

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

---

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

---

2020

## Enhancing Academic Quality: Viewpoints of Academics

Sajjad Rehman  
rehman05@gmail.com

Reham Al-Issa  
*Kuwait University*, rehamasissa@hotmail.com

Hessah Alasousi  
*Kuwait University*, hessahmlis@gmail.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>



Part of the [Educational Assessment, Evaluation, and Research Commons](#), and the [Library and Information Science Commons](#)

---

Rehman, Sajjad; Al-Issa, Reham; and Alasousi, Hessah, "Enhancing Academic Quality: Viewpoints of Academics" (2020). *Library Philosophy and Practice (e-journal)*. 4193.  
<https://digitalcommons.unl.edu/libphilprac/4193>

# **Enhancing Academic Quality: Viewpoints of Academics**

## **Abstract**

This study examined faculty views and perceptions of the library and information science (LIS) programs of the six member nations of the Gulf Cooperation Council (GCC) in enhancing academic quality using formal assessment. Two focus groups were held in Kuwait and Muscat. In each focus group, nine participants discussed opportunities, practices, possibilities, and mechanics of assessment and assessment-based systems. It was found that these schools were active in assessment, as CILIP conducted extensive assessment in two programs, resulting in accreditation. Faculty members who participated in the focus groups agreed on the value and need of formal assessment. The participants discussed possible forums for assessment and the systems or mechanics it might entail such as accreditation. They had divergent viewpoints about the agency, structure, and enforcement of assessment. The participants agreed on the need for further deliberations on the issue.

**Keywords:** LIS education, academic quality, LIS program assessment, LIS program accreditation.

## **Introduction**

Library and information science (LIS) education has a strong tradition of formal assessment of its academic programs. These programs used assessment under the rubrics of accreditation, self-study, certification, using external consultants, and quality assurance. The ultimate aim was to enhance academic quality in teaching, research, and service. The United States has been a pioneering nation in the graduate studies of LIS. American Library Association (ALA) has been playing a leading role in many professional domains (Chaudhry, Rehman and Majid 2018). ALA conducted formal assessment of the LIS programs, using the system of accreditation. An ALA-accredited degree has been the norm for induction in a professional position in library and information organizations. ALA's Committee on Accreditation has been assessing LIS schools every 6<sup>th</sup> year. For this exercise, intensive assessment was performed for curriculum, faculty, research and publications of faculty, and student body. The latest document about ALA's role and function is available in a 2015 policy document (ALA 2019). Other regional professional associations also undertook formal assessment and recognition of LIS education programs, using the cover of accreditation.

In LIS programs, the need for recognition has been widespread. Different agencies have conducted diverse assessment of the LIS programs worldwide (Mehra, Olson and Ahmad 2011). Many LIS programs have applied quality assurance as an instrument of formal assessment. IFLA's Section on Education and Training (SET) has been active for the last 40 years. The SET has used a model of quality assurance in the European continent (Tammaro 2005; Tammaro 2007). IFLA also published two monographs on quality assurance (Ameen 2007; Miwa and Miyahara 2014). Quality assurance has been applied in different disciplines of business, health, education, etc.

For enforcing quality assurance, the American Society for Quality (ASQ) pleaded planned and systematic activities for a quality system for a product or service. The core values of quality assurance include quality control, transparency, mobility of professionals, and uniformity.

Certification is widely recognized as a formal system of assessment. Approved agencies apply criteria for authenticating professional practice. It is commonly practiced for employment of teachers, health professionals, counsellors, school librarians and many other public service employees. *Business Dictionary* (2017) defined the concept as a formal procedure by which an accredited or authorized person or agency assesses and verifies (and attests in writing by issuing a certificate) the attributes, characteristics, quality, qualification, or status of individuals or organizations, goods or services, procedures or processes, or events or situations, in accordance with established requirements or standards.

A large number of countries in many parts of the world have been according membership or fellowship in librarianship. In the USA, state agencies have been responsible for certifying those who had to pursue a career in a library, media center or school resource center (Dickinson 2005; Woellner 1983).

Most widely used approach for assessment is accreditation. Accreditation is a voluntary system of evaluation of higher education institutions. It is based on self-evaluation and peer-assessment. It is aimed at improving academic quality. In the case of public sector agencies, it serves the purpose of accountability. The process of accreditation implies enhancement of quality of higher education programs. In North America, ALA has been conducting institutional assessment and it has been issuing a list of accredited programs. The number of accredited programs has varied from year-to-year (ALA 2019). Other accrediting agencies have covered other regions in the world, described in a later section.

### **Shift in LIS Education**

Recently a major transition has occurred in the top LIS schools, as many of them joined the iSchools movement. Many deans of the LIS schools have pioneered this forum. The primary feature of the iSchools is multi-disciplinarily, embracing many programs of information and knowledge sciences (Jaeger, Golbeck, Druin and Fleischmann 2010; Wiggins and Sawyer 2012).

A discussion has surrounded the movement of iSchools about the value, relevance and usefulness of accreditation of iSchools. Many iSchools are still pursuing accreditation, as it has been a required degree for employment in libraries. Many iSchools are uncertain about assessment or accreditation options (Chu 2012).

### **Controversy about Accreditation**

Case (2009) discussed ALA's new standards for accreditation and noted that the accredited degree was becoming controversial. Weech (2010) also found that many LIS programs were reconsidering the option of ALA-accreditation. Holey (2016) observed that a uniform degree had posed problems for the ALA accreditation process, and this controversy was intensifying. Shu and Mongeon (2016) discussed how many iSchools have been considering accreditation is un-needed for their graduates. They view that disciplinary identity of iSchools is distinct, as seven of the iSchools have not been using accreditation for their graduates. Wedgeworth (2013) conducted doctoral research and found significant differences between the iSchools and the other LIS schools that offer the ALA-accredited Master's degree. He noted that many additional LIS programs might search for a precise iSchool identity.

### **Role of Academics**

In the process of assessment or accreditation, the faculty's role is manifold. Academic seniors serve on committees, boards or accreditation councils. They assess academic program, using standards or yardsticks. In the process of assessment or accreditation, faculty performance in teaching, research, and service is the primary consideration. As the role of faculty members is recognized in teaching and research, they are rigorously assessed for their performance and conduct. (Morse and Santiago Jr. 2000).

It is understood that faculty is the primary stakeholder in the process of assessment. They have the insight for conceiving needs, developing programs, and designing infrastructure for assessment or accreditation in any nation or region.

## **Context**

In the six member nations of the GCC, three have LIS programs. Many years back, Qatar suspended its program. The UAE's private school was recently founded and this program does not have essential qualifications for its inclusion in an assessment study. Bahrain has never offered any degree program. One of the *only women* programs in Saudi Arabia is a replica of one established university. Its representative failed to establish the credential of an autonomous identify despite repeated requests of contact. The other seven programs are as follows: Saudi Arabia, 4, Muscat, 1; and Kuwait, 2. Seven programs had qualified to be the participants of this study (Chaudhry, Rehman and Majid 2018).

## **Problem**

We have noted a widespread recognition of the value and need of assessment for LIS programs. We felt the need to explore perceptions and views of faculty members about the use and implementation of assessment in the 6-nation forum of the GCC, using the qualitative method of focus groups. We expected that the views and insights of the faculty members would bring forth an open and frank dialogue on the subject for instituting a formal assessment system in the region. We conducted two focus groups in two different countries, hoping that exploring possibilities and prospects comprehensively would cover pertinent issues and challenges.

## **Objectives and Research Questions**

The objective of this study was to examine possibilities, opportunities, and mechanics considered suitable for assessment of LIS programs in the GCC. The study was meant to examine faculty views about the following questions.

1. To investigate desirability of formal assessment in the LIS programs of the GCC region.

2. To examine possibilities and opportunities for assessment in the LIS programs of the region.
3. To seek faculty input about modalities, structure and instruments of assessment in the region.
4. To highlight the challenges and obstacles in implementing assessment programs in the LIS programs of the region and how could these be addressed?

## **Literature Review**

It has been premised that assessment is the core element in all exercise of formal evaluation such as accreditation, quality assurance, certification and similar nomenclature.

### **Professional Forums for Accreditation**

ALA has been in the accreditation business since 1924 when it established its *Board of Education for Librarianship* that started accrediting 5<sup>th</sup> year undergraduate degree after Williamson's Report of 1923. Later, Master's degree became a norm during 40's and 50's, and ALA established Committee on Accreditation that has been functioning with clear guidelines and standards (Chaudhry, Rehman and Majid 2018; Vann 1961).

From the above discussions, it is clear that ALA accredits only graduate programs (Willard and Wilson 2004). The undergraduate degree has maintained significance for induction in professional position in many countries in Europe, West Asia and Australia. ALA's accreditation program, though having global ramifications, has been constrained for limiting itself to the North American continent. LIS schools in other countries and regions felt obliged to develop their own accreditation programs.

IFLA, being an international forum, has been contemplating assessments, using the term *quality assurance* (Tammara 2005; Tammara 2007). IFLA has produced reports and books covering different aspects of *quality assurance* (Miwa and Miyahara 2014). IFLA has been

concerned about maintaining quality in LIS education. It has endorsed a set of guidelines for LIS education (IFLA 2019). The guidelines covered salient aspects of curriculum, faculty, students, support, and instructional facilities.

The Chartered Institute of Library and Information Professionals (CILIP) was established as a national forum for the UK (Broady-Peterson 2006). Later CILIP has served more like an international agency, accrediting academic programs in Europe and in other regions. In the Arabian Peninsula, the Public Authority for Applied Education and Training (PAAET) in Kuwait and Muscat University have used CILIP consultants in their pursuit of accreditation. Details about accreditation prognosis of CILIP are available on its website (CILIP 2019). CILIP has asserted that a CILIP accredited program is the best preparation for professional practice. All programs are assessed using the Professional Knowledge and Skills Base (PKSB), which identifies the core knowledge and skills of the profession. Individual institutions advise on entrance requirements, starting dates and the availability of places. As of 2019, 22 programs were listed on the website including programs in China, Kuwait, and Oman.

Enser (2002) recommended that CILIP needed to extend its scope to cover archives, records and museum sciences. Another significant recommendation was that CILIP needed to consider requirements of lifelong learning of the British government higher education for their meaningful incorporation in the CILIP criteria.

Among other national associations engaged in accreditation is the Australian Library and Information Association (ALIA). This association is unique as it covers technical training diplomas in its scope of programs. It also accredited a diploma program in the neighboring Fiji (ALIA 2019).

Different accrediting bodies have applied distinct criteria they used in the accreditation process. There are, however, common elements found across these provisions, which deal with organizational placement in parent body, environmental milieu, mission and goals, curriculum,

faculty (teaching, research productivity, and professional service), enrollment, employability, resources, etc. Rehman (2012) used same variables, covering LIS programs in the Arabian Peninsula.

Sarkhel (2006) studied 120 Indian universities offering bachelor's degree, 78 Master degree, and another 21 2-year integrated Master degree in library and information science. Additionally, 63 Ph.D. programs were also found. Sarkhel noted that the University Grants Commission (UGC) was responsible for monitoring higher education in India. The UGC had established National Assessment and Accreditation Council (NAAC), which pursued institutional and departmental accreditation. This body had not initiated any activity for the LIS education programs. Singh and Shahid (2010) also stressed that the Indian UGC needed to be proactive in introducing curricular frame and guidelines. In neighboring Pakistan, Rehman (2016) observed that since Higher Education Commission (HEC) of Pakistan had certain leverage on universities in the country, it might be considered as a viable option for assessment. In the other South Asian nation of Bangladesh, Islam and Chowdhury (2006) found that in the absence of formal accreditation, LIS education faced diverse problems of lack of infrastructure, scarcity of reading materials, inadequate faculty, paucity of quality research, lack of jobs, and absence of national policies.

The Association of Southeast Nations (ASEAN) is one of the regions having common characteristics. In this region, studies have covered accreditation opportunities, structure, administration, and implementation scenario (Khoo, Majid and Chaudhry 2003; Majid, Chaudhry, Foo and Logan 2003).

This review has pointed out the significance of assessment for LIS programs. Accreditation appeared to be a global phenomenon for assessment in LIS programs. Many LIS schools in the Asian region are still contemplating to adopt a viable system of assessment, possibly accreditation.

## **Methodology**

In order to have insight of the senior academics in the region, we conducted two focus groups and nine senior academics participated in these discussions in Kuwait and Muscat, Oman.

Deliberations were intensive and valuable. The essence of discussions is presented in the section on focus group deliberations..

- We have used *library and information science (LIS)* as a generic term as a possible substitute of *information studies, information management and information science*.
- Terms *program, school and academic program* have been used interchangeably.
- Term *GCC* is used synonymously with *Arabian Gulf* having six members of the *Gulf Cooperation Council (GCC)*.

## **Two Focus Groups: Qualitative Analysis**

Essence of this study was the conduct of two focus groups. Reports of these groups are as follows:

### **Focus Group I**

The first focus group was conducted at Kuwait University. Nine participants participated in the discussion; five from Kuwait University's Department of Information Studies, two from PAAET's Department of Library and Information Science, and two senior academics who were now working in professional positions.

The participants discussed assessment opportunities and possibilities. One academic noted that globally LIS schools did not conceive accreditation being a basic qualification for the induction of professionals. A significant trend was that a growing number of iSchools were skeptical about the value of accreditation. Quality assurance had been more like a buzzword in professional forums like IFLA. This international forum does not pursue accreditation programs.

A senior academic observed that an assessment scheme should be developed as an official forum. Such a forum needs to discuss specificities of assessment proposals. Accreditation may be

viewed as a viable option. Such a local forum can streamline the accreditation dynamics and peculiarities.

One of the two academic programs in Kuwait has used CILIP for getting academic recognition. This agency serves as a regional forum, extending its assessment programs beyond Europe. They used a skill-based assessment of their curricula. This agency's consultants conducted a formal assessment over a 6-month period. One faculty member from PAAET spearheaded faculty's engagement in the exercise. It was noted that some faculty members had an adverse attitude in some phases of the evaluation. These faculty members were not positive and receptive for assessment by outsiders. They became cynical in their engagements or encounters. Even some of them caused delays when they were expected to provide specific input.

Two members expressed that inbreeding had been practiced, as graduates of these schools earned doctorates from the West and later returned to their alma maters for teaching assignment. This exercise was double-edged and had both pros and cons.

One participant observed that in Kuwait, the Civil Service Commission played a vital role in determining service structures and remunerations of professionals. Their current practices defy the spirit of assessment or accreditation. The Civil Service Commission should be immediately approached for rationalizing their current practices that are unreasonable and irrational for its treatment of LIS professionals who had earned Master's degree.

Regarding the value of assessors, an opinion was expressed that external assessors, used in many information study programs in the GCC, may serve members of an accreditation team. It was noted that a major segment of the information market was related to school media and any assessment should also cater for this segment. There are health information professionals who need to satisfy standards stipulated for this group by respective health information agencies

In general, the participant felt happy about the outcome and noted that this experience was valuable, as external assessors had applied fresh and natural vision and wisdom.

## Focus Group II

We conducted the second focus group in Muscat, Oman on the occasion of Special Library Association (SLA)/Arabian Gulf Chapter's (AGC) conference. Eight academics and one senior professional manager from six GGC nations participated in this focus group. The participants agreed that there was no formal regional accrediting body for their programs.

The participants favored institutional accreditation and noted many problems in realizing this target. One possibility discussed was SLA/AGC, which might provide an institutional venue for accreditation. National bodies may serve as national nodes for possible accreditation or certification. The academics viewed that a Committee may represent all information study programs in the region. This Committee may solicit input about curricula in different education programs. That would help in attaining some degree of quality assurance at the regional level.

An academic from a Saudi university maintained that their program had international accreditation accorded by ABET (Accreditation Board of Engineering and Technology). This required intensive evaluation and enhancement in the computing facilities. This exercise resulted in restructuring of program. With this accreditation they have been able to better capitalize on the job market for their graduates. Based on this exercise, this academic encouraged other participants to use similar initiatives in their academic programs.

Another agency of accreditation used in this region is CILIP. Two academic programs in the region used this agency. It entailed intensive exercise of assessment of different academic aspects of these programs. They viewed that accreditation may motivate faculty members and other stakeholders. It may help in revamping the existing program. It may serve as an opportunity for the LIS graduates. The accreditation may cause change in curricula and other aspects. Then LIS programs may include areas such as ethics and policy development. Additionally, the programs may change the methods they use in teaching. The academics may be engaged in developing documentation for the accrediting team.

There was another view that accreditation might be pursued at the broader level of the information education programs in the Arab world. LIS programs in the region may achieve this by organizing meetings or forums where discussions take place for developing ideas and propositions. It implies that the academic standards for accreditation need adjustments considering local needs. LIS programs need to consider job market that may have peculiar conditions in their application of assessment criteria.

Another view expressed was that in all GCC nations, information education programs are instituted in public sector universities. These universities share the strategic vision held in those national environments. Since Saudi Arabia has many academic programs, this largest bloc has to cater for the national needs and aspirations in that country.

A general understanding prevailed that an academic body should manage a forum that regulates assessment policies, strategies, instruments and infrastructure for holding accreditation or assessment programs. Another understanding was that a regular follow-up was needed where focused discussions would take place. SLA/AGC annual conferences may provide an opportunity for such regular discussions. This may facilitate in instituting a forum that is eventually responsible for meaningful exchange and deliberation.

### **Common Understandings**

We may infer the following understandings from the two focus groups:

1. A regional forum should conduct deliberations about different aspects of assessment or accreditation.
2. External reviewers carry value for developing intensive documentation and engaging stakeholders.
3. Two international agencies have been engaged for accrediting three academic programs.
4. There is always a segment of faculty who resents initiatives of assessment and change.

5. Since public universities finance and administer all academic programs, their policies and strategies prevail.
6. All academic departments do not agree on seeking accreditation.
7. Local job market and idiosyncrasies effect and regulate assessment policies and practices.
8. Academics have different views about different aspects of accreditation and assessment.

## **Discussion**

Focus groups provided valuable insights about assessment and accreditation. A consensus prevailed about the value of assessment in both the focus groups. However, there are different views about possible mechanics and logistics to be applied for implementing assessment.

Many participants were aware of the shift in the LIS education, having ramifications for the old scheme of accreditation. Similar views have been expressed in other studies (Case 2009; Chu 2012; Holey 2016 and Weech 2010). While assessment is a critical factor for change and development, old scheme of accreditation may not be as relevant in the emerging scenario. One LIS program has already used accreditation from an agency specializing in engineering and technology. Times are fast changing and so are the perspectives of the academic of the LIS.

All the respondents wished to have some sort of assessment in place in their parent academic bodies. The variation in views is somehow natural and many personal or professional variables may be the root cause. Differences were expressed around certain aspects. When a regional body for assessment was discussed, names of different professional bodies appeared. A couple of Saudi participants referred to a unit in the Ministry of Higher Education, as they had been using structured systems. PAAET and Muscat University delegates had positive view about their 6-month accreditation experiment with CILIP. They were referring to their positive engagement in the conduct of self-study, developing documentation, visits of consultants, and interviews with different segments of faculty, students, alumni, and university administration. Arabian Gulf

Chapter of the Special Libraries Association (SLA/AGC) is a widely recognized regional body that has been holding national conference for the last 23 years. It is the largest regional forum, but it lacks secretariat or any provision for undertaking any such responsibility. None of the SLA chapters in the US has been engaged in accreditation or certification.

A forum needs to be constituted that is represented by all the schools that are the apparent stakeholders. Issues about agency, experts, duration, and management need to be discussed openly. Challenges are immense, yet resolution should be worthwhile.

Rehman (2012) conducted a detailed review of possible propositions and discussed pros and cons of IFLA in particular. On the side of cons, sensitivities abound about experts, autonomy, local idiosyncrasies, issues, prerogatives, etc. On the pros side it is an internationally recognized forum, as it has dedicated staff and quarters, it already has elaborate guidelines, and it may conveniently work with local professional bodies. LIS programs may become institutional counterparts for accreditation. IFLA, as an organization, is not alien to institutional membership. In order to work out details of this option, stakeholders need to be involved. One possibility is that IFLA may develop specific framework and pools of experts for any region. In the situation of this region, IFLA may work with a regional forum of academics of the region. A model thus developed may be replicated in different regions.

Overall, it emerged from the discussion in both the focus groups that accreditation appeared to be considered with seriousness. This sentiment is consistent with the observations made in the study of Willard and Wilson (2004). However, any such exercise needs to be adjusted in view of local and cultural conditions.

It is realized that an agency is needed if any formal system of assessment or accreditation is to be pursued. It should engage senior academics to draft standards, guidelines, instruments, and processes. Detailed documentation needs to be developed. Appropriate adjustments and

customization would be desirable for regional needs, as proposed in the preceding section. There appears to be a common core of the elements that are to be evaluated in the assessment process. One of the challenges is the formation of pools of experts. The appointment of a member could be for a certain period. A viable possibility is that the team should have some eminent educationists from each region and about as many members might be picked from the international market. This might be a sensitive issue for the academic departments, but the practices of CILIP might be relevant.

Apparently, policies and practices of evaluation vary in the LIS programs. These schools are using evaluation outcomes for improving their academic programs. Three strategies used are accreditation, self-study and external evaluation. It largely varies how different programs may conduct evaluation exercise in terms of objectives, strategies, instruments, outcome and application.

LIS programs need to adopt uniform policies for student intake, acceptance, credit transfer, and employability. Quality assurance requires that there should be common parameters for achieving cross-acceptance of degrees in the region. One possible solution is to introduce systems of accreditation.

The ultimate aim of accreditation is achieving quality in the conduct and management of academic programs. It should cover all the academic aspects of curriculum, faculty, student enrollment, facilities or resources, and management. Accreditation may facilitate continuity in changes and development.

This study may be complemented if face-to-face interviews are conducted with stakeholders from the ranks of students, alumni, faculty and academic administrators. LIS programs in North Africa and many other Middle Eastern countries may have common features. Studies, using

survey method, may cover these programs, bringing fresh insights on the phenomena of assessment or accreditation. Such studies may bring additional information and insights.

## References

- Ameen, Kanwal. "Issues of quality assurance (QA) in LIS higher education in Pakistan." In *World Library and Information Congress*, 19-23, 2007.
- "Australian Library and Information Association." Australian Library and Information Association (ALIA). Accessed August 22, 2019. <https://www.alia.org.au/>
- Broady-Preston, Judith. "CILIP: a twenty-first century association for the information profession?." *Library management* (2006).
- Case, Donald O. "On the controversy regarding proposed changes to ALA standards." *Bulletin of the American Society for Information Science and Technology* 35, no. 6 (2009): 3-3.
- Chaudhry, Abdus Sattar, Sajjad ur Rehman, and Shaheen Majid. "Continuing Assessment." In *Information Education: Imperatives of the Digital Environment*. Noor Publishing, 2018.
- Chu, Heting. "iSchools and non-iSchools in the USA: An examination of their master's programs." *Education for information* 29, no. 1 (2012): 1-17.
- "CILIP Accredited Qualifications - CILIP: the Library and Information Association." CILIP. Accessed August 22, 2019. <https://www.cilip.org.uk/page/qualifications>.
- Dickinson, Gail. *Achieving national board certification for school library media specialists: A study guide*. American Library Association, 2005.
- Enser, Peter. "The role of professional body accreditation in library & information science education in the UK." *Libri* 52, no. 4 (2002): 214-219.
- "Guidelines for Professional Library/Information Educational Programs - 2012." IFLA. Accessed August 22, 2019. <https://www.ifla.org/publications/guidelines-for-professional-libraryinformation-educational-programs-2012>
- Holley, Robert P. "Library culture and the MLIS: the bonds that unite librarianship." *The Bottom Line* (2016).
- Islam, Md, and Mohammed Abu Khaled Chowdhury. "Library and information science education system in Bangladesh: An overall situation." (2006).
- Jaeger, Paul T., Jennifer Golbeck, Allison Druin, and Kenneth R. Fleischmann. "The First Workshop on the Future of School Doctoral Education: Issues, Challenges, and Aspirations." *Journal of Education for Library and Information Science* (2010): 201-208.
- Khoo, Christopher, Shaheen Majid, and Abdus Sattar Chaudhry. "Developing an accreditation system for LIS professional education programmes in Southeast Asia: Issues and perspectives." *Malaysian Journal of Library & Information Science* 8, no. 2 (2003): 131-149.

Majid, Shaheen, Abdus Sattar Chaudhry, S. Foo, and E. Logan. "Accreditation of library and information studies programmes in Southeast Asia: A proposed model." *Singapore Journal of Library & Information Management* 32 (2003): 58-69.

Mehra, Bharat, Hope A. Olson, and Suzana Ahmad. "Integrating diversity across the LIS curriculum: An exploratory study of instructors' perceptions and practices online." *IFLA journal* 37, no. 1 (2011): 39-51.

Miwa, Makiko, and Shizuko Miyahara, eds. *Quality assurance in LIS education: an international and comparative study*. Springer, 2014.

Morse, Jean Avnet, and George Santiago Jr. "Accreditation and faculty working together." *Academe* 86, no. 1 (2000): 30.

Sarkhel, Juran Krishna. 2006. "Quality Assurance and Accreditation of LIS Education in Indian Universities: Issues and Perspectives." In *Proceedings of the Asia-Pacific Conference on Library & Information Education & Practice 2006 (A-LIEP 2006), Singapore, April 3, 2006*, 427-31.

Singapore: School of Communication & Information, Nanyang Technological University.

Shu, Fei, and Phillippe Mongeon. "The evolution of iSchool movement (1988-2013): A bibliometric view." *Education for information* 32, no. 4 (2016): 359-373.

Singh, Joginder, and Syed Mohd Shahid. "Changing needs of library and information science curricula in India." *Library Philosophy and Practice* (2010): 1.

"Standards, Process, Policies, and Procedures (AP3)." ALA, May 1, 2019.  
<http://www.ala.org/educationcareers/accreditedprograms/standards>

Tammaro, Anna Maria. "Report on quality assurance models in LIS programs." *IFLA Education and Training Division* (2005).

Tammaro, A. M. "Performance indicators in library and information science (LIS) education: towards cross-border quality assurance in Europe." Retrieved June 12, 2013. (2007).  
[https://www.academia.edu/765590/Performance\\_indicators\\_in\\_Library\\_and\\_Information\\_science\\_LIS\\_education\\_towards\\_crossborder\\_quality\\_assurance\\_in\\_Europe](https://www.academia.edu/765590/Performance_indicators_in_Library_and_Information_science_LIS_education_towards_crossborder_quality_assurance_in_Europe)

Ur Rehman, Sajjad. "Quality assurance and LIS education in the Gulf Cooperation Council (GCC) countries." *New Library World* 109, no. 7/8 (2008): 366-382.

Ur Rehman, Sajjad. "Accreditation of library and information science programmes in the Gulf Cooperation Council nations." *Journal of librarianship and information science* 44, no. 1 (2012): 65-72.

Ur Rehman, Sajjad. "Prof. Sajjad ur Rehman." *Pakistan Journal of Information Management & Libraries* 17 (2016): R5.

Vann, Sarah K.. "Training for librarianship before 1923 : education for librarianship prior to the publication of Williamson's report on training for library service." (1961).

Wedgeworth, Robert. "Certain Characteristics of iSchools Compared to Other LIS Programs." (2013).

Weech, Terry. "LIS competencies in the digital age: the US and the EU: two views." (2010).

"What Is Certification? Definition and Meaning." BusinessDictionary.com. Accessed January 10, 2017. <http://www.businessdictionary.com/definition/certification.html>.

Wiggins, Andrea, and Steven Sawyer. "Intellectual diversity and the faculty composition of iSchools." *Journal of the American Society for Information Science and Technology* 63, no. 1 (2012): 8-21.

Willard, Patricia, and Concepción S. Wilson. "Australian professional library and information studies education programs: changing structure and content." *Australian Academic & Research Libraries* 35, no. 4 (2004): 273-288.

Woellner, Elizabeth H. *Requirements for Certification [of] Teachers, Counselors, Librarians, Administrators for Elementary Schools, Secondary Schools, Junior Colleges*. 1983-84. The University of Chicago Press, 5801 S. Ellis Ave., Chicago, IL 60637, 1983.