

	<p style="text-align: right;">Date : 07/06/2007</p> <p><b>Issues of Quality Assurance (QA) in LIS Higher Education in Pakistan</b></p> <p><b>Dr. Kanwal Ameen</b> Assistant Professor, University of the Punjab, Lahore Pakistan</p>
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### **Abstract**

*The change has been a constant phenomenon in librarianship. However, it has been comparatively very slow in developing countries like Pakistan, where a need to prepare professionals with a blend of traditional and modern skills is still there. Presently, eight universities have been offering regular programs in LISE. However, there are serious quality issues regarding faculty, curriculum development, infrastructure, assessments, etc. in these programs. Nonetheless, for the last few years, the Higher Education Commission (HEC) of Pakistan is pushing hard to induce and maintain the quality of higher education. The paper gives a brief account of the present scenario of post-graduate LIS programs, identifies the basic issues regarding quality library and information studies education (LISE) in Pakistan, and suggests the possible measures for QA in Pakistan. The multi-method approach was used to collect the data for this study based on survey, interviews, focus group, discussions with peers and observation and experience of the author.*

### **Introduction**

Dear Colleagues, I am so delighted to be here and grateful to the Chair for the IFLA Section on Education and Training Program Committee for providing me the opportunity of presenting the state of Pakistan on QA at this prestigious platform. Indeed, organizing this session and choosing this theme is a commendable effort. I would first present an overview of the library and information science education (LISE) in Pakistan followed by the discussion on present status of QA and future prospects in this regard.

know, a number of developments have taken place in the LIS education program from the opening of Melvil Dewey's School of Library Economy in 1887 at Columbia University to the appearing of the Williamson Report in 1923 to the KALIPER (ALISE, 2000) study

findings to the EUCLID conference (2002; 2005) and A-LIEP (2006) Conference. Responding to the information needs of evolving and sophisticated societies, change in the curricula, school names and in the job market has been a constant phenomenon at global level.

However, the pace of change has been varying in different parts of the globe. It has been comparatively very slow in developing countries like Pakistan; where there is still a need to prepare professionals with a blend of traditional and modern skills, since a large number of libraries are traditional. To create the best and balanced combination of needed traditional and modern skills is very challenging for the library and information studies educational (LISE) programs in the country.

Presently, eight universities have been offering regular programs in LISE. However, there are serious quality issues regarding faculty, curriculum development, infrastructure, assessments, etc. in these programs. Hardly any literature has been produced on the issue of QA at the local level. However, studies have been conducted on different aspects of LISE like faculty research contribution (Rehman, 1992), needed competencies (Mahmood, 2003), curriculum developments (Qarshi, 1992), leadership training (Kanwal, 2006), research quality (Haider and Mahmood, 2007) etc. These studies illustrate serious gaps in each area of LISE.

Nonetheless, for the last few years, the Higher Education Commission (HEC) of Pakistan is pushing hard to induce and maintain the quality of higher education. Thus, it is high time to address the QA issues of LISE in Pakistan to prepare compatible professionals who are enabled to serve the competitive market.

### **Objectives of the study**

1. Give a brief account of the present scenario of post-graduate LIS programs
2. Identify the basic issues regarding quality LISE in Pakistan, and
3. Suggest the possible measures for QA in Pakistan

### **Research Design**

The following methods were used to collect data:

1. A telephonic survey
2. Interviews
3. A focus group
4. Discussions with peers

The multi-method approach was used to collect the data for this study based on: (i) a survey conducted over telephone/in-person from the chairpersons/In-charge/ senior faculty members of all schools to collect relevant information (ii) Interviews conducted with faculty members of the two schools that have poor quality reputation (iii) A focus group held at the PU (April 25, 2007) with 14 eminent professionals of the Lahore city to enquire about the market needs (iv) a number of personal communication with peers , and (v) observation and experience of the author

## **LISE in Pakistan: From Certificate program to MPhil leading to PhD**

The LISE was started at the University of the Punjab (PU), Lahore by Asa Don Dickinson in 1915 as a post-graduate certificate program, but admission was also given to undergrad working librarians with the approval of the then VC (A. H. Qarshi, personal communication, May 1, 2007). It was the second university program of library education in the world after Columbia University program of Melvil Dewey. Credit for earning this land mark honor goes to Professor James C. R. Ewing, the Vice-Chancellor of the University of the Punjab (1910-1917). He was American national educated in the U.S. He suggested recruiting a trained librarian to thoroughly arrange the library and to train a class of young men for such work. The suggestion was approved by the Syndicate (Anwar, 1992). Dickenson, who applied for the position in response to an advertisement published in American press, was appointed for one year.

### **Curriculum Development**

#### Pre-independence (Before 1947)

Dickinson devised courses based on theory and practice. He delivered lectures for a month along with his wife, who taught a library handwriting course. After the course work, there was practical training of library work for three months. The courses they taught were as follows: Decimal Classification; Cataloging and Library Handwriting; Book Selection and Acquisition Routines; Library Administration. During his one year stay, Dickenson also authored the first ever textbook on library education, entitled *Punjab Library Primer*, published by the PU in 1916.

#### Post-Independence

The PU program was upgraded into a one year 'Diploma in Library Science' in 1959 with addition of a course on "Reference Service". But, Karachi University had already started a post-graduate Diploma course in 1956 and it was followed by the commencement of a Master's program in 1962. Hence, Karachi University opened the doors towards a master's degree LISE in the country. Presently, seven universities have been offering regular two year MLS programs and one university is offering a long distance program, which has been under criticism since its inception due to quality issues.

### **PhD in Library Science**

The University of Karachi was the first one to introduce a direct PhD program in 1967, by Prof. Abdul Moid, who had returned after getting his doctoral degree from Illinois University in 1964. Five students were registered but the degree was conferred upon only one candidate in 1981. Through the direct doctoral program, Karachi University produced 2, Islamia University in Bahawalpur 1, PU 2 and most recently Sindh University has also awarded 1 degree (the candidates were faculty members of these universities). Among the present academic staff, one faculty member is at PU, seven at Karachi University, 11 at Islamia

University in Bahawalpur, five at Sindh and two at Quetta have been registered in the direct Ph.D program.

HEC has stopped these kinds of doctoral programs in 2006; rather 11 previously PhD registrations at Islamia University of Bahawalpur are also at risk. HEC has asked for the commencement of regular “MPhil leading to PhD” programs following American pattern only, provided if minimum two permanent PhD faculty members and other facilities are available in the school. PU has taken the lead in offering such a program in 2005 following the HEC instructions and regulations regarding quality assurance. Ten seats were allocated for each new MPhil session. It comprises of two-semester course work, and on its successful completion leads into Mphil or PhD course work followed by research thesis, depending on the CGPA of the students. The PU program has established its worth in quite a short span of time by fully adhering to the HEC requirements. In a feedback study, students described the course work as being very rewarding. University of Sindh has also started such a program in 2007, but only six students passed the test for admission.

### **Output of Schools**

It is estimated that more or less 450 Master students are produced annually by eight LIS schools. There is a significant increase in the enrollment due to the commencement of evening programs in the University of the Punjab and Peshawar. So far, the admissions have been based on merit of their previous grades. From this year, an entry test will be conducted also to double test the eligibility of the new entrants to improve quality of education at PU.

In terms of producing research in lieu of a degree, nearly 860 MLIS theses, 3 MPhil and 6 PhD dissertations have been produced by all schools. Out of ten students of the first batch of PU MPhil leading to PhD program 4 have been admitted to PhD and 4 into MPhil.

### **QA Issues in the Present Scenario**

#### **Defining QA:**

“A program for the systematic monitoring and evaluation of the various aspects of a project, service, or facility to ensure that standards of quality are being met”

*(Merriam-Webster’s Online Dictionary)*

“A voluntary, non-governmental system of evaluation used to protect the public interest and to verify the quality of service provided by member institutions”

*(ALA, 2007)*

A means for controlling QA issues of an educational program is accreditation by some outsider accreditation body. Chernay (1990) states, “Accreditation serves as a mechanism for quality assessment and quality enhancement with quality defined as the effective utilization of resources to achieve appropriate educational objectives”. ALA Standards (1992) for accreditation assess following six major areas: Mission, Goals and Objectives; Curriculum;

Faculty; Students; Administration and Financial Support; and Physical Resources and Facilities, and IFLA (2000) The literature review demonstrates that the issue of standardizing library education grabbed the attention of intelligentsia since the beginning of the 20<sup>th</sup> century. The Williamson Report is referred to as the, “first steps toward standards” by Shera (1972, p. 235). The Report significantly affected the educational scenario in the USA. Later, Europe and other developed countries followed the path to attain quality in library education programs.

The issues of quality have been discussed in the developing and developed Asian countries; also regarding faculty development, research produced curriculum development and so forth. (e.g., Anwar, 1993; Khurshid, 1993; Satija, 1999; 2006; Sarkhel, 2006; Saladyanant, 2006; Makiko, 2006; Haider and Mahmood, 2007) The proceedings of two recent conferences held in Nanyang Technological University, Singapore (A-LIEP, 2006) and Punjabi University, Patiala, India (IALTIS, 2006) present various aspects and suggestions for QA and accreditation of educational programs in the Asian region. However, in practice, to attain QA is a very challenging phenomenon in developing and less developed countries. There is no accreditation body in Pakistan to assess the quality of LISE programs being offered but of the universities only. For the purpose of this paper, the ALA (1992) standards and selected IFLA Guidelines (2000) were used as standards to review the quality status of major parameters of these programs in Pakistan. A survey was conducted over telephone/in- person from the chairpersons/In-charge/ senior faculty members of all schools to collect relevant information. Table 1 shows the results of data followed by the textual analysis, interpretation and comments:

Table 1: QA in LIS Schools

N=8

Standards	Yes	No
Mission statement	0	8
Goals & objectives	5	3
HEC curriculum in 2002, 1998	7,1	0
Curriculum as public document	8	0
Practicum/Internship	6	2
Continuing education	5	3
Regular review of curriculum	8	0
Consultancy	4	4
Sufficient Financial support	3	5

Sufficient Physical facilities	0	8
Access to Internet resources	7	1
Advisory assistance to students	8	0
Standards		Response
Academic staff (full time)	46 *(P=2; ASP=1;AP=27; L=16)	
Part-time faculty	14	
Designated Head of Program	Chairman=2,In-charge=6	
Programs	MA=8; M.Phil Leading to Ph.D=2	
Library resources	Satisfactory	
Available IT resources	Part-time lab=2,Full time=6	
Student/ alumni evaluation of programs	Not practiced in any School	
Building	All need bigger space	

\*P= Professor, ASP= Associate Professor, AP= assistant Professor, L= Lecturer

N= Number of Library Schools in Pakistan

### **Mission statement**

The review of all the schools' websites and their printed handbooks revealed that the devising of written mission statements is still not in vogue in LISE programs. The mission statement developed at PU School and sent to the IT Centre to put it on its website is still pending for downloading after months.

## **Aims, Goals and Objectives**

The five schools have mentioned one or more objectives of their programs. Though, these do not serve as planning tools in the practical sense; rather as worthy mentions in the university handbook. As a matter of fact, the norm of devising mission statements and making them public is only now budding in our organizational culture, specifically in the public sector.

## **Curriculum**

Except one, all universities have implemented the 'HEC Curriculum 2002' during 2004 to 2006, with local changes. It is interesting to note that this curriculum is already outdated and needs revision, yet schools seriously lack the needed human and material resources to implement it in letter and spirit; in the absence of the needed resources, each school integrates the theory, application, and use of technology accordingly. It was specifically recommended by the HEC revision committee that the HEC should provide the required resources and faculty development opportunities to library schools, but no mutual planned concrete steps have been taken in this regard by both schools and HEC.

## **Core Subjects with varied titles**

Considering local conditions, each university has developed its own set of core and optional courses based on HEC curriculum. Following are listed the core courses only being taught under different titles and coverage level:

Classification; Cataloguing; Management of Specific Type of Libraries; Foundation of Librarianship; Library Management and Reference Services; Comparative Classification and Comparative Cataloguing; Theory of Information Science or its component; Research Methods in Librarianship; Literature or Sources of Humanities, Social Sciences, Sciences, etc., Management of Specific types of Libraries; Thesis (Optional). With the dawn of the 21<sup>st</sup> century the courses on Marketing of LIS and IT got specific attention, and most recently the need has been felt for a course on communication skills (focus group, 2007).

All schools got their name changed from "Library Science" to "Library and Information Science" (MLIS) during 1990s, but this change was more cosmetic as the schools still lack in ICT facilities and expert faculty in this area.

## **Curriculum as public document**

Curriculum is provided to students and some schools have included this information in the university's handbook or website. This practice is common in all schools.

## **Practicum/Internship**

The practicum was introduced in 2004 at PU for the duration of eight weeks. The other five universities have just introduced it from 2006 or 2007 with varying duration (4 weeks to 12

weeks). Despite internees' complaints about some librarians' weak input, the students of PU would report this practice as a greatly rewarding learning experience. It is interesting to mention that all libraries do not follow a uniform pattern of training the internees following the instructions of the school. Consequently, the quality of practicum depends on the availability of resources, infrastructure, and the competency of the library staff. To assess the quality of this component, a master research study is being conducted at PU under the supervision of this author based on the survey from the internees.

### **Continuing education**

A number of workshops, seminars, and short-courses are offered by a majority of the schools for the practicing librarians. However, they are not extensive and merely introduce with basics of new developments. Unfortunately, all the schools do not have faculty members well versed in ICT skills and capable of teaching courses like digital library development, knowledge management, etc. Faculty members themselves need extensive refresher courses in certain areas.

### **Regular review of curriculum**

Though all respondents supplied affirmative responses to this inquiry, there has been at least a five to ten year interval since the curriculum at certain schools was revised. It has been due to the non-availability of senior faculty members/experts in new disciplines, lack of faculty development opportunities, as well as poor infrastructure to implement changed curricula and lengthy procedure of curriculum reviewing through different bodies of the universities. Furthermore, some faculty members do not exert themselves to keep abreast with the new developments in their area of specializations. This state would directly hamper the quality of LISE programs at all schools.

To enquire the market needs regarding LIS desired skills to be incorporated in the curriculum, a focus group was held at PU (2007) with eminent professionals of the Lahore city. Almost all 14 participants were of the view that fresh entrants in the field exhibit very weak skills of communication, IT and general IQ and these skills must be sharpened in students. Prof. Malahat K. S. (personal communication, 2007) Chairperson of Karachi school felt the same way and had added a course on communication skills in the curriculum in 2006.

### **Academic staff (full time)**

This is the greatest shortcoming influencing the quality of LISE. The shortage of desired academic staff at senior positions in all schools is a fundamental impediment in the QA. The student-teacher ratio also does not meet standards. There are 46 full time teachers in 8 schools for 450 students. The faculty promotion criterion is not uniform at all universities. The PU has the strictest policy for promotion.

The academic staff is neither sufficient nor demonstrating "research-based competence in the designated teaching areas, technological proficiency... a sustained record of scholarship, and active participation in appropriate professional associations. For teachers of programs at the



professional level, a sustained record of scholarship is expected... (IFLA, 2002)". Adkins and Budd (2006) also argue that to gauge the effectiveness of higher education institutions, we can look at the productivity of faculty members in terms of research produced. An investigation into the research record of the present faculty from 2004 does not present an encouraging picture. Only two faculty members from PU got 17 research papers published internationally and three by other schools faculty and 26 papers were published in 2 local non-refereed journals. There is hardly any research collaboration or exchange between faculty members of different schools.

### **Part-time faculty**

Hiring visiting faculty is an international practice, but two schools are almost dependant on temporary or visiting faculty. Consequently, they are under serious threats concerning quality issues and even the faculty members themselves stated that these schools should be closed, if the present situation persists (personal communication, May 1, 2007).

### **Designated head of program**

Karachi University is the only school headed by a professor (non-PhD) and PU by an associate professor (PhD). The other six are managed by assistant professors as in-charge in the absence of a PhD senior member. The person as in-charge has limited authority and major decisions are taken by the Dean's office. It significantly affects the efficiency, effectiveness and functioning of administration and creates hurdles in QA.

### **Consultancy**

Mostly, faculty members provide consultancy for free to practicing librarians; some faculty members do the paid consultancy for organizations.

### **Advisory assistance to students**

As in the Eastern tradition, alumni and students can easily access their teachers to seek assistance and advice. Teachers, by and large, consider it their moral obligation to assist students in all possible ways.

### **Student and alumni evaluation of programs**

This practice has still not been introduced in the country. However, PU intends to introduce it in the coming year following HEC standards.

### **Library resources**

There are centralized, semi centralized, and decentralized library systems in the university libraries of Pakistan. In semi-centralized system, seminar libraries meet basic reference and curriculum needs of students while in decentralized system, independent libraries besides university central library are attached to schools. These libraries possess an extensive

collection of books along with Internet access to HEC digital databases. PU school library owns a good collection to meet the academic and research needs of its community. However, the physical environment and paraprofessional staff do not meet community expectations.

### **IT and Internet resources**

All schools have now either established their own labs or are sharing other labs on campus to provide students with hands-on experience for learning basic IT skills. The schools have managed to provide access to Internet resources to faculty, students, and researchers. HEC digital library provides free full text access to thousands of databases.

However, the issues of efficiency, speed, access, shortage of equipment, and power supply are threats to the adoption of e-culture. Every summer there is an increasing amount of power shortages which cause damage to the expensive equipment while also decreasing the efficiency of the library's IT system. It is strange that a number of LIS faculty members either do not have their personal email accounts or do not check it regularly. The e-culture is in the nascent and its potential is not exploited fully by students and teachers.

### **Physical facilities**

All schools need more space to offer a quality physical environment for classrooms, IT labs, library and staff. Furthermore, the existing facilities do not meet the quality standards. The ambiance of classrooms, offices, library and labs is generally old fashioned and not lively.

### **Class room teaching aids**

Most of the schools have white/blackboards in the classrooms. Only three schools have multimedia. Teachers rarely use multimedia tools for their regular teaching of classes. The number of students in a session is large (more or less 50); therefore, only chairs are kept in rows in the classrooms without tables. Karachi University School has got sound system in classrooms. PU also got a sound system to use for special lectures and workshops.

### **Areas to be Focused for QA**

Data analysis demonstrates that following areas need to be addressed on priority basis:

- Formulating mission, aims and goals of program in a thoughtful manner
- Regular Curriculum revisions and implementation
- Faculty Strength and student teacher ratio
- Uniformity in: devising core courses; teaching methodology; assessment methods

Infrastructure in respect of:

- Faculty hiring, development and promotion
- Physical facilities: Space, ICT labs, modern teaching aids, physical environment,
- Internal and external quality assurance.

- Cooperation at national and international level

### **The Role of Higher Education Commission (HEC) in QA**

The HEC, set up by the Government of Pakistan in 2002, has taken significant steps to assure quality for higher education in Pakistan in the coming years. It has established a QA Cell that states,

The need to develop a culture of evaluation is inseparable from the concept of quality... Both internal self evaluation and external review are vital components of any well-developed quality assurance system.

It is absolutely critical to monitor and regulate growth of sub-standard institutions of higher learning. A comprehensive multi-level mechanism of accreditation is to be developed to ensure provision of quality education. Accreditation needs to occur at the department or program level, as well as the Institutional level.

[\(http://www.hec.gov.pk/new/QualityAssurance/\)](http://www.hec.gov.pk/new/QualityAssurance/)

HEC has established:

- ‘QA Cell’ in HEC
- Quality Enhancement Cell (QEC) at all Universities
- Programs, grants, scholarship for research, faculty development, collaboration and training etc.
- HEC Digital Library

The HEC has established a Quality Enhancement Cell (QEC) in universities to introduce and implement the procedures of the *Self-assessment Manual* (HEC, n.d). This manual also gives eight major criterion subdivided into related standards to be achieved. The Cell at PU is aggressively working in this direction and workshops have been conducted to help in developing policies and procedures, following the manual, maintain or improve quality. This author is the convener of the departmental committee of QA and has prepared a report on the prevailing status and future plans regarding QA while mentioning the prerequisites to improve the quality.

Then, the HEC has given incentives to promote research, acquire foreign faculty, funds for workshops and conferences, and granting scholarship to go abroad to present research or do postgraduate research. It shows the deep concern of HEC regarding QA. The quality of research is a special focus and HEC has developed a zero-tolerance policy for plagiarism. The vice-chancellor of PU has announced the incentive grant in 2007 of Rs. 50,000/ for a paper published in a journal with Impact Factor and Rs. 25,000 for a paper published in any HEC recognized journal to promote scholarship. The inventory of demands regarding the up gradation of infrastructure has also been sought by the administration.

## **HEC National Digital Library**

Through this project the HEC has launched a unique program “to provide researchers within public and private universities in Pakistan and non-profit research and development organizations with access to international scholarly literature based on electronic (online) delivery, providing access to high quality, peer-reviewed journals, databases and articles across a wide range of disciplines”

([http://www.hec.gov.pk/new/eReforms/Digital\\_Libraries.htm](http://www.hec.gov.pk/new/eReforms/Digital_Libraries.htm)).

## **Barriers in QA**

- Cultural and behavioral
- Procedural (Red tapism)
- Political dynamics
- Lack of sound strategic planning
- Lack of understanding among HEC, university administration and academic staff

However, establishing the culture and systems for internal and external, quantitative and qualitative assessment is not easy and will take its due time, specifically in a society like Pakistan where the tradition of implying political influences, vested interests on the universities’ set ups and lack of strategic planning is deep rooted. Furthermore, though the government has allocated huge grants for the higher education, she has not been able to change the bureaucratic mindset of following too many formalities and mistrust. This mindset does not facilitate the timely approval of different projects and plans. On the other hand, it is also true that faculty members are not skilled enough in making appealing plans for funding projects.

## **Suggestions**

- To assure quality, all schools should follow the HEC standards beginning with the formulation of mission and goals of programs. These should be formulated considering the local present and future professional scenario.
- HEC and all other sources should be exploited following the required procedures, for better physical facilities and development. University administration and LIS faculty needs to be more aggressively utilize the existing opportunities.
- More collaboration among different library schools needs to be developed to share knowledge and skills. Better-developed schools need to help less developed ones through HEC programs. The HEC has funds for this kind of faculty exchange.
- India is geographically very close to Pakistan and not expensive to visit, and a number of eminent scholars are contributing in the LISE and literature there. Both countries share common issues regarding quality. It is really sad that despite all claims for friendship from both sides, it is still hard and risky to visit each other’s country because of procedural hazards and complications regarding visas and traveling conditions. More academic and research collaboration may help to improve the quality of LISE on both sides of border.
- The procedure of curriculum revision should be efficient and regular

- Alumni and student evaluation must be introduced to improve the quality.
- A uniform assessment method is also important to maintain the quality.
- The faculty needs to fully exploit available electronic resources for their instruction and research purposes and explore faculty development opportunities.

## Conclusion

The literature reviewed, data collected, discussions with peers, personal experience, and observation reveals that the issues regarding QA are very much similar with other countries in the region, specifically with India. Nonetheless, there is growing awareness regarding quality and a wave of healthy competition among schools is rising. The need for formal, external, and internal assessment strategies is felt and is in the suggestive phase. There are more opportunities available within and outside the country for higher education and research. More funds are there for physical facilities and collective development. Still, much more needs to be done to ensure quality. It is assumed that the “Mphil leading to PhD” programs will meet the future needs of quality faculty members. HEC incentives will also play role in meeting quality assurance. It is suggested that exploring existing opportunities, more sharing and collaboration among all schools within and outside country in all possible manners may lead to quality assurance in LISE programs.

## REFERENCES

- Adkins, D. & Budd, J (2006). Scholarly productivity of U.S. LIS faculty. *Library & information Science Research*, 28, 374-389.
- ALIEP (2006). Asia-Pacific Conference Proceedings on Library and Information Education and Practice: Preparing Information Professionals for Leadership in the New Age, Nanyang Technological University, Singapore. 3-6 April, 2006.
- Ameen, K. (2006). Challenges of Preparing LIS Professionals for Leadership Roles in Pakistan . *Journal of Education in Library and Information Science* 47 (2), 200-217
- American Library Association (1992). Standards for Accreditation of Master's Programs in Library and Information Studies . Retrieved on April 15, 2007 from <http://www.ala.org/ala/accreditation/accredstandards/standards.htm>.
- Anwar, M. A. (1990). The Pioneers: Asa Don Dickinson. *Third World Libraries*, 1(2), 7-15.
- Anwar, M. A. (1992). State of the library profession in Pakistan: From celebration to reality. In Sajjad ur Rehman et al. (Eds.). *Library education in Pakistan: Past, present and future* (pp. vii-xx). Lahore: PULSAA.
- ALISE (Association for Library and Information Science Education), Kaliper Advisory Committee (2000). *Educating library and information Science professionals for a new century: The KALIPER report*. Reston, Virginia.

- Chernay, Gloria (1990). *Accreditation and the Role of the Council on Postsecondary Accreditation*. Washington, DC: The Council on Postsecondary Accreditation, p. 3.
- EUCLID Conference (2002). *Restructuring and adapting to European standards: overcoming regional variations in needs and interests in education for LIS*. (Wednesday 16 - Friday 18 October 2002). Retrieved on April 10, 2007 from [http://euclid.hio.no/files/pdf/thessaloniki\\_conference.pdf](http://euclid.hio.no/files/pdf/thessaloniki_conference.pdf).
- EUCLID Working Conference. (2005). *Library and Information Science Education in Europe: Joint Curriculum Development and Bologna Perspectives*. Copenhagen, Denmark: Royal School of Library and Information Science.
- Haider, S. J & Mehmood, K (2007). Mphil and PhD library and information science research in Pakistan: an evaluation. *Library Review*, 56(5), 407-417.
- IATLIS National Conference Proceedings. (2006). Building curriculum with a difference: A vision for LIS education in the 21<sup>st</sup> century. Patiala: Punjabi University, 23-25 November 2006.
- International Federation of Library Associations and Institutions (2002). *Guidelines for Professional Library/Information Educational Programs - 2000*. Retrieved March 15, 2007, from <http://www.ifla.org/VII/s23/bulletin/guidelines.htm#1>
- Khurshid, A. (1992). Library education in Pakistan: Concerns, issues and practices. In Sajjad ur Rehman, Abdus Sattar Chaudhry & Afzal Haq Qarshi (Eds.). *Library education in Pakistan: Past, present and future* (pp.11-28). Lahore: PULSAA.
- Makiko, M. (2006). Trends and Issues in LIS Education in Asia. *Journal of Education in Library and Information Science* 47 (2), 167-180.
- Mahmood, K. (2003). A comparison between needed competencies of academic librarians and LIS curricula in Pakistan. *The Electronic Library*, 21 (2): 99-109.
- Merriam-Webster's online dictionary*. (n.d). Springfield, MA: Merriam -Webster. Retrieved on May 1, 2007 from <http://mw1.merriam-webster.com/dictionary/Quality%20assurance>.
- Pakistan, Higher Education Commission (2002). *Revised curriculum for B.A./BLIS/MLIS*. Retrieved April 8, 2007 from [http://www.hec.gov.pk/new/AcademicAffairs/Curriculum\\_Revision/download/Curriculms\\_pdf/BA\\_BLIS\\_MLIS.pdf](http://www.hec.gov.pk/new/AcademicAffairs/Curriculum_Revision/download/Curriculms_pdf/BA_BLIS_MLIS.pdf).
- Pakistan, Higher Education Commission (2004). HEC National Digital Library. Retrieved March 22, 2007 from <http://www.digitallibrary.edu.pk/>
- Pakistan, Higher Education Commission. (2006). Self assessment manual. Lahore: Quality Enhancement Cell, University of the Punjab.

- Khurshid, A. (2000). *Planning and management of library and information services in Pakistan*. Karachi: Library and Information Services Group.
- Qarshi, A. H. (1992). Development of curriculum at the University of the Punjab: Dickinson's contributions and afterwards. In Sajjad ur Rehman, Abdus Sattar Chaudhry & Afzal Haq Qarshi (Eds.). *Library education in Pakistan: Past, present and future* (pp.77-91). Lahore: PULSAA
- Rehman, S. (1992). Library and Information Science faculty in the Universities of Pakistan: An Appraisal. In Sajjad ur Rehman, Abdus Sattar Chaudhry & Afzal Haq Qarshi (Eds.). *Library education in Pakistan: Past, present and future* (pp.129-149). Lahore: PULSAA
- Saladyanant, T. (2006). Quality assurance of information science program. In A-LIEP (pp.432-435).
- Sarkhel, J.K. (2006). Quality assurance and accreditation of LIS education in Indian Universities: Issues and perspectives. In A-LIEP (pp.427-431).
- Satija, M. P. (1999). Doctoral Research in Library and Information Science in India: Some Observations and Comments. *Libri*, 49, 236-242.
- Satija, M. P. (2006). *Library Education in India at the cross roads*. Paper presented at the XXIII IATLIS National conference-2006 on Building curriculum with a difference: A vision for LIS education in the 21<sup>st</sup> century. In Karisiddappa, C.R. & Kumber, B.D. (Eds.). Punjabi University, Patiala.
- Shera, J. H. (1972). *The foundations of education for librarianship* New York: Becker and Hayes.
- University of the Punjab, department of Library and information science (2007). [Minutes of Curriculum meeting]. Unpublished raw data.