%) were males and 1(10%) was a female. The results suggest that the LIS profession in Malawi (in both the industry and academic) is dominated by men. Such a trend is mainly attributed to the fact that in Malawi, some university degree programmes are associated with men while others by females. For example, it is deeply rooted in most Malawians minds that Nursing and Midwifery is meant for females whereas most other courses including LIS are meant for males. A recent study by Chaputula (2014) about LIS professionals also registered a low female representation of 31.9%. Figure 1 shows further that most LIS professionals in Malawi are in possession of a bachelor's degree followed by a diploma. The higher number of respondents with bachelor's degrees and diplomas is actually attributed to the establishment of the MZUNI LIS School. The fact that the Department introduced a master's degree in 2014 explains why there are only few respondents with a master's qualification. In fact, there are eight masters' students registered in the Department and are expected to graduate in 2016. Most likely, the 4 (8.3%) respondents with master's degrees obtained their qualifications in other countries such as South Africa, United Kingdom and Botswana where LIS schools have been offering master's degrees in LIS for decades. It was revealed during the follow-up interviews the Head of Department of LIS that Mzuzu University decided to introduce a master's programme to cut back the costs that the Malawi Government spends in educating LIS professionals abroad.
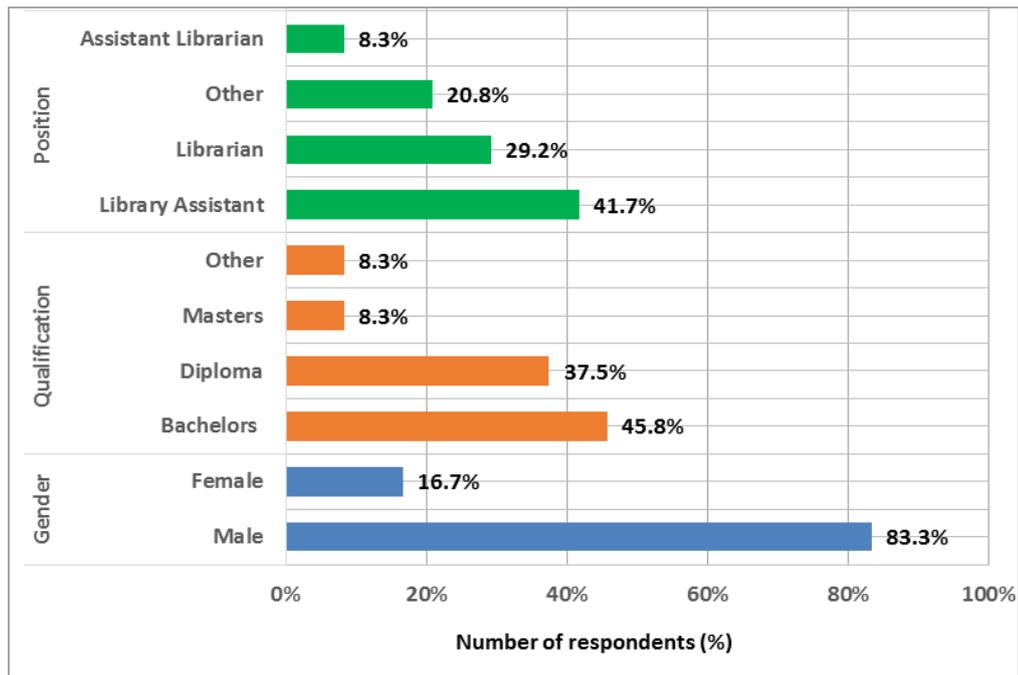
Figure 1: Respondents by gender, qualification and position

Trends and roles

Findings of this study show that there are some newer trends and developments that have taken place in the Department. Primarily, the Department introduced a Master's degree in Library and Information Science in 2014 with funding from INASP and the Norwegian Library Association (NLA). Follow-up interviews with the Head of LIS Department revealed that INASP funded the curriculum development thereby validating claims by Burnett (2013) that INASP has conducted its first curriculum development activity at MZUNI. The NLA offered scholarships to ten masters' students with a possibility of renewal. Other notable developments include the introduction of new courses such as Entrepreneurship, e-commerce, Rural Information, Children and Youth Services and some ICT related courses.

Pertaining to changing in the name of the Department, findings show that there have been suggestions to change the nomenclature as evidenced by one of the following statements: "not yet [changed the name] but change has been suggested to name it Department of Information Science" and "that the University is restructuring and new faculties have been proposed. Eventually, the Department of LIS will belong to the Faculty of Arts and Social Sciences". The researcher also investigated the extent to which the Department has undertaken the core functions it was tasked to accomplish upon its establishment and the results from the questionnaires and document analysis show that focus has been on training LIS professionals. One lecturer respondents that "this [numbers of professionals trained] has not been formally measured but we know many [LIS professionals] have been trained and are working in reputable institutions". Such sentiments are well corroborated with the findings from document analysis as presented in Table 1 below where it is observable that over the years, the Department has trained many LIS professionals at diploma and degree level.

Table 1. Number of MZUNI LIS graduates (2005-2015)

Year	Number of graduates		
	Bachelors (Undergraduate)	**Bachelors (Upgrading)**	**Diploma**
2005	-	-	9
2006	-	-	7
2007	-	-	7
2008	-	6	6
2009	58	5	2
2010	20	3	13
2011	17	7	13
2012	16	7	13
2013	17	7	9
2014	14	7	14
2015	24	2	10
Total	**166**	**44**	**103**

Source: **MZUNI (2015)**

LIS courses/ subjects and programmes

LIS professionals were asked to provide their views on the courses or subjects offered by Department that are more relevant to their work environment. As illustrated in Table 2 below, it is clear that between 30 (62.5%) and 48 (100%) LIS professionals are of the view that Information Literacy, Database Management Systems, Computer and Communication Technology, Computer Networks, Cataloguing and Classification, Information Storage and Retrieval, Collection Development, Web Design, Digital Librarianship, Records Management, Information Management, Knowledge Management, End User Computing and Information Systems are the courses offered by the Department that are crucial to the LIS professionals' work places. Another point worth emphasising on is the fact that the results suggest that ICT courses are being regarded as very important by most LIS professionals. The fact that Database Management Systems, Computer Networks, Web Design and End User Computing including Digital Librarianship are rated highly explains why other Information Science schools such as University of Pretoria have recently introduced Information and Communication Technology programmes for LIS professionals. It is thus safe to conclude that the LIS profession is slowly but surely being driven by technologies. However, from the lecturers' perspectives, courses regarded as core include Cataloguing and Classification, Information Literacy, Collection Development, Digital Librarianship and Records Management. The results suggest that although both LIS professionals and lecturers agree that Information Literacy, Collection Development and Knowledge Management are the most important courses, most lecturers are not aware that ICT courses are rated highly by people in the industry. Lack of tracer studies in Malawi may be the reasons lecturers are not aware about which courses are a catalyst for the LIS operations in Malawi. Since ICT courses are being regarded as crucial for the LIS profession in Malawi, one wonders why the Department is being relocated to the yet to be established Faculty of Arts and Social Sciences.

Table 2. Relevance of the subjects/courses

Course/Subject	*f*	%
Information Literacy	48	100.0
Database Management Systems	48	100.0
Computer and Communication Technology	44	91.7
Computer Networks	44	91.7
Cataloguing and Classification	42	87.5
Information Storage and Retrieval	40	83.3
Collection Development	40	83.3
Web Design	38	79.2
Digital Librarianship	38	79.2
Records Management	32	66.7
Information Management	32	66.7
Knowledge Management	32	66.7
End User Computing	30	62.5
Information Systems	30	62.5
Information Resources and Services	24	50.0
Indexing and Abstracting	24	50.0
Archives Management	24	50.0
Information and Society	22	45.8
Packaging of Information	10	20.8

The study also sought respondents' views on the new courses needed to be included in the curriculum. On the part of LIS professionals, 36 (75.0%) want Information Systems and Systems Development, 36 (75.0%) Customer Care/Relations, 32 (66.7%) Information Ethics and 30 (62.5%) want Hardware and Software. Likewise, lecturers proposed to review the curriculum to keep abreast with the ever changing trends in the LIS profession. More importantly, all the LIS professionals and lecturers were of the view that the Department should introduce more degree programmes. For example, 44 (91.7%) indicted that the Department should introduce Information Technology for LIS, 34 (70.8%) Records Management, 26 (54.2%) Publishing and Multimedia and 22 (45.8%) Knowledge Management. One lecturer commented that "technology related programmes need to be introduced to strengthen technological capacity of the profession in the country". The findings deepen observations made by Ocholla and Bothma (2007:64), Okello-Obura and Kigongo-Bukenya (2011) who independently assert that over the years, LIS schools have diversified course offering by integrating multimedia, information technology and knowledge management. The demand by the LIS professionals to include more ICT courses give substance to sentiments by Burnett (2013) that the LIS schools in developing countries are lagging behind in responding to the highly paced changing digital environment and are consequently failing short to produce graduates with knowledge and skillsets required to succeed in the complex industry.

On whether it was necessary to change the current name of the Department or programme, Forty four (91.7%) LIS professionals were of the view that it should change. Information gathered through an open-ended question, reveal quite clearly that between 30 (62.5%) and 34 (70.8%) respondents indicated that the Department should be called by any of the following names: Department of Information Science, Department of Information Studies or Department of Information Resources and Library Science. Various reasons were provided justifying the need to change the name as evidenced by the following verbatim responses: "I

believe the information we might need as librarians is not only for the library, so there is need to create room for expansion in terms of information gathered and learned" and "Library deals with information. Without information the 'library' is non-existent hence labelling it as Library and Information is like duplicating or echoing the same thing. Let Library Studies be a major under Information Science". However, lecturers had divided opinions as whether to change the name or not with seven indicating that the Department should change and three saying it should not. One lecturer advocating the name change commented "Information Science is a better term [than LIS] in order to encompass all aspects of the profession and the emerging peripherals" and another one who agreed said: "The term library should be removed to avoid confusing employers who think such graduates can only work in libraries which disappointingly, have lamentably failed to employ our graduates". Unfortunately, according to the findings, no apparent reasons were provided by the opponents to the change. A proposal to change the name of the Department is in line with what has occurred in other African countries such as Ethiopia where Mathew (2014:3388) reports that the LIS School at Jimma University and Haramaya University have their names changed from Information Studies to Information Science.

Challenges
Like other LIS schools in developing countries, the findings of this study show that there are various challenges hindering the smooth running of the Department. Chiefly, most lecturers bemoaned of limited funding and inadequate resources and lack of appreciation of the LIS profession by policy makers. Inadequate funding has squarely retarded the ambitious plans of the Department as attested by some of the following selected lecturers' verbatim: "due to limited funding, we are unable to introduce new programmes, to conduct research and to conduct outreach programmes", "it is hard to achieve the smooth running of the Department without its own building and resources including ICT equipment", and "with limited funding, it means the Department is unable to attract professors". Furthermore, inadequacy of the funds have borne other alarming challenges. For example, the Department is unable to conduct recruitment symposiums which can help to market its programmes and graduates and it is failing to adequately expose its students to practical work and this according to one of the lecturers leads to "students facing challenges at their work places because they do not have enough experience required to succeed in the work environment". Insufficient funding and inadequate industrial attachment for students are not peculiar to this Department because respectively, Ocholla and Bothma (2007) and Burnett (2013) raised similar concerns.

Some of the challenges that lecturers mentioned are well supported by those that LIS professionals cited. As illustrated in Figure 2 below, lack of working relationship between the LIS Department and the industry and lack of the appreciation of the LIS profession by policy makers are some of challenges affecting the LIS professionals in Malawi. The LIS profession is relatively new Malawi and it is yet to be appreciated by both, the private and public sector. LIS schools in Uganda (Okello-Obura & Kigongo-Bukenya, 2011) and Ethiopia (Burnett, 2013; Mathew, 2014:3390) are also faced with a similar challenge. But what are the LIS professionals doing to change the mind-set or attitude of policy makers about the value of libraries towards the national development? Your guess is as good as mine. Probably, the Department has to go by proposals independently made by Ocholla and Bothma (2007), Chow *et al*. (2011) and Burnett (2013) that LIS schools should create solid partnerships or dialogue with the industry or employers in a wide range of activities including curriculum development or alignment, research and publication.

The researcher is not perplexed by the high number of respondents who complained about the lack of opportunities to further their studies (see Figure 2) despite the availability of the LIS Department. A cross tabulation of the results revealed that the large proportion of this group is composed of diploma holders who are currently employed and this provides a clue: their employers are not always willing to release them for studies and that being the only LIS School in the country faced with limited resources, it is not possible to admit all the applicants. Thus, the introduction of weekend programmes may be seen as a direct solution to minimise this problem.
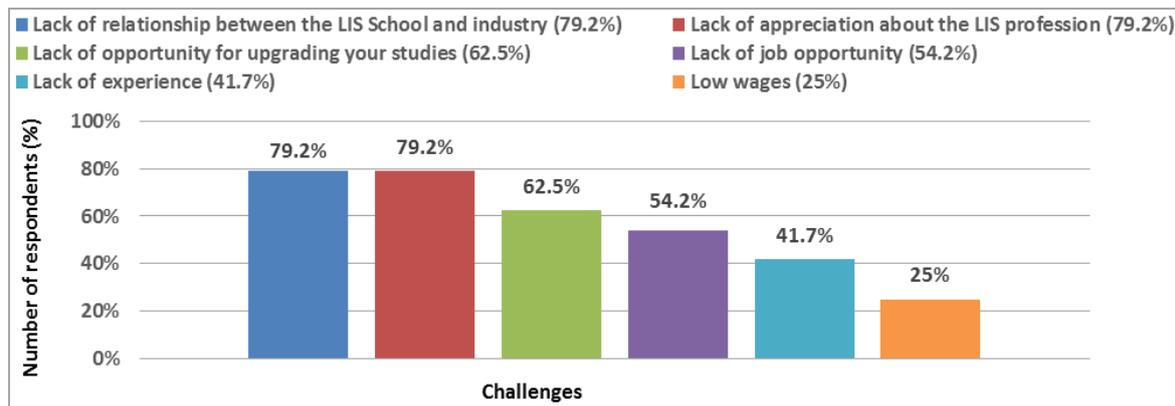

Figure 2: Challenges that LIS professionals face

Conclusions and reconditions
According to the findings, the Department has not only recently introduced a Master's degree in LIS as an unprecedented milestone in the LIS profession in Malawi, but it has also performed quite well in training LIS professionals at both diploma and degree level. From the LIS professionals' point of view, Database Management Systems, Computer and Communication Technology, Computer Networks, Web Design, Information Storage and Retrieval, Information Literacy, Cataloguing and Classification, Information Storage and Retrieval, Collection Development and Digital Librarianship are inevitable courses for one to succeed in the industry. LIS professionals and lecturers do not only agree on the need to introduce new degree programmes such as Information Technology for LIS, Records Management and Publishing and Multimedia but also the need to change the name of the Department to Information Science. Three major challenges affect the operations of the Department. First, lack of funding which adversely bleeds other challenges like limited time for industrial attachments, unavailability of technological infrastructure and failure to attract professors. Second, failure by policy makers to appreciate the LIS profession and finally, lack of working relationship between the industry and the Department. To this end, the researcher urges the Department to establish solid partnerships with the industry and work collectively in marketing and raising awareness of the profession to both the private and public sectors. The Department should apply for funding from INASP and other donors to conduct a curriculum review. Finally, the researcher urges the Department to conduct periodic tracer studies which may help in reorienting it with the changing needs of the industry.

References

Abioye, A. (2013). Enhancing library and information science education through cross-border collaboration: the experience of university of Ibadan, Nigeria and University of Ghana. Paper presented at IFLA World Library and Information Congress, Singapore. August 17-23. Retrieved 25 March 2015 from: http://creativecommons.org/licenses/by/3.0/.

Al-Suqri, M. N., Saleem, N.E.A., & Gharieb, M. E. (2013). Understanding the prospects and potential for improved regional LIS collaboration in the developing world: an empirical study of LIS departments in the GCC States. *Samaru Journal of Information Studies*, 12(1-2), 38-47.

Burnett, P. (2013). Challenges and problems of Library and Information Science Education in selected African countries. Paper presented at IFLA World Library and Information Congress, Singapore. August 17-23.

Chaputula, A.H. (2014). Job prospects for Mzuzu University library and information science graduates. *New Library World*, 115(11/12), 571-587.

Chipeta, G., & Chawinga, W. (2012). An investigation on the strategies for developing and sustaining strong library associations: a case of the Malawi Library Association (MALA). *Malawi Journal of Library and Information Science*, 1(1), 59-71.

Chow, A. S., Shaw, T.L., Gwynn, D., Martensen, D., & Howard, M. (2011). Changing times and requirements: implications for LIS education. *LIBRES Library and Information Science Research Electronic Journal*, 21(1).

Connaway, L.S., & Powell, R.R. (2004). *Basic research methods for librarians*, 10th Ed, Greenwich: Conn, Libraries Unlimited.

Flick, U. (2011). *Introducing research methodology: a beginner' guide to doing a research project.* London: Sage Publications.

Gupta S., & Gupta, D.K. (1997). Development of library and information science education in Africa. *Intl. Inform. & Libr. Rev.,* 29, 95-107.

Hysa, B., & Južnič, P. (2013). Agents of change: regional cooperation and LIS education and training. Paper presented at IFLA World Library and Information Congress, Singapore. August 17-23.

Mammo, W. (2007). Demise, renaissance or existence of LIS education in Ethiopia: curriculum, employers' expectations and professionals' dreams. *The International Information & Library Review,* 39,145–157.

Mathew, M. (2014). Information Science Education in Ethiopia - an overview. *European Academic Research*, 1(10),3385-3393.

McNamara, C. 1999. *General guidelines for conducting research interviews*. Retrieved 20 January 2015 from http://managementhelp.org/businessresearch/interviews.htm

Minishi-Majanja, M., & Ocholla, D.N. (2004). Auditing of information and communication technologies in library and information science education in Africa. *Education for Information*, 22(3/4), 187-206.

Mzuzu University. (2015). *Mzuzu University Prospectus*. Malawi, Mzuzu: Mzuzu University.

Mzuzu University Registry (2015). *List of LIS Graduates*. Unpublished material

Ocholla, D., & Bothma, T. (2007). Trends, challenges and opportunities for LIS education and training in Eastern and Southern Africa, *New Library World*, 108(1/2), 55-78.

Ocholla, D. (2008). The current status and challenges of collaboration in library and information studies (LIS) education and training in Africa. *New Library World*, 109(9/10), 466-479.

Okello-Obura, C., & Kigongo-Bukenya, I.M.N. (2011). Library and Information Science education and training in Uganda: trends, challenges and the way forward. *Education Research International.* Retrieved 26 March 2015 from: http://downloads.hindawi.com/journals/edu/2011/705372.pdf.

Phiri, M. (2010). LIS education/training in Malawi: problems and prospects. Paper presented at IFLA satellite meeting on cooperation and collaboration in teaching and research: trends in library and information studies education, Borås. August 8-9.

Van Aswegen, E.S. (1997). Menials or managers? A decade of library and information science education at Cape Technikon", *South African Journal of Library and Information Science*, 65(2), 53-9.

Virkus, S. (2008). LIS education in Europe: challenges and opportunities. In: V. Neugebauer (Ed.), *Informationskonzepte für die Zukunft: ODOK '07* (pp. 191-204).