

Building Strong LIS Education: A Call to Global and Local Action

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*- an initiative of the IFLA Education and Training Section (SET),
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and Library Theory and Research (LTR) Section*

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Executive Summary

Economic globalization is transforming the field of Library and Information Science (LIS) through the need for increased interconnections and cross-border sharing of information and resources. Simultaneously, there is increasing mobility and migration of international LIS professionals, students, and faculty. These contemporary changes raise questions about the transferability of LIS credentials in international education, skills, and jobs.

International standards for LIS have never been fully established due to the variance in approaches to education across the globe. While there are limited reciprocal agreements between selected countries (e.g., the U.S. and Canada), these are based on standards emanating from one or more accrediting bodies to which all parties agree. In the case of the U.S. and Canada, the accrediting body is the American Library Association and the degree that is accredited is the Master's in Library and Information Science (MLIS) or equivalent. Outside of this and only a few other agreements, there is very limited standardization or agreement on different educational and professional practice requirements around the world. Furthermore, knowledge about education, certification, accreditation, and professional entry requirements varies from country to country, with varying degrees of quality review. For example, some countries rely on one or two mechanisms for quality review: 1) accreditation of the university rather than an individual department; and 2) oversight of LIS education to more or lesser degrees by a library association. To further compound the problem of international LIS education, there is little information from and about developing countries.

The Building Strong Library and Information Science Education (BSLISE) Working Group of the International Federation of Library Associations and Institutions (IFLA), a joint working group of the Standing Committees of Education and Training, and Library Theory and Research, and the LIS Education in Developing Countries Special Interest Group, is pursuing the development of an international quality assurance (QA) framework that will guide and promote international educational standards in LIS. Its work considers the sociopolitical and technological developments that are inclusive of local and regional contexts. The BSLISE Working Group, in its first phase of research, conducted an international survey to understand the qualification requirements for library and information “professional” practice around the world, inclusive of regional and national contexts.

The survey was designed to examine the following areas: (1) LIS qualification and certification requirements; (2) the definition and meaning of a LIS “professional,” and (3) agencies responsible for determining professional requirements. The survey received 706 responses from 101 countries; the countries with the most responses included the United States, China, South Africa, Brazil, Chile, India, Mexico, Australia, Sudan, and El Salvador. The largest number of responses came from LIS professionals, followed by LIS educators, and authorities validating LIS competencies for professional and other practice. There were more responses from the developing regions of the world, particularly Africa, Asia & Oceania, and Latin America & the Caribbean. The following key findings were identified from the data analysis:

1. A formal undergraduate or graduate degree is required in many countries; however, there is no correspondence/equivalence among degrees; for many programs, there is no international or recognized standard against which they can be benchmarked for transferability or reciprocity.

2. Certification is required in many responding countries; these are local certifications that are not internationally recognized, that is, there is no correspondence/equivalence among certifications; hence, reciprocity becomes an issue, and the local certification practices do not have an international or recognized standard for QA.
3. Many countries have formal local structures/systems for QA (i.e., governmental or higher education accrediting body; professional association; professional charter/council/union, etc.) or regulatory mechanisms; however, other countries may have none.
4. Different LIS professional qualification structures are in place; however, there is insufficient international knowledge about them and they may not always be recognized or understood.
5. Most responses from around the world indicate that certification is not needed for the broader LIS field. In Europe, the situation is mixed.
6. The library field and the broader LIS field may have been, at one time, understood as separate disciplines; however, the evolving nature of librarianship has blurred the boundaries in terms of scopes of practice, skills, and knowledge.

Key recommendations identified from the study are:

1. Identify core and other competencies for transferability and reciprocity.
2. Develop an International framework for the assessment of quality standards in LIS education.
3. Create a local structure where there is none, building on local strengths.
4. Develop an international resource that identifies local structures.
5. Develop a “system” of qualification/ accreditation inclusive of the areas in the broader LIS field.
6. Define and understand what the broader LIS field means and its implications for LIS education and professional development.

It is clear that much work is needed ahead and, after deliberation, the BSLISE plans to take these next steps to:

- Develop an international resource that identifies local structures.
- Develop an international framework for the assessment of quality standards in LIS education.
- Identify core and other competencies for transferability and reciprocity.

Deliberate action is needed at the local, regional, and international levels to build strong LIS education. Additional stakeholders will need to be involved to pursue the specific goals of each key action.

Appropriately educated, adequately trained, continually learning professionals are a requirement for effective and efficient information services.

IFLA Section on Education and Training <https://www.ifla.org/set>

Introduction

As the field of library and information science (LIS) grows increasingly interconnected on account of transborder mobility and international collaborations, the transferability of LIS credentials takes center stage (e.g., Dali & Dilevko, 2007, 2009). The knowledge of qualification and certification requirements becomes paramount for developing credential equivalencies across geographic borders and for QA standards for relevant and meaningful LIS education. Currently, however, there is a very limited understanding of different educational and professional practice requirements around the world, and the amount of comprehensive and vital knowledge about education, certification, accreditation, and professional entry requirements varies widely from country to country; particularly palpable is the lack of information from and about developing countries. There have been past attempts by United Nations Educational, Scientific, and Cultural Organization (UNESCO) and IFLA for comprehensive data collection and curriculum harmonization, but significant results have never been achieved (e.g., Bird, Chu, & Oguz, 2015; Johnson, 2013; Tammaro, 2015; Tammaro & Weech, 2008; Weech & Tammaro, 2012). Today, a substantial effort to remedy the situation is being made by the IFLA Building Strong Library and Information Science Education (BSLISE) Working Group.

BSLISE Working Group emerged after the 2016 IFLA Satellite Meeting as an initiative of the IFLA Section on Education and Training (SET), the LIS Education in Developing Countries Special Interest Group (SIG), and the Section on Library Theory and Research (LTR); today, it includes members from across the globe (Appendix A). As part of its mandate, BSLISE Working Group is working toward the development of an international quality assurance framework that will promote educational standards in LIS, on par with current socio-political and technological developments and inclusive of regional and national contexts. The proposed framework will enable and facilitate the identification of core competencies for LIS professionals that will allow for their mobility across geopolitical contexts.

As a first step toward this goal, in the spring of 2017, BSLISE Working Group conducted an international online survey that was available in six languages (Arabic, Chinese, English, French, Russian, and Spanish). The survey, combining multiple choice and open-ended questions, examined: (1) LIS qualification and certification requirements; (2) the definition and meaning of an LIS “professional”; and (3) agencies tasked with determining professional entry requirements. The survey received 706 responses from 101 countries. Meticulous work has been done to translate responses into English and to develop a uniformed and rigorous coding procedure for data comparability and quality control. Preliminary findings were presented at the IFLA World Library and Information Congress (WLIC) in August 2017, and feedback from the session was integrated into subsequent presentations (see: lisedu.wordpress.com) and research deliberations.

Openness to new mindsets, adaptability and new conceptual thinking are some of the elements required to prevent information professionals from becoming obsolete in a constantly shifting information landscape. Passionate educators are needed who are able to inspire and create an environment from which an innovative new breed of information professional can spring.

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International Context of Quality LIS Education

LIS Education and the Nature of LIS: A Look at Context, Identity, and Practice

An increase in international collaborations and cross-border mobility is bringing to the forefront the issues of LIS credentialing equivalencies and the process of quality assurance (Han, Shi, Li, Wang & Shen, 2014; Tammaro, 2015). LIS represents a generic term defining a field, a discipline, or a specialty that engages in teaching and research related to libraries, information, and documentation (Palmer & Cragin, 2008). In today's digital environments, some institutions have even dropped the "library" element in LIS (Raju, 2015) in order to account for the broader scope of their LIS programs, which can overlap with other disciplinary areas, such as information systems or information technology (IT). Others have forged alliances with such disciplines as computer science or business and management, a convergence which has led to the creation of iSchools (e.g., Burnett & Bonnici, 2006). Due to the significant changes in the LIS field and services, some authors denote misalignments between the LIS core curriculum and professional identity (Lorring, 2007; Wilson & Halpin, 2006). It is important, nevertheless, to think innovatively about both core curricula and competencies, while being responsive and adaptive in developing new and complementary skill sets through a "stretched identity" that meets societal needs in the best possible way at a point in time and history (Linton, 2016; Corral, 2010; Matusiak, Stansbury & Barczyk, 2014).

Globally, LIS shares some common developments throughout the history and development of its programs. In 1925, in the U.S., for example, the establishment of the Minimum Standards for Library Schools (MSLS) shifted librarianship from the apprenticeship-learning model to learning within an educational institution framed by established curricula; this marked a transition from vocation to profession and discipline (Burnett & Bonnici, 2006). The MSLS standards provided a quantitative framework for the assessment of four proposed typologies of library schools at the graduate and undergraduate levels. In Charles C. Williamson's report, *Training for Librarians*, commissioned by the Carnegie Corporation, comparisons were drawn between librarianship and such professions as law and medicine, stressing the importance of not only formulating standards but also enforcing them through a certification board associated with a national body (Lynch, 2008). Although similarities in professionalization and certification in LIS can be found across countries and regions, there are also differences that account for some of the current challenges to the standardization and internationalization of accreditation and certification models globally.

The professionalization of LIS can be understood not as a linear process but as a process that involves constant re-assessment, negotiation, and even re-branding (Alvesson, Ashcraft, & Thomas, 2008). In our technologically driven society, it is becoming increasingly difficult to define the boundaries that distinguish LIS from other cognate disciplines (Cannon, 2017). Technology is changing the way in which society uses ubiquitous information and creates knowledge. In the past, library services and practices largely focused on managing and providing access to print collections. Today, the roles of LIS professionals are much more diverse, complex, and directed to supporting user educational and informational needs in both physical and virtual environments (Chow et al., 2011). While professional identity is still frequently "anchored" in the traditional core values and competencies of librarianship (Huvila et al., 2013), it is nevertheless transforming in response to social and information realities of society and market demands (Mole, Dim & Horsfall, 2017).

IFLA's (2013; 2017) reports on the state of libraries identified the trends currently affecting the global information environment in relation to LIS services, namely: new technologies that expand people's access to information; online education and informal lifelong learning opportunities that encourage the democratization of learning; the monitoring of data that challenge privacy and trust online; the rise of new voices and global citizenship; and the rise of the global information economy that fosters creative opportunities for new economic solutions. In response to these changes, employers are seeking multi-skilled, adaptable LIS graduates and professionals with a variety of "soft" skills such as interpersonal skills, critical/creative thinking, and the ability to work collaboratively, leadership/management skills,

and technical qualifications to complement LIS core professional competencies (Broady-Preston, 2009; Orme, 2008; Bronstein, 2015). The democratization and “emancipation of information users” (De Bruyn, 2007) and the proliferation of data freely generated by technological devices creates new opportunities for the LIS sector, including but not limited to metadata creation and handling; data curation and research management; the digitization of documents, and the management of repositories (Raju, 2015).

In the last decade, LIS programs have responded to the changing environment, both locally and globally, through the development of curricula that foster new skill sets and expertise for their graduates. These changes also open the door to the development of international information management competencies through such opportunities as international online LIS degrees and internships (Myburg & Tammaro, 2013). In academic environments in particular, we notice disciplinary paradigm shifts in the ways of conducting research, which include the rise of e-research, e-science, and digital humanities and generate a vast amount of data; these developments require a new level of support in order to capture, manage, archive, and preserve the data in question (Raju, 2013). To better understand how LIS professionals can be positioned to address these opportunities and transformations, we need to examine the processes that govern LIS programs globally and the types of qualifications that are required from LIS professionals in their respective fields of practice.

Quality Assurance (QA) and the Internationalization of LIS Programs

With increased professional mobility, the question of defining appropriate measures for assessing and comparing the quality of LIS educational programs globally becomes more pressing. Accreditation, however, is a process carried out in a relatively limited number of countries, namely Australia, Canada, New Zealand, the UK, and the U.S. (Dalton & Levison, 2000). Abdullahi and Kajberg’s (2004) study demonstrated that there is a desire to improve programs, to understand the nature of the LIS profession, and to explore ways in which international cooperative schemes can be best utilized.

A generally involves a review process consisting of periodical evaluation, which relies on a combination of self-assessment, a peer expert site visit, and a follow-up report (Tammaro, 2015). In Australia, Canada, the UK, and the U.S., professional associations take on the task of program evaluation whereas in Africa, Asia, Europe, and Latin America, governments play a major role (Abdullahi, Kajberg, & Virkus, 2007). A number of professional bodies, such as the American Library Association (ALA) and the Australian Library and Information Association (ALIA), define their accreditation requisites through a first-level approach, that is, the identification of core competencies based on established standards. Others, such as the Chartered Institute of Library and Information Professionals (CILIP), use a multi-level approach whereby level two consists of identifying an individual’s suitability for practice through a professional development report and portfolio, and level three involves keeping track of Continuous Professional Development (CPD) (Tammaro, 2005). The internationalization of curricula can range from offering a course in another language to transnational courses or joint programs/degrees set across two different countries (Abdullahi, 2015).

The QA of international trade, regulated by the World Trade Organization (WTO), specifically by the General Agreement on Trade in Services (GATS), consists of a multilateral framework with general rules of conduct, including education. Defining standards of the quality of education and the recognition of qualifications based on a demand-driven market is risky. A number of non-governmental organizations (e.g., UNESCO, the Organization for Economic Cooperation and Development [OECD]), inter-governmental initiatives (e.g., the Bologna Process within the European Union [EU]), and professional organizations (e.g., the European Association for Library and Information Education and Research [EUCLID]) have formulated guidelines and codes to improve the transparency of programs and qualifications, to encourage collaboration and cooperation between countries, and to foster the harmonization of programs. Some recent initiatives, such as those undertaken by the Association for Library and Information Science Education (ALISE), the Association for Information Science & Technology (ASIS&T), and the iSchool member institutions, provide additional opportunities for discussing accreditation and the internationalization of LIS credentials at both local and global levels (Ross et al., 2016). Assessing the quality of programs through compatible QA systems is a critical element of the process whose purpose can range from facilitating employability to delineating specializations.

The Work of IFLA and its Education and Training Section (SET): Toward the Internationalization of LIS Education

IFLA and SET have actively supported the internationalization and QA of LIS education for a long time, including the established criteria for the global equivalency of LIS qualifications (Dalton & Levinson, 2000; Tammaro, 2005; Tammaro, 2006). They 2008 study by Tammaro & Weech, titled “Feasibility of Guidelines for Equivalency and Recognition of LIS Qualifications,” found that, with the exception of countries adopting the Anglo-American model, the bachelor’s degree appears to be the prevalent degree, sufficient for entering the profession. The study strongly recommended that a professional or national association be involved in the accreditation process, using a model based on learning outcomes. The International Guidelines for Equivalency and Reciprocity of Qualifications for LIS Professionals, developed by Weech and Tammaro (2009), provide a “quality”-based model that includes such dimensions such as curriculum, learning, and teaching and learning outcomes. It is a negotiated process that allows for trust building among LIS schools and helps to foster collaboration for QA globally. However, the challenge lies in adapting these concepts effectively to local settings (Abdullahi, 2015).

A Look at Qualifications in the LIS Profession

To help navigate the landscape of LIS education worldwide, the *World Guide to Library and Information Science Education* (Schniederjurgan, 2007) provides a listing of over 900 institutions and their LIS programs.¹ Some interesting trends tied to the research literature can be noted by continent (Burtis, Hubbard & Lotts, 2010).

- In the Gulf Cooperation Council (GCC) countries, four countries offered undergraduate LIS programs (Kuwait, Oman, Qatar, and Saudi Arabia), with three countries (Kuwait, Oman, Saudi Arabia) offering a master’s degree (Rehman, 2008).
- There are currently over 62 programs accredited by the ALA in the U.S., Puerto Rico, and Canada, including eight programs in Canada and a program at the University of Puerto Rico (American Library Association, 2018).
- In Africa, 50 LIS schools offer LIS credentials from the certificate to the doctoral level (Ocholla, 2007). In central/southern/eastern Africa, 75 undergraduate, 26 master’s, and 16 doctoral programs were counted (Ocholla & Bothma, 2007).
- In China, there were over 50 schools of information science and/or information management. Japan and South Korea offered LIS programs at both the graduate and undergraduate level (Ueda et al., 2005; Park 2004).
- Six of the 10 member countries of the Association of Southeast Asian Nations (ASEAN) offered LIS education (Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam). Four of the eight member countries of the South Asian Association for Regional Cooperation (SAARC) offered LIS education (India, Pakistan, Bangladesh, and Sri Lanka) at the certificate, undergraduate, and graduate level.
- European LIS education consisted of theoretical studies (undergraduate/graduate) and training for technical library work streams. Work had been done to unify LIS education standards across all EU members, as mediated by the Bologna Process, especially for new member states (Juznic & Badovinac, 2005) and to develop a common conceptual framework for defining core elements in the LIS curriculum as a basis for enhancing the mobility of the Bologna Process (Lorrington & Kajberg, 2005).
- Australia and New Zealand offer 14 programs at the undergraduate and graduate (master’s and doctoral) levels, in addition to certificate programs through vocational institutions.
- A review of the data available on the EDICIC (2017) website identified over 70 institutions that offer LIS programs in Latin America and the Caribbean, which account for over 100 programs at the undergraduate level and more than 50 Master’s degree programs. Brazil accounts for 34 of these graduate programs (CAPES).

¹ Countries with no evidence of LIS education include: Brunei, Cambodia, Myanmar, Laos Afghanistan, Bhutan, Maldives and Nepal Angola, Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Congo, Djibouti, Equatorial Guinea, Eritrea, Gambia, Guinea Bissau, Lesotho, Liberia, Madagascar, Mauritania, Mozambique, Rwanda, Principe, Seychelles, Somalia, Swaziland, Togo, Tajikistan, Turkmenistan and Uzbekistan Andorra, Armenia, Cyprus, Georgia, Liechtenstein, Luxembourg, Monaco, San Marino, North Korean, East Timor, Kiribati, Marshall Islands, Micronesia, Nauru, Tonga and Tuvalu, Samoa, Solomon Islands, and Vanuatu (Schniederjurgan, 2007)

The application of theory to practice is also a critical element of LIS programs. Opportunities for international internships, practicums, and field experiences in different forms are particularly valuable because they allow students to gain intercultural experience and sensitivity, both of which are highly sought-after skills in the current job market (Abdullahi, Kajbert, & Virkus, 2007). Experiential learning in the form of end-of-program assessment (EPA) and capstone projects has also been associated with early career success (Rathbun-Grubb, 2016). Other types of “field” experiences, such as apprenticeships, mentorships, and service learning, also provide valuable and transformative learning opportunities for students, more so if conducted in an international setting (Cooper, 2013; Ball, 2008; Lacy & Copeland, 2013). A large-scale study by Bird, Chu, and Oguz (2015), involving 68 countries, discovered that internships in LIS programs are often required by the program or by law. Comparative studies of LIS programs across different countries show striking similarities in practicum and internship organization, as well as in the attitudes that students and employers have toward them (Pymm & Juznic, 2014). International opportunities, such as those offered at the School of Information at San José State University, can extend to virtual global projects, international LIS internships, international project-based learning, faculty professional development abroad, and international research collaborations (Hirsh et al., 2015). These learning and educational experiences become valuable components in accredited LIS programs.

Professional Development and Continuing Education: Building Resilient and Agile LIS Professionals

Moving forward, the LIS profession needs a new generation of innovative and engaged professionals to take the lead in their own CPD. Lifelong learning is key to being not only responsive but also proactive amid the market demands and societal needs. Professional associations, international associations, and LIS schools are well positioned to play a critical role in anticipating, framing, and motivating professionals to respond and adapt to changes in the profession, shaping its future (Bailey, 2016; Rafiq, Jabeen & Arif, 2017).



Image by Clara M. Chu. *The Maureen and Mike Mansfield Library, University of Montana (United States)*

Methodology

The BSLISE Working Group conducted an international, multilingual online survey to understand the qualification requirements for library and information “professional” practice around the world, inclusive of regional and national contexts. An online questionnaire (see Appendix B) was administered in March-May, 2017, and examined the following areas: (1) LIS qualification and certification requirements; (2) the definition and meaning of a LIS “professional”; and (3) agencies responsible for determining professional requirements. To ensure the broad reach and accessible participation, the survey was made available online in six of the seven IFLA official languages (Arabic, Chinese, English, French, Russian, and Spanish). Respondents were encouraged to respond in their chosen language. German translation was not provided because the team did not have easy access to a German language speaker and because our professional experiences show that Germans in the LIS field have a working knowledge of English. While the online mode ensured 24/7 access and a broad reach, respondents with connectivity issues were able to request and receive a print version of the questionnaire via email. As an international research team, we were able to access regional electronic discussion/distribution lists that otherwise would not be easily identifiable to those outside of the region. Invitations to participate in the survey were distributed online in various parts of the world and at regional conferences in the Arabian Gulf and Latin America. Online reminders were sent at two-week intervals after the original invitation, and the survey was extended for a total of 6 weeks. The preliminary data review showed that few European countries participated, and non-participating European countries were later addressed with a targeted survey invitation in May 2017.

The online questionnaire was composed of 12 questions, which included both multiple-choice and open-ended questions (see Appendix B). The instrument was deliberately short to increase the response rate and focused on gathering baseline data from countries worldwide, representing each of IFLA’s 10 regions and allowing for comparative analysis. Q1-Q3 sought demographic information, including the professional title, the institutional name, and the respondent’s country. Q4 and Q5 asked for the “professional qualification” needed to practice either as a librarian (i.e., fully credentialed and professional librarian) or a library and information professional (i.e., not “professional” librarian, library assistant, etc.). Q6 and Q7 sought to identify what professional certification was recognized as sufficient for the respondent to work as either a librarian or a library and information professional. Q8 was an open-ended question that allowed respondents to describe who was considered an information professional in greater detail. Q9 asked respondents to identify which authority officially determined the professional entry requirements for the LIS field. Q10 asked if there was any legislation or policy that mandated minimum qualifications for librarians (e.g., Peruvian law (El Congreso de la República de Peru). Q11 inquired whether there was any legislation or policy that mandated that librarians have a professional certificate (e.g., the certification of public librarians in New York state of the U. S. (New York State Library, n.d.). Q12 allowed respondents to enter additional comments or information related to LIS qualifications in their country or region.

The regional and language expertise of team members was invaluable in developing the survey and interpreting responses to ensure that differences were understood and clearly presented with regard to terminology and educational structures (e.g., post-secondary education levels of study and admission requirements) and entities that shape LIS “professional” entry requirements (e.g., professional organizations, policies, etc.). Qualitative responses (Q8 and Q12) were coded to allow for frequency counts for general, regional, and/or country trends.

The data were coded using the following regions identified by IFLA (“IFLA Congress Regions as determined by the governing board (GB) at the GB meetings in March 2006 (IFLA, 2006): Africa, Asia & Oceania, Europe, Latin America & the Caribbean, and North America.

The BSLISE Working Group presented the survey’s preliminary findings at an open session at the IFLA WLIC in Wroclaw, Poland, on August 24, 2017, and input was sought from participating delegates, including LIS practitioners, educators, and other stakeholders. After the presentation and discussion of

the preliminary findings at the 2017 IFLA World Congress, it was decided that the data would best be analyzed on the basis of individual countries. The data for each country were reviewed to obtain the actual practices/conditions for professional recognition. Subsequently, additional presentations were made, and feedback was considered in the analysis of the survey's methodology, findings, and recommendations.

In total, 706 responses were received from 101 countries. In the tables below, n^1 refers to the total number of countries from which responses were received (101), and n^2 indicates the total number of responses (706) that were received. In other words, multiple responses were received from some countries; see Table 2.

When the responses were collated, it was evident that, in a number of cases, contradictory answers were received from the same country, specifically in relation to the requirements defining a professional librarian, legal questions, and other requirements. In these cases, the members of the research team tried to verify the contradictory information using some of the following channels: their professional networks, library associations, deans/directors of LIS Schools in respective countries, other individuals with requisite knowledge, or web data mining. These actions often resulted in resolving contradictions or receiving corroborative information and thus provided more reliable results. In other cases, however, these methods were not successful and no definitive answer is available in our report. This also explains why, in some tables below, the n value is lower than 101. While the data set may not be complete, the gaps in questions can be addressed in the future.

In this questionnaire, dichotomous questions (e.g., yes/no questions) generally reflect a statutory or legal situation in a specific country and, in these cases, there can only be a maximum of 101 responses (n_1). In multiple-choice questions, with multiple responses allowed, n can obviously be higher but should always be at least 101 (n_1) because all questions were required. For multiple-choice questions with only one response allowed, tables below reflect only the prevalent practice of the country, and no attempt is made to list all the possible practices within a country.



Image by Chris Wong. *Surrey Public Library (Canada)*
<https://www.instagram.com/wongski/>

Findings and Discussion

The survey findings (see Appendix B) provide insights into the breadth of practices, the nature of qualifications, and related matters of the LIS profession worldwide. Each of the below headings refers to a thematic area of the survey and follows the sequence of survey questions. Q2 was optional and, therefore, not reported.

Survey Responses – Respondents’ Background, Countries, and Regions

The survey had a strong response worldwide and included responses from 101 countries (n_1) and 706 respondents (n_2). Multiple responses were allowed for Q1 about the role/capacity in which respondents answered the survey, and a small number of respondents selected two or more options; this resulted in a total of 808 responses (n_3). The largest number of responses came from LIS professionals (412 or 51%), followed by LIS educators (185 or 22.9%); these two groups likely have the greatest interest in the matters of qualification, certification, and competence validation (see Table 1). The 48 respondents who identified as “Other” included LIS students, unemployed, or retired individuals.

Table 1	
<i>Survey Respondents (Q1)</i>	
<u>Capacity</u>	<u>Responses* (%)</u>
LIS professional	412 (51%)
LIS educator	185 (22.9%)
Professional association officer	59 (7.3%)
LIS program head/dean/director	57 (7.1%)
National librarian or representative	40 (5%)
Professional certification representative	7 (0.9%)
Other	48 (5.9%)

*Note: Multiple responses were allowed; 706 respondents provided 808 responses.

While there was only a single response from some countries, multiple responses were received from other countries (see Appendix C for details). The 10 countries that provided the largest number of responses are included in Table 2.

In terms of responses by region, a response rate from developing regions of the world was higher, specifically from Africa, Asia and Oceania, and Latin America and the Caribbean (see Table 3). The higher level of interest in the topic may suggest a need that exists in regions for formalized governance structures to facilitate quality standards in LIS education.

Table 2	
<i>Top 10 Responding Countries Ranked by the Number of Survey Responses (Q3)</i>	
<u>Country</u>	<u>Responses (%)</u>
United States	72 (10.2%)
China	67 (9.6%)
South Africa	53 (7.5%)
Brazil	38 (5.4%)
Chile	34 (4.8%)
India	26 (3.7%)
Mexico	23 (3.3%)
Australia	20 (2.8%)
Sudan	20 (2.8%)
El Salvador	19 (2.7%)

Table 3	
<i>Survey Responses by Region (Q3)</i>	
<u>Region</u>	<u>Responses (%)</u>
Africa	167 (23.7%)
Asia & Oceania	213 (30.2%)
Europe	55 (7.8%)
Latin America & Caribbean	185 (26.2%)
North America	86 (12.2%)
Total	706 (100%)

Professional Qualifications for Librarianship and the Broader Library and Information Field

In response to Q4, “In your country, in the specific field of librarianship, what is the ‘professional’ QUALIFICATION needed to practice/work as a librarian?”, the dominant response was that a degree, either undergraduate or graduate, is required, with more countries requiring an undergraduate degree as the first degree for professional practice. The developing regions tended to prefer an undergraduate degree as a professional entry-level qualification compared to the developed regions, and this could be due to resource constraints and other development-related challenges (see Table 4).

Table 4						
<i>Professional Qualifications to Practice/Work in Librarianship (Q4)</i>						
<u>Education level librarianship</u>	<u>Africa</u>	<u>Asia & Oceania</u>	<u>Europe</u>	<u>Latin America & Caribbean</u>	<u>North America</u>	<u>Total</u>
A diploma from a college or a professional/vocational training institution (in any field)		4 (22.2%)				4 (4.8%)
A diploma from a college or a professional/vocational training institution (in LIS)				1 (5.3%)		1 (1.2%)
A graduate university degree (in LIS)	1 (4.8%)	1 (5.6%)	9 (37.5%)	1 (5.3%)	2 (100%)	14 (16.7%)
An undergraduate OR a graduate university degree				2 (8.3%)		2 (2.4%)
An undergraduate OR a graduate university degree (in LIS)	4 (19%)		7 (29.2%)			11 (13.1%)
An undergraduate university degree (in any field)		2 (11.1%)	1 (4.2%)	1 (5.3%)		4 (4.8%)
An undergraduate university degree (in LIS)	14 (66%)	6 (33.3%)	3 (12.5%)	15 (78.9%)		38 (45.2%)
None	1 (4.8%)	3 (16.7%)	2 (8.3%)			6 (7.1%)
Other		1 (5.6%)				1 (1.2%)
Qualification by apprenticeship (any field)	1 (4.8%)	1 (5.6%)		1 (5.3%)		3 (3.6%)
Total	21 (25%)	18 (21.4%)	24 (28.6%)	19 (22.6%)	2 (2.4%)	84 (100%)

In response to Q5, “In your country, in the broader field of LIS, what is the ‘professional’ QUALIFICATION needed to practice/work as a library and information professional?” Again, the dominant response was that a degree, either undergraduate or graduate, is required (see Table 5), with more countries requiring an undergraduate degree as the first degree for professional practice. From the standpoint of the LIS profession, it is encouraging to observe that for both Q4 and Q5, the majority of responses indicated that a formal degree is officially recognized for professional practice both in the specific field of librarianship and in the broader library and information field. The survey distinguished between the specific field of librarianship involving librarians and the broader library and information field covering cognate disciplinary specialists such as archivists, records managers, database managers, and so on.

Table 5						
<i>Professional Qualifications to Practice/Work in the Broader Library and Information Field (Q5)</i>						
<u>Education level LIS broader</u>	<u>Africa</u>	<u>Asia & Oceania</u>	<u>Europe</u>	<u>Latin America & Caribbean</u>	<u>North America</u>	<u>Total</u>
A diploma from a college or a professional/vocational training institution (in any field)	1 (5%)	1 (6.7%)	1 (4.2%)	1 (5.3%)		4 (5%)
A diploma from a college or a professional/vocational training institution (in LIS)	1 (5%)	1 (6.7%)			1 (50%)	3 (3.8%)
A graduate university degree (in any field)	1 (5%)		4 (16.7%)			5 (6.3%)
A graduate university degree (in LIS)	5 (25%)	4 (26.7%)	5 (20.8%)	1 (5.3%)		15 (18.8%)
An undergraduate OR a graduate university degree (in LIS)	2 (10%)		8 (33.3%)		1 (50%)	11 (13.8%)
An undergraduate university degree (in any field)		1 (6.7%)	1 (4.2%)	1 (5.3%)		3 (3.8%)
An undergraduate university degree (in LIS)	6 (30%)	4 (26.7%)	5 (20.8%)	15 (78.9%)		30 (37.5%)
None	1 (5%)	1 (6.7%)				2 (2.5%)
Other	3 (15%)	1 (6.7%)				4 (5%)
Qualification by apprenticeship any field)		2 (13.3%)		1 (5.3%)		3 (3.8%)
Total	20 (25%)	15 (18.8%)	24 (30%)	19 (23.8%)	2 (2.5%)	80 (100%)

Professional Certification for Librarianship and the Broader Library and Information Field

In response to the question on whether ‘professional’ certification is needed to practice/work as a librarian in the field of librarianship, the majority of responses from around the world indicated that certification is needed (see Table 6). In Africa, the situation seems to be mixed and in North America it is not required for the generalist librarian designation.

Table 6			
<i>Professional Certification Required to Practice/Work as a Librarian (Q6a)</i>			
<u>Need for Certification for a “librarian”</u>	<u>No</u>	<u>Yes</u>	<u>Total</u>
Africa	11 (52.4%)	10 (47.6 %)	21
Asia & Oceania	3 (15.8%)	16 (84.2%)	19
Europe	9 (37.5%)	15 (62.5%)	24
Latin America & Caribbean	5 (33.3%)	10 (66.7%)	15
North America	2 (100%)	-	2
Total	30 (37%)	51 (63%)	81

Table 7			
<i>Professional Certification Required to Practice/Work in a Specialized Area of Librarianship (Q6b)</i>			
<u>Certification for “specialized” areas</u>	<u>No</u>	<u>Yes</u>	<u>Total</u>
Africa	15 (100%)	-	15
Asia & Oceania	1 (50%)	1 (50%)	2
Europe	25 (100%)	-	25
Latin America & Caribbean	10 (90.9%)	1 (9.1%)	11
North America	-	2 (100%)	2
Total	51 (92.7%)	4 (7.3%)	55

Table 8			
<i>Professional Certification Required to Practice/Work in the Broader Library and Information Field (Q7)</i>			
<u>Certification for the broader LIS field</u>	<u>No</u>	<u>Yes</u>	<u>Total</u>
Africa	15 (65.2%)	8 (34.8%)	23
Asia & Oceania	8 (30.8%)	18 (69.2%)	26
Europe	11 (44%)	14 (56%)	25
Latin America & Caribbean	16 (80%)	4 (20%)	20
North America	2 (100%)	-	2
Total	52 (54.2%)	44 (45.8%)	96

The question on certification probed further whether in the specific field of librarianship, certification is required for specialized areas, such as school libraries, law libraries, etc. From the majority of responses, it has emerged that specializations are rare. In North America, while certification is not required for the generalist “librarian” designation (see Table 6), it is required for some specialized areas (see Table 7), such as school librarianship, for example.

Based on the majority of responses from around the world, in the broader field of library and information science, certification to practice/work as a library and information professional is not needed (see Table 8). In Europe, however, the situation is mixed and in Asia & Oceania certification is not required for the broader LIS field.

Characteristics of a Library and Information Professional

There were 687 responses to the question about “who is considered an ‘LIS professional,’” which generated 712-coded responses. Coded responses mainly showed that a holder of a professional degree/education is considered to be an LIS professional by all regions (see Table 9). Declarative knowledge (i.e., knowledge of or about something) was considered more important than procedural knowledge (i.e., knowledge about how to do something), which attested to the critical importance of disciplinary-based academic preparation (UNESCO, 2016).

Table 9						
<i>The Characteristics/Representation of a Library and Information Professional from the Perspective of Respondents’ Countries (Q8)</i>						
<u>Region</u>	<u>Knowledge and skills in LIS field</u>	<u>Person has a professional LIS degree</u>	<u>Working in a library or similar information institution</u>	<u>LIS job title and work experience</u>	<u>Other</u>	<u>Total (% by region)</u>
Africa	4 (2%) [5%]	134 (72%) [31%]	20 (11%) [22%]	23 (12%) [34%]	6 (3%) [14%]	187 (26%)
Asia & Oceania	53 (24%) [69%]	79 (37%) [18%]	30 (14%) [34%]	22 (10%) [33%]	32 (15%) [74%]	216 (31%)
Europe	5 (11%) [7%]	22 (50%) [5%]	12 (27%) [13%]	2 (5%) [3%]	3 (7%) [7%]	44 (6%)
Latin America & Caribbean	4 (2%) [5%]	141 (87%) [32%]	14 (9%) [16%]	4 (2%) [6%]		163 (23%)
North America	11 (11%) [14%]	60 (59%) [14%]	13 (13%) [15%]	16 (15%) [24%]	2 (2%) [5%]	102 (14%)
Total [% by characteristic]	77 (11%) [100%]	436 (61%) [100%]	89 (13%) [100%]	67 (9%) [100%]	43 (6%) [100%]	712 (100%)

Authority to Determine Library and Information Professional Entry Requirements

When asked who has the authority to determine ‘professional’ entry requirements to the LIS field in their country, the majority of respondents (see Table 10) indicated a government agency for Asia & Oceania, while it was mixed between a government agency and a professional association for Europe and Latin America & the Caribbean. The authority was mixed among a government agency, no agency, and ‘other’ for Africa, and for North America it was a professional association. Professional association is used here to refer to either a professional association, one that exists “primarily to provide products and services to the members of a profession,” or a professional regulatory body, one that “exist[s] mainly to promote and protect the public interest ensuring that the professional they register practice their profession in a safe and effective manner” (Balthazard, 2017, para. 2).

<u>Region</u>	<u>A government agency</u>	<u>A professional association</u>	<u>None</u>	<u>Other. Please describe</u>	<u>The national library</u>	<u>Total</u>
Africa	7 (32.8 %)	1 (4.5%)	6 (27.3 %)	8 (36.4%)		22
Asia & Oceania	13 (52%)	1 (4%)	7 (28%)	2 (8%)	2 (8%)	25
Europe	6 (24%)	8 (32%)	3 (12%)	4 (16%)	4 (16%)	25
Latin America & Caribbean	5 (22.7%)	6 (27.3%)	8 (36.4%)	2 (9.1%)	1 (4.5%)	22
North America		2 (100%)				2
Total	31 (32.3%)	18 (18.8%)	24 (25%)	16 (16.7%)	7 (7.3%)	96

Diversity [in library and information science] needs to be engaged not only in local context by understanding, responding and reflecting the needs of its user community but in a global context where migration, communication and other forms of exchange shape and inform our development as global citizens, consciously or unconsciously.

C.M. Chu (2017). <https://www.idiversitybydesign.com/early-draft/#titleKeynoteChu>

Legislation/Policy on Qualifications for Librarians

The majority of responses indicated that there is no existing legislation/policy that mandates librarians' qualifications, which is particularly notable in Asia and Oceania, Latin America and the Caribbean, and North America. The situation is mixed in Africa, and legislation/policy exists in most of Europe (Table 11).

Table 11			
<i>Regional List of Existing Legislation/Policy in Country that Dictates Qualification of Librarians (Q10)</i>			
<u>Region</u>	<u>No</u>	<u>Yes</u>	<u>Total</u>
Africa	12 (52.2%)	11 (47.8%)	23
Asia & Oceania	17 (63%)	10 (37%)	27
Europe	9 (36%)	16 (64%)	25
Latin America & Caribbean	19 (82.6 %)	4 (17.4 %)	23
North America	2 (100%)		2
Total	59 (59%)	41 (41%)	100

Legislation/Policy on Certification for Librarians

The majority of responses indicated that there is no legislation/policy that mandates the certification of librarians, that is, certification is not required. This is true of Africa, Asia and Oceania, Latin America and the Caribbean, and North America. Certification is required in most of Europe (see Table 12).

Table 12			
<i>Existing Legislation/Policy Mandating the Certification of Librarians by Region (Q11)</i>			
<u>Region</u>	<u>No</u>	<u>Yes</u>	<u>Total</u>
Africa	17 (73.9%)	6 (26.1%)	23
Asia & Oceania	18 (66.7%)	9 (33.3%)	27
Europe	10 (40%)	15 (60%)	25
Latin America & Caribbean	20 (87%)	3 (13%)	23
North America	2 (100%)		2
Total	67 (67%)	33 (33%)	100

Additional Comments on LIS Qualification or Certification

There were diverse comments revealed in the open-ended responses. In examining the relatively few responses by region (see Table 13), the coded responses indicated by 30% or more of those received, include a need for a “General statement indicating required qualifications/education” in Asia & Oceania (n=20, 63%) and Europe (n=8, 31%), and a “Desire for accreditation/certification/licensure” in Latin America and the Caribbean (n=26, 44%). Nineteen (59%) responses from Africa were not captured by the categories and thus are coded as ‘Other.’ Examples of these emphasize concern for the profession (“The need for more formalized reality to protect the reputation of the profession”) and the need for regional action (“There is a need to define a LIS professional in the African region”).

Table 13

Additional Comments on LIS Qualifications and/or Certification by Region (Q12)

<u>Comment</u>	<u>Africa</u>	<u>Asia & Oceania</u>	<u>Europe</u>	<u>Latin America & Caribbean</u>	<u>North America</u>	<u>Total</u>
Desired change in accreditation/certification/licensure	5 (16%)	8 (10%)	3 (12%)		3 (7%)	19 (7.3%)
Desired change in education/train	1 (3%)	9 (30%)			3 (7%)	13 (5%)
Desired change in professional communication among different agencies in the LIS community		2 (2%)				2 (0.8 %)
Differences in qualifications/ educational requirements between provinces/states		4 (5%)			19 (42%)	23 (8.9%)
Differences in qualifications/ educational requirements between public and school librarians		1 (1%)	1(4%)		4 (9%)	6 (2.3%)
Differences in qualifications based on library type or size					3 (7%)	3 (1.2%)
General statement indicating required qualifications/education		20 (63%)	8 (31%)	10 (17%)	8 (18%)	46 (17.7%)
Statement indicating accreditation or governing body	1 (3%)	8 (16%)	2 (8%)	2 (3%)	5 (11%)	18 (7%)
Desire for a definition of a “library” or “LIS” professional	2 (6%)	2 (2%)	1 (4%)			5 (2%)
Desire for accreditation/certification/licensure	1 (3%)	15 (25%)	1 (4%)	26 (44%)		43 (16.6%)
Oversight/Need for enforcement of qualification/ certification/ accreditation/ legislation	3 (9%)	13 (22%)	2 (8%)	11 (19%)		29 (11.2%)
Other	19 (59%)	15 (25%)	8 (31%)	10 (17%)		52 (20%)
Total	32 (12%)	97 (38%)	26 (10%)	59 (23%)	45 (17%)	259 (100%)



Image by Chris Wong. *BCIT Downtown Campus (Vancouver, Canada)*
<https://www.instagram.com/wongski/>

Key Findings and Call to Action

The data present some meaningful findings and trends pointing to opportunities for action. The Action Plan below presents the key findings from the research with corresponding recommended actions and entities that the BSLISE Working Group has identified as change agents to implement the recommendations. The LIS community, relevant stakeholders, and governmental agencies are invited to act in order to build strong LIS education around the world. Such actions can be local or international and, as appropriate, collective and collaborative.

Action Plan: Key Findings and Recommended Actions

Key Finding	Recommended Action	Change Agent
1. A formal undergraduate or graduate degree is required in many countries; however, there is no correspondence/equivalence among degrees; for many programs, there is no international or recognized standard against which they can be benchmarked for transferability or reciprocity.	1. Identify core and other competencies for transferability and reciprocity.	1. IFLA BSLISE Working Group and other stakeholders
2. Certification is required in many responding countries; these are local certifications that are not internationally recognized, that is, there is no correspondence/equivalence among certifications; hence, reciprocity becomes an issue, and the local certification practices do not have an international or recognized standard for QA.	2. Develop an International framework for the assessment of quality standards in LIS education.	2. IFLA BSLISE Working Group and other stakeholders
3. Many countries have formal local structures/systems for QA (i.e., governmental or higher education accrediting body; professional association; professional charter/council/union, etc.) or regulatory mechanisms; however, other countries may have none.	3. Create a local structure where there is none, building on local strengths.	3. Local LIS professionals, associations, and other stakeholders; government agencies
4. Different LIS professional qualification structures are in place; however, there is insufficient international knowledge about them and they may not always be recognized or understood.	4. Develop an international resource that identifies local structures.	4. IFLA BSLISE Working Group and other stakeholders
5. Most responses from around the world indicate that certification is not needed for the broader LIS field. In Europe, the situation is mixed.	5. Develop a "system" of qualification/ accreditation inclusive of the areas in the broader LIS field.	5. Relevant stakeholders
6. The library field and the broader LIS field may have been, at one time, understood as separate disciplines; however, the evolving nature of librarianship has blurred the boundaries in terms of scopes of practice, skills, and knowledge.	6. Define and understand what the broader LIS field means and its implications for LIS education and professional development.	6. IFLA BSLISE Working Group and other stakeholders

Next Steps for BSLISE Working Group

The findings of the first survey undertaken by the BSLISE Working Group to understand qualification requirements for library and information “professional” practice around the world have outlined four key areas for BSLISE Working Group to undertake: Recommend Actions 1, 2, 4 and 6 (see Action Plan above). These areas were identified as important to bring to the attention of IFLA leadership, and three of them are listed below in the chronological order of action for implementation over the next three years (2018-2021). It was determined that Recommended Action 6 would become an actionable item in the longer term.

Action A: Develop an international resource that identifies local structures (Recommended Action 4).

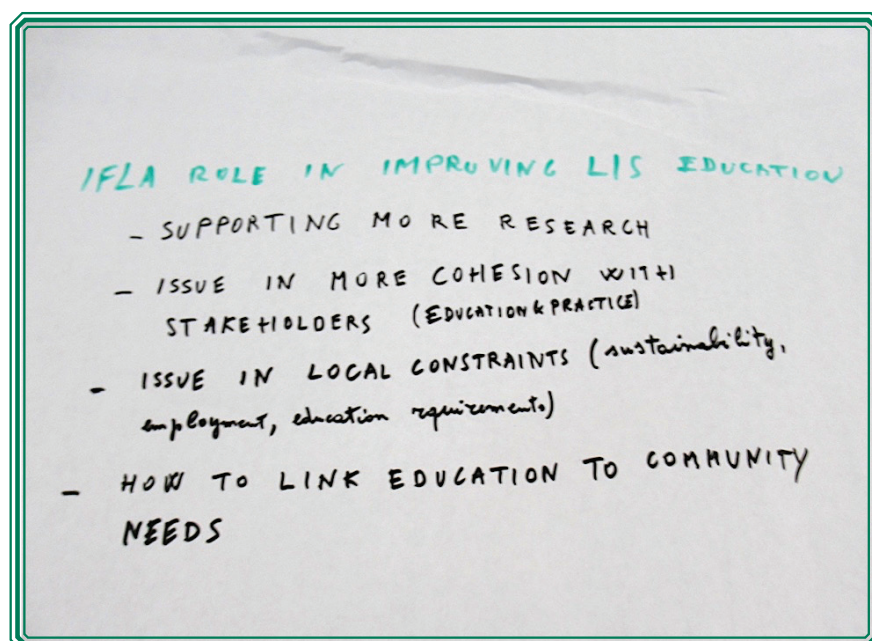
With funding and infrastructure support from IFLA, the BSLISE Working Group, will build on the existing databases of LIS programs worldwide to develop a regularly updated, international database and asset map, capturing information about LIS schools and programs and local structures, organizations, and procedures that address the issues of professional qualifications, accreditation, certification, and registration for professional practice.

Action B: Develop an international framework for the assessment of quality standards in LIS education (Recommended Action 2).

The BSLISE Working Group will engage the IFLA leadership and constituents to address the need for this framework (or related mechanism) and its role in developing and managing this assessment mechanism. Aligning this framework with IFLA’s Global Vision is necessary. Based on these deliberations, the BSLISE Working Group will work with the IFLA leadership, staff, and units, as well as other appropriate LIS entities, to move this action forward.

Action C: Identify core and other competencies for transferability and reciprocity (Recommended Action 1).

The BSLISE Working Group will work with the IFLA SET, Section on Library Theory and Research, and the LIS Education in Developing Countries SIG to incorporate an examination of existing competency standards, developed by professional associations and regulatory bodies, into their strategic plans. Support to carry out the project will be solicited by IFLA sections from the Professional Committee (PC) Project funds. Relevant IFLA sections will introduce and obtain support for their strategic work on LIS education from IFLA Divisions 4 (Support of the Profession) and Division 5 (Regions).



Flip chart discussion notes – BSLISE Session, 2016 IFLA WLIC, Wroclaw (Poland).

Conclusion

It is evident that much work needs to be done to build strong international LIS education. Based on the recommendations generated from the BSLISE Working Group's survey findings, deliberate action is needed at the local, regional, and international levels. In anticipation of implementing the identified recommendations, the BSLISE Working Group will promote the White Paper on Building Strong LIS Education and its call to global and local action at the 2018 IFLA WLIC and other professional and research meetings around the world, on its website, and via online webinars. The Call to Action is a timely initiative that addresses the pressing issues related to the qualification of LIS professionals, including but not limited to internationalization, increased mobility and employment reciprocity, and professional identity; it also identifies key stakeholders from all regions of the world that can contribute to advancing the cause of international LIS education.



Image by Chris Wong. *Simon Fraser University, Surrey Campus (Canada)*
<https://www.instagram.com/wongski/>

Education and training for library and information services concerns all IFLA's Divisions and requires cooperation with them and other international and inter-regional associations which have a related mission.

IFLA Section on Education and Training <https://www.ifla.org/set>

Appendices

Appendix A. IFLA Building Strong LIS Education (BSLISE) Working Group Members

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Appendix B. International Survey of Entry Requirements for Library and Information “Professional” Practice

The IFLA Building Strong Library and Information Science Education (BSLISE) Working Group is conducting an international study to learn the differing qualification requirements (education, certification, individual credentialing system) for library and information “professional” practice in order to develop a better understanding of the equivalence of credentials and the role of LIS education. We invite the LIS community to participate in this survey to provide information regarding professional qualification and certification in their country. The results of this international survey will contribute to a better understanding of these practices and the equivalence of credentials globally. It will also serve as the initial phase of an ongoing research project geared toward developing a framework to 1) assess the quality of LIS education, and (2) determine the transferability of LIS education, internationally. Deadline: May 10, 2017. For more information, please contact us at: iflabslise@gmail.com or visit our webpage: <https://lisedu.wordpress.com/>

Q1 – In what capacity are you responding to this survey? Multiple answers are possible

- National librarian or representative
- Professional association officer
- Professional certification representative
- LIS educator
- LIS program head/dean/director
- LIS professional
- Other:

Q2 – What is the name of your institution?

Q3 – Which country are you representing?

Q4 – In your country, in the specific field of librarianship, what is the ‘professional’ QUALIFICATION (education, training) needed to practice/work as a librarian? Select as many that apply.

- An undergraduate university degree (in LIS)
- An undergraduate university degree (in any field)
- A graduate university degree (in LIS)
- A graduate university degree (in any field)
- A diploma from a college or a professional/vocational training institution (in LIS)
- A diploma from a college or a professional/vocational training institution (in any field)
- Qualification by apprenticeship (any field)
- None
- Other. Please describe

Q5 – In your country, in the broader field of LIS, what is the ‘professional’ QUALIFICATION (education, training) needed to practice/work as a library and information professional? Select as many that apply.

- An undergraduate university degree (in LIS)
- An undergraduate university degree (in any field)
- A graduate university degree (in LIS) An undergraduate university degree (in LIS)

- A graduate university degree (in any field)
- A diploma from a college or a professional/vocational training institution (in LIS)
- A diploma from a college or a professional/vocational training institution (in any field)
- Qualification by apprenticeship any field)
- None
- Other. Please describe:

Q6 – In your country, in the specific field of librarianship, is ‘professional’ CERTIFICATION (authoritative validation of competencies) needed to practice/work as a librarian? (Select all that apply)

- Yes, certification for “librarian” (general)
- Yes, certification for “specialized areas” in librarianship (e.g., by field (public, school, law, etc.), state/province).
- None
- Other. Please describe

Q7 – In your country, in the broader field of LIS, is ‘professional’ CERTIFICATION (authoritative validation of competencies) needed for practicing/working as a library and information professional?

Multiple answers are possible

- Yes
- No
- Other. Please describe

Q8 – In your country, who is considered an ‘LIS professional’? Please provide a short definition that is common in your country and if appropriate, cite the source(s).

Q9 – In your country, who has the authority to determine ‘professional’ entry requirements to the LIS field?

- Select as many that apply
- The national library
- A professional association
- A government agency
- None
- Other. Please describe

Q10 – In your country, is there any legislation/policy that stipulates QUALIFICATION of librarians?

- Yes
- No

Q11 – In your country, is there any legislation/policy that stipulates CERTIFICATION of librarians?

- Yes
- No

Q12 – Please add any comments or information on LIS qualification and/or certification in your country or region.

Appendix C. The Distribution of Responses by Country

<u>Country</u>	<u>Number of Responses</u>	<u>Country</u>	<u>Number of Responses</u>
Afghanistan	1	Georgia	1
Algeria	15	Germany	1
Argentina	7	Ghana	3
Australia	20	Greece	2
Azerbaijan	1	Guatemala	2
Bahrain	1	Guinea-Bissau	1
Bangladesh	2	Haiti	1
Belgium	1	Honduras	1
Bénin	1	India	26
Bahrain	1	Indonesia	7
Bangladesh	2	Iran	1
Belgium	1	Iraq	4
Bénin	1	Ireland	4
Bosnia and Herzegovina	2	Italy	1
Botswana	5	Jamaica	9
Brazil	38	Japan	2
Burundi	2	Jordan	5
Canada	14	Korea	1
Chile	34	Kuwait	2
China	68	Latvia	1
Colombia	13	Lebanon	6
Costa Rica	2	Libya	1
Côte d'Ivoire	1	Malawi	1
Croatia	5	Malaysia	1
Cuba	1	Martinique	1
Czech Republic	1	Mauritius	4
Democratic Republic of Congo	1	Mexico	23
Denmark	1	Mongolia	1
Ecuador	2	Morocco	1
Egypt	17	Namibia	1
El Salvador	19	Nepal	1
France	3	Netherlands	3

<u>Country</u>	<u>Number of Responses</u>	<u>Country</u>	<u>Number of Responses</u>
New Zealand	1	UAE	7
Nicaragua	1	Uganda	1
Nigeria	13	The UK	3
Oman	3	Uruguay	13
Pakistan	4	The U.S.	72
Palestine	4	Uzbekistan	18
Panama	1	Venezuela	3
Paraguay	3	Yemen	1
Peru	6	Zimbabwe	10
Philippines	18	Total	706
Portugal	2		
Puerto Rico	2		
Romania	1		
Russia	8		
Saint Lucia	1		
Saudi Arabia	4		
Scotland	1		
Serbia	3		
Seychelles	1		
Slovenia	1		
South Africa	53		
Spain	2		
Sri Lanka	3		
Sudan	20		
Swaziland	3		
Sweden	3		
Switzerland	2		
Taiwan	1		
Tanzania	2		
Trinidad and Tobago	2		
Tunisia	10		
Turkey	2		

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We need to reinvent education and we can only do that if our libraries are central to the reinvention and its realisation.

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