LIS Graduates Employability-Needs and Expectations of the Library and Information Science (LIS) curriculum at the University of the Punjab (PU): An appraisal of Pakistani LIS Professionals

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Abstract

This paper analyzes the opinion of young and senior LIS professionals in Pakistan on LIS curricula and its relevance to market needs to enhance employability. Mixed research methods were used to collect data from professionals through two questionnaires, focus group and personal experience. The findings reveal that the LIS curriculum offered at the University of the Punjab (PU) is up-to-date and well designed but it is not fulfilling the needs of young graduates and employers. Both groups are dissatisfied with employability skills due to improper implementation of LIS curricula and shortage of specialized faculty members. The employers complained of weak communication, practical and presentation skills. They expect graduates with more multidimensional and market oriented skills.

Introduction

The focus of LIS education is to develop competent and skilled human resources to meet the changing needs of this digital environment. Many evolutionary changes have taken place in the information market place from Dewey school of Library Economy to 21st century information science schools. In the period of formal librarianship (1850- to date) the importance of curriculum has been realized for the contemporary information environment, with more emphasis given to LIS curriculum than apprenticeship. LIS academicians comprehend the need of modern curriculum that produces graduates according to the changing information marketplace. The changing labour market of information professionals demands new competencies in LIS graduates to enhance employability. Ameen (2007) observed that change in

the curricula, schools names and in the job market has been a constant phenomenon at global level. Pakistani LIS schools too are no exception.

LIS Schools in Pakistan

At present, there are 53 public and 37 private universities and 32 degree awarding institutions offering education in all kinds of disciplines with attached centralized or decentralized library systems (Pakistan, HEC, 2007). Academic libraries appear to be the primary consumer of LIS graduates along with public and special libraries in Pakistan.

There are eight library schools in the country offering masters/Ph. D level education in LIS. One LIS school is offering distant learning programmes at the bachelor and masters level. The total output of these seven LIS schools is about to 400-450 graduates.

LIS Education in PU

"The LIS Education was started at the University of the Punjab Lahore by Asa Don Dickinson, an American librarian and student of Melvil Dewy, in 1915 as a post-graduate certificate program" (Khurshaid, 1992, p. 13). "University of the Punjab was the first university outside the USA, in the world to introduce regular training in librarianship" (Bansal & Tikku, 1988, p.397). An American national Professor James C. R. Ewing, then Vice-Chancellor of the University of the Punjab (1910-1917), suggested the recruitment of a trained librarian. The objective was to train already working personnel in libraries and reorganizing the Punjab University Library. The suggestion was approved by the Syndicate (Anwar, 1992; Qarshi, 1992). Dickenson, who applied for the position in response to an advertisement published in American press, was appointed for one year (Ameen, 2007).

Dickinson reached Lahore on October 12, 1915 and established a series of lectures on modern library methods in November 1915. He delivered lectures for about one month and there was practical training of library work for three months. The faculty comprised of Dickinson himself and his wife and they conducted four examinations to evaluate the candidates before awarding the certificates (Qarshi, 1992).

> No records of the university are traceable which could describe the curriculum prescribed for this first class. However, contents of the Punjab library Primer are regarded as a summary of his lectures. The following subject has been covered by the Primer: Decimal Classification, Cataloguing and Library Handwriting, Book Selection and Acquisition Routines and Library Administration" (Qarshi, 1992, p. 79).

This book is the compilation of lectures. Anwar (1990) pointed out that "Punjab library Primer is the first professional piece of literature written as text book by professionally educated librarian and a teacher" (p. 5). Kaiser (1990) described that Dickinson served as library educator or as an author of text books only during his stay in Lahore, otherwise he has only been serving as successful library administrator.

The Dickinson course remained suspended for two years after his departure and was revived in 1918. This undergraduate course was converted into post graduate course in 1928. A post graduate diploma was started in 1959 and a masters in 1974 and M.Phil leading to PhD programme in 2005 at PU.

Curriculum Revision in PU

Qarshi (1992) describes that the LIS curriculum revision has been very slow since 1990s. He narrates that development of curriculum in PU consisted of four stages (1915-1990) i.e. from Asa Dickinson' certificate course, to a one year Diploma in Library Science, then in 1959 with the addition of a course on "Reference Service" and later a masters programme in 1974 with the addition of a course on "Research methodology. The fourth stage was the addition of information science components in 1990s.

The HEC revised the MLIS curriculum in 1998 and again in 2002. "HEC Curriculum 2002" was implemented in 2004 with local changes. The LIS department PU again revised and implemented its curricula with the consultation of LIS academicians and practitioners according to market needs in 2007. New courses were offered in the PU MLIS. The MLIS is a two year degree programme of 72 credits along with a compulsory internship of 8 weeks or 288 working hours. A research thesis is optional for those students who secure 3 out of 4 or more in full CGPA.

What is Employability?

"Employability skills are those basic skills necessary for getting, keeping, and doing well on a job" (Robinson, 2000, p. 1). He is of the view that employability skills are teachable skills and

divides them in three categories: Basic Academic Skills, Higher-Order Thinking Skills and Personal Qualities.

Employability can also be defined as "a set of achievements—skills, understandings and personal attributes-that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy" (ESECT & HE, 2004, p. 8). It also "Enabl[es] students to aquire the knowldege, personal and professional skills and encourage the attitudes that will support their future development and employment" (Sheffield Hallam University, p. 1).

Objectives of the study
1. The opinion of young LIS professionals, in the University of the Punjab will be analyzed about their:
    *   employability
    *   suitability of course contents with current market needs
    *   satisfaction to what they have learnt in MLIS.
2. This study will explore the perception and expectations of library leaders/employers on existing LIS courses at PU and the relevance of the courses with contemporary labour market of professional librarians in Pakistan.
3. It will also suggest the possible ways to enhance employability in Pakistan.

Literature Review

Curriculum is an instrument that enables LIS professionals to practice their skills in the work environment (Rugambwa, 2001).The addition of information science components in the LIS programmes and IT based market have changed the nature of LIS curricula. The literature on employability of LIS graduates reports that many studies have been carried out on perception of alumni and employers about LIS curricula and employability (Mammo 2007; Varalakshami 2006; Stilwell 2004; Lutwama and Kigongo-Bukenya 2004; Raju 2004; Stephens & Hamblin 2006, Ocholla 2001).

Mammo (2007) discusses the factors effecting the LIS employers' perception of LIS employees and their employability from an Ethiopian perspective. He also reviews the existing curricula of the B.Sc. Degree in information systems, Master Degree in Information Science at Addis Ababa University and BLIS at Jimma University. "The study gives a general overview of the challenges of LIS education and reasons for the dissatisfaction of LIS employers and professionals. Thus, findings of the study can be of help for LIS educators who might be interested in developing and designing skill upgrading courses, as well as to review and develop LIS curricula" (p. 155).

Genoni & Smith (2005) conducted a study of LIS graduate employment outcome in Australian prospective. This study was part of longitudinal study of the graduates of Curtin University of Technology. The students completing their study from 1988-1992, 1993-1997 and 1998-2002 were the population of these studies. This study (1998-2002) compared the results from previous two studies. The results indicated that a number of graduates find information-related jobs outside libraries and records centres and employment outcomes mirror that the supply from Curtin University is less than it has been in the past.

Kennan, Willard & Wilson (2006) assessed the changing needs of employers about information professionals. They observed this change through 135 newspaper advertisements over a four week period in each of the following years: 2004; 1994; 1984 and 1974. The study findings revealed that there was a change in job pattern. The applications in 1974 were inviting reference or technical librarians whereas in 2004 the most demanded attributes were interpersonal skills and behavioral characteristics.

Stilwell (2004) and Raju (2004) both conducted studies from a South Africa perspective and assessed the perception of alumni and employers on the relevance of curricula to the LIS service work environment. Stilwell (2004) conducted his study on the university of Natal post graduate LIS programme and found that this programme accomplished its expected result in preparing graduates. Raju (2004) made a comparative study of LIS curricula and employers needs and found that post graduate diploma is reputable LIS programme in South Africa.

Lutwama and Kigongo-Bukenya (2004) also conducted a study to match the contents of LIS curricula to the employability needs of graduates of the East African School of Library and Information Science, Uganda from 1995-1999. The study established that employers were dissatisfied about the lack of practical skills among graduates.

Aina and Moahi (1999) reported on the relevance of LIS curricula with graduates needs at the University of Botswana. The findings reveal that half of the respondents were dissatisfied with their current library jobs due to low socio-economic status.

Varalakshami (2006) undertook a comparative study of LIS graduate employability and LIS curriculum review at Andhra University. India. He conducted a survey of alumni, senior LIS professionals and analysed of employment advertisements to know the opinion and expectations of both target groups to enhance employability.

Research Design

The project was a multi-method study based on questionnaire survey, group interviews, and observation. The literature was reviewed to develop an understanding of the subject and data gathering instruments. The author has experience of LIS graduate employability as a librarian and as a teacher.

The detail of the different phases of data collection is as follows:

- Employers Survey: The senior LIS professionals from Pakistan were surveyed. The sample of 20 library leaders/ employers/experienced LIS professionals from reputed academic and special libraries of Pakistan was drawn/ taken. These LIS professionals are involved in recruitment of the LIS graduates or supervising internship to PU LIS graduate as part of their studies. A questionnaire survey was used to collect this data.
- LIS Young Professional Survey: The young LIS graduates were surveyed. A semi-structured questionnaire was designed using a Likert Scale to collect data. The sample of 40 young professionals of three academic years (from 2005-2007) graduated from the University of the Punjab, Lahore and working in library and information centres was selected. Two hundred and twenty three students, completing their MLIS during these

three years in morning and evening sessions, were the target population of this study. The number of graduate students was 65, 77, and 81 in these three years respectively 2005, 2006, 2007. A stratified random sample was drawn.

- Focus Group: A focus group consisting of 8 LIS Professionals was conducted at the Punjab University Library on 10th April 2008.

The two questionnaires consisted of 4 parts and a combination of open and closed questions. The questionnaires incorporated questions on:

- personal information,
- learning during MLIS Degree /Curriculum,
- employability Skills,
- satisfaction level, and
- suggestions to improve the curriculum for better employability for the LIS graduate.

Both questionnaires have many common indicators to compare the opinion of both data sets. (See Appendix 1).

Data Collection

Data were collected from target groups through personal visits. E-mail and cell phones were also used to follow up the participants. 32(80%) alumni responded the survey while only 12 (60%) employers responded in spite of personal visits. The Statistical Package for Social Sciences (SPSS) and Atlas ti were used to analyze and manipulate the quantitative and qualitative data respectively.

Data Analysis and Discussion
Senior/ Young LIS Professionals' Opinions/Perceptions

1. Respondents' Profile

There were two groups of respondents. One was the senior LIS professionals (n1=12) and the other was the young LIS professionals and alumni of PU (n2=32). The respondents' demographic profile is described next.

Twelve senior LIS professionals out of twenty from 10 institutions participated in this survey. The response rate was 60%. Most respondents were male, 10 (83.3%) and 2(16.7%) were female. Nine (75%) of the respondents were from public sector universities and 3 (25%) from private sector universities. Five (41.7%) of the respondents had up to ten years job experience and the other group of 5 had 10-15 years such experience, while only 2 had more than 15 years job experience. The age of 9 (75%) of the respondents was between 31-40 years. The remaining 3 (25%) of the respondents were more than the age of forty. The salary of 7 (58.8%) senior LIS professionals ranged from Rs.20, 001 to Rs. 30,000 while 5 (41.6%) drew above Rs. 40,000 per month.

Thirty two young LIS professionals out of a possible forty, from 30 libraries participated in this part of the survey. All of the respondents were PU alumni who graduated in 2005, 06, and 07. The response rate was 80%. There were 17 (53.1%) female respondents while the male respondents were 15 (46.9%). It is worth mentioning that the ratio of female students was about double that of the male students in PU LIS department. But many female students don't join the profession after their graduation. Thirteen (40.6%) respondents were from public sector universities, and 19 (59.4%) from private sector universities. Most of the young respondents 20 (62.5%) got their first job within one month of graduation. The remaining 7 (22%) got their first job within 2-4 month of graduation. This fact shows the good labour market for LIS graduates in Pakistan. Only one respondent got his first job after unemployment of eight months. Eleven of the (34.4%) respondents graduated in 2005, 12 (37.5%) in 2006 and 9 (28.1%) in 2007. It is worth mentioning that 25 (78.1%) of the respondents were aged between 20-25 years. Only 7 (21.9%) respondents were aged between 25-30. Most of the young LIS professionals' 28 (87.5) monthly salary ranging from Rs.10, 000 to Rs. 20,000 while four drew above Rs. 20,000 at the time of reply. The last four respondents are getting good salary because of working in private sector.

2. Seniors and young LIS professional' opinion about the MLIS curriculum at PU

The mean score of senior and young LIS professionals about the LIS curriculum has been given in Table 1.

Table 1: Seniors and young LIS professional' opinion about the MLIS curriculum at PU
Independent Sample t-Test n1=12, n2=32 Y=Young LIS Professionals, S= Seniors LIS professionals

	Opinion on curriculum	Mean		t	df	Sig. (2-tailed)
		n1=Seniors	n2=Young			
1	Course contents are related to Practical approach	3.1667	3.0938	.231	42	.818
2	Interpersonal skills	2.5833	3.0000	-1.538	42	.132
3	Presentation skills	2.2500	2.7188	-1.192	42	.240
4	Office communication (written)	1.8333	2.0000	-.462	42	.646
5	Interview skills	2.0833	2.0938	-.027	42	.978
6	Information storage and retrieval	2.9167	3.0000	-.278	42	.782
7	Database management	2.2500	2.2813	-.072	42	.943
8	Management of information Centre	2.5833	2.3125	.580	42	.565
9	Human Resource Management	2.4167	1.8438	1.565	42	.125
10	Leadership skills	2.1667	2.6250	-1.122	42	.268
11	IT skills	2.6667	3.0000	-.977	42	.334
12	Advance library Softwares	2.0833	2.8125	-1.903	42	.064
13	Online searching skills	2.4167	3.5000	-3.414	42	.001*
14	Marketing LIS services	2.2500	3.0625	-2.242	42	.030*
15	Research skills	2.6667	3.0938	-1.079	42	.287

Note: **1-** Not at all   **2-**To a little extent   **3-**Just OK   **4-**To reasonable extent   **5-**To great extent

To see the significant of difference between means of opinion independent sample t-test was used. The results of the independent sample t- test show that there was no significant difference (at the alpha level $\alpha=0.05$) among the means of the opinion of both groups. The results illustrate that the opinion of both professional groups (seniors and young) regarding different aspects of curriculum i.e. the course content is related to practical approach, interpersonal skills, presentation skills, office communication (written), interview skills, information storage and retrieval, database management, management of information centre, human resource management, leadership skills, IT skills, advance library software and research skills are not

significantly different. Therefore the opinion of seniors and young professionals is the same for the above mentioned aspect of curricula.

On the other hand the opinions on two attributes were found to be significantly different between the seniors and young professionals. These attributes included "Online searching skills" and "Marketing of LIS services". This might lead us to assume that the young were not aware of the expectations of employers regarding online searching skills and Marketing of LIS services. The mean for online searching skills for the seniors is 2.4 but for young professionals it is 3.5. The mean for Marketing of LIS services for the seniors is 2.25 but for young professionals it is 3.062. The high mean (3.062) shows that the young professionals think marketing of LIS services is treated well in the MLIS curricula. The seniors have a low mean (2.25) because the course "Marketing of LIS services" was introduced into the PU LIS department in 2002 as an optional paper but is now compulsory for all students. This further exhibits a high expectation at the employer's part that graduate have more practical skills.
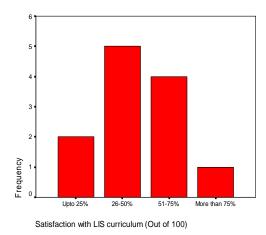
The lowest mean was for written office communication (S=1.83, Y=2.00) followed by Interview skills (S=2.08, J=2.09) and human resource management (S=2.42, Y= 1.84). These results show that both groups were dissatisfied with the coverage of these issues in the PU LIS curricula. The LIS department at PU has now introduced the new compulsory courses of "Personality development and communication skills" and "Human resource management" in semesters 1st and 2nd semester respectively. These efforts should improve the situation.
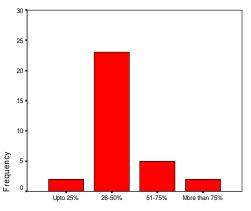
Overall satisfaction of senior and young LIS professionals with the LIS curriculum at PU

The 7 (58.3%) senior LIS professionals/employers (n1=12) were satisfied with the LIS curricula up to 50% and 4 (33.3%) were satisfied 51-75%. Only one senior respondent was satisfied more than 75 % with the LIS curricula. The 25 (78.1%) young LIS professionals (n2=32) were satisfied with the LIS curricula up to 50%, and 5 (15.6%) are satisfied up to 51-75%. Only two young respondents were satisfied more than 75 % with LIS curricula. The following graphs illustrate the figures.

1. Bar chart for seniors' satisfaction n1=12 2.   **Bar chart for young professionals' satisfaction n2=32**

Satisfaction with LIS curriculum (Out of 100)

Satisfaction with LIS curriculum (Out of 100)

3.   Employability Skill

The opinion of senior and young LIS professionals about their employability skills was collected through a five point scale. The mean score for both groups regarding LIS graduate employability skills are given in Table 2. To see the significant of difference between means of opinion independent sample t-test was used.

Table 2: Perceptions of Senior and Young LIS professional' on Employability Skill; Independent Samples t-Test n1=12, n2=32 Y=Young LIS Professionals, S= Seniors LIS professionals

	Opinion on employability	Mean		t	df	Sig. (2-tailed)
		n1=Seniors	n2=Young			
1	Presentation Skills	4.5000	4.0313	1.324	42	.193
2	Good academic record	4.1667	3.8750	1.214	42	.232
3	Good interview skills	4.3333	4.1875	.345	42	.732
4	Team work	4.3333	4.1563	.591	42	.558
5	Problem solving aptitude	4.3333	3.8125	1.163	42	.251
6	Good report writing skills	4.3333	3.8438	1.129	42	.265
7	IT skills	4.2500	4.3750	-.333	42	.741
8	Online searching skills	4.1667	4.2188	-.128	42	.899
9	Friendly attitude	4.0833	3.6563	1.054	42	.298
10	Learning skills	4.2500	4.1250	.400	42	.691
11	Time Management	4.1667	4.0625	.289	42	.774
12	Achieving professional goals	4.0909	4.3750	-1.013	42	.317
13	Plan and organize independently	4.0833	3.9375	.364	42	.718

Note: **1-** Strongly Disagree **2-** Disagree **3-**Just OK **4-** Agree **5-** Strongly Agree

The results of independent sample t- test show that there is no significant difference (at the alpha level $\alpha=0.05$) among the means of the opinion for both groups. The results illustrate that the opinion of both professional groups (seniors and young) concerning different aspects of employability skills i.e. presentation skills, good academic record, interview skills, team work, problem solving aptitude, report writing skills, IT skills, online searching skills, friendly attitude, learning skills, time management, achieving professional goals and plan & organize independently are not significantly different. Therefore the opinions of seniors and the young professionals were the same for above mentioned employability skills.

Both the groups were of the view that above mentioned skills are very important for LIS professionals to search and maintain good jobs in a competitive information market place. The high mean (4.5) of presentation skills shows that this skill was very important for senior LIS professionals/employers to provide a good job in this service oriented profession. The other important skills in the seniors' opinion were interview skills, team work, problem solving aptitude and report writing skills which the same mean (4.33). According to the young professionals' point of view IT skills (Mean=4.375) were more important to enhance employability. This is good sign that seniors and young LIS professionals are well aware of employability skills for LIS graduates and have the same opinion of them.

4.   Young LIS professional's satisfaction level

The opinion of young LIS professionals about their satisfaction level of different aspects of the MLIS programme and their parent department (Dept. of LIS PU) was collected through a five point scale and the results are shown in Table 3 below.

Table 3:   General findings of young LIS professional' satisfaction level

	Attributes	Mean	SD
1	Teaching methodology	2.6250	.55358
2	No. of teachers	2.8125	.82060
3	Guest lectures are arranged	2.2813	.85135
4	Class environment is encouraging to learn	2.4063	.79755
5	Relevant texts are available in English Language	3.5000	.70763
6	Optional courses are offered on students' demand	2.9375	1.26841
7	Internet and Lab facilities	2.6250	.79312
8	Information in the contents of Courses is sufficient	3.0313	.89747
9	IT/information courses serve the market needs	2.3438	.74528
10	Research facilities are sufficient for students	3.4688	.71922
11	Internship duration	2.8438	.95409

Note: 1-Highly Dissatisfied **2-**Dissatisfied   **3-**Just OK **4-**Satisfied **5-**Highly Satisfied

The satisfaction level for "Relevant texts are available in English Language" remained highest (Average=3.50, S.D=0.70) followed by Research facilities (Average=3.47, S.D=0.72) and Information in the contents of Courses is sufficient (Average=3.03, S.D=0.89). The Satisfaction level of respondents remained lowest about "Guest lecturers are arranged" (Average=2.28, S.D=0.85), followed by IT/information courses that serve the market needs (Average=2.34, S.D=0.74) and Class environment (Average=2.41, S.D=0.79). The satisfaction level of young professionals for teaching methodology and Internet and Lab facilities remained the same (Average=2.6250).

The young LIS graduates were also dissatisfied with the question" Optional courses are offered on students' demand" (Average=2.94, S.D=1.27) followed by "Internship duration" (Average=2.84, S.D=0.95) and "No. of teachers" (Average=2.81, S.D=0.82).

5.   Problems with the MLIS curriculum and employability

There are problems faced by senior LIS professionals in the process of recruitment and for young professionals in job searching and the practicality of performing library functions. These problems affect the employability of LIS graduates. Table 4 below includes data on this and problems in LIS curricula

Table 4:   Problems mentioned by LIS young and senior professionals about curricula and employability skill for LIS graduates n1=12 n2=32

Sr.	Problems	Frequencies	
		Seniors	**Young LIS professionals**
1	More emphasis on theoretical perspective	1	3
2	Poor interpersonal skills	2	6
3	Weak presentation skills	5	3
4	Not Proficient with English language (spoken and written)	5	18
5	No knowledge of written office communication	5	16
6	Haven't interviewing skills	4	15
7	Not familiar with database management	4	13
8	Not aware of advance library Softwares	6	10
9	Lack of online searching skills/ IT skills	3	8
10	Lack leadership skills	5	5
11	Bureaucratic attitude/ Not customer focused	3	-
12	Lack of motivation in providing services	2	-
13	Research skills are not developed	1	3
14	Join profession for job not for professional commitment	2	-
15	Curricula not properly implemented	2	-
16	Lack of specialized trained staff	3	6
17	Experience is required for first job	-	3
18	LIS professionals are not part of decision making	1	-

The most common problems are communication, IT applications, management, lack of motivated professionals and implementation of the curriculum. Senior professionals complained that young professionals have poor communication skills and are not proficient with English language (Frequency=5). They also criticized young professionals' lack of management skills and knowledge of IT and modern library software (Frequency=6).

The young professionals (n2=18) were critical that they were not proficient with English language, had not knowledge of written office communication (n2=16) and had not learnt

interviewing skills in their curriculum (n2=15) and they had to suffer due to the lack of these skills. Thirteen young professionals reported they were not familiar with database management, ten young respondents stated they were not aware of advance library Softwares and three complained that they faced problems of not having experience for first job.

Discussion / Summary of findings

LIS employers surveyed were not satisfied with LIS professionals and have opinion that LIS graduates will have to develop market oriented skills to meet the challenging as well as changing information market place. The young LIS professionals will have to improve their communication skills, problem solving attitude, good knowledge of IT, storage and retrieval of information, presentation skills, proficiency in English language and will have to provide services to customers with motivation and commitment. In addition, the very fact that LIS professionals think that their practical skills are not adequate and they have to face problems because they haven't knowledge "of written office communication, interviewing skills, database management, online searching skills/ IT skills" and duration of internship is also inadequate to perform the library operations effectively.

The above mentioned areas have been covered in the curriculum to a reasonable extent but not properly implemented. The analytical capabilities, decision making skills, technological skills and communication skills are indispensable to enhance the employability of LIS professionals. But the primary challenge for academicians and practitioners is to translate these skills into curricula and its proper implementation to transfer them in students. In our context the main problem is implementation due to non availability of specialized faculty. There are only two PhD teachers in the department. The senior LIS professionals had the opinion that the LIS courses should be taught by both teachers and competent librarians. So the students should be aware of the needs of information market place and develop their capabilities accordingly.

The young LIS graduates were dissatisfied with the question" Optional courses are offered on students' demand" (Average=2.94, S.D=1.27) followed by "Internship duration" (Average=2.84, S.D=0.95) and "No. of teachers" (Average=2.81, S.D=0.82). Malik (2007) described in her study that PU LIS graduate were not satisfied with internship pattern and

duration. She recommended that the practicum/internship should be designed in such a way to bridge the gap between theory and practice and increase the duration of internship.

The following recommendations arise from this study.

General Recommendations

- Senior LIS professionals recommended in the response of open ended question that new courses should be taught in following areas: web searching, database design (desktop and server based), use of online resources and specialized access through free and low paid subscriptions, digitization and indexing digitized material, ICT skills, management skills presentation skills, writing and speaking proficiency, planning and problem solving skills. Training of library software yaz client, Koha, zebra server, web page designing etc. should be the part of curriculum. These areas have been covered in the curriculum to some extent but not properly implemented.

- The courses should be in more flexible way and should be revised after every two years to meet the changing need of information market.

- Not only young professionals but the senior professionals also need to learn new techniques. Learning is ongoing process for all professionals at all levels.

- Young LIS professionals had the opinion that the duration of internship should have increased from eight weeks to sixteen weeks to mix the theoretical and practical skills in the curriculum. The graduates despite having good theoretical knowledge will have to face tough time in actual workplace. The senior LIS professionals recommended that there must be at least 50% faculty from competent practitioners to blend the experience of academician and librarians practically.

- The LIS faculty should have specialized knowledge. The courses should be student focused and they join this profession by choice rather than accidental career and are committed to learn. As Steinberg (1992) points out "No curriculum overhaul, no instructional innovation, no change in school organization…will succeed if students don't come to school interested in and committed to learning" (p. 198).

- Longitudinal case studies should be conducted to evaluate the students and employers needs. There should be regular curriculum audit and gap analysis. There should be career counseling for students and career fairs for both students and employers.

Conclusion

In today's competitive knowledge based economy, the theoretical knowledge of academic subject is not enough for LIS graduate to survive in the information market. The graduates will have to develop market oriented skills to meet the challenging as well as changing needs of employers. They will have to improve their communication skills, problem solving attitude, good knowledge of IT, storage and retrieval of information, presentation skills, proficiency in English language and will have to provide services to customers with motivation and commitment. These features will enhance their employability skills. The curriculum of MLIS in PU should mirror these skills.

Feather's (1991) comments are very suitable to conclude:

> Library and information science is generalist in the sense that their skills are transferable and adaptable. They do, however, have a unique specialism. That specialism lies in the management and provision of information services. The objective, therefore, is to design curriculum in which the theory and practice of that specialism will be taught in such a way that the new entrants to the profession can apply them in whatever context s/he choose to work (p. 20).

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APPENDIX

- **YOUNG LIS PROFESSIONAL QUESTIONNAIRE**
- **SENIOR LIS PROFESSIONAL QUESTIONNAIRE**
http://www.ifla.org/IV/ifla74/papers/123-Warraich-questionnaire-en.pdf