

Internship in LIS education: An international perspective on experiential learning

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Abstract:

The value of internship as a form of experiential learning in library and information science (LIS) education has been debated for many years in North America. To gain a global perspective, the current research examines whether such an experience is required and for what reasons and whether placements can be done internationally or virtually. Participants include national libraries, associations, and academic LIS programs from 69 different countries around the world. Results indicate that outside of American Library Association accredited institutions, internship is more often required and that when it is not, participation rates are low. Further, there was much stronger support for international experiences. Despite the increasing use of online tools to deliver LIS education, there is a decided lack of institutional support for virtual internships. Suggestions for further research are proposed that address the interdisciplinary, intentional, interconnected, and international model for an internship model in 21st Century in LIS education.

Keywords: Internship | library science | information science | experiential learning

Article:

*****Note: Full text of article below**

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2

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6 education has been debated for many years in North America. To gain a global perspective, the
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8 placements can be done internationally or virtually. Participants include national libraries,
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10 indicate that outside of American Library Association accredited institutions, internship is more often
11 required and that when it is not, participation rates are low. Further, there was much stronger support
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14 for further research are proposed that address the *interdisciplinary, intentional,*
15 *interconnected, and international* model for an internship model in 21st Century in LIS
16 education.

17 **Keywords**

18 **Internship, library science, information science, experiential learning**

1 **Introduction**

2 Internships serve a critical function in professional education by exposing students to
3 professionals, their day-to-day activities, and the challenges of an institutional environment.
4 Students who participate in these opportunities achieve a better understanding of their chosen
5 profession and can better link theory and practice (Kolb, 1984; Kolb, 2000; Schön, 1990;
6 Schön, 1983; Coleman, 1989). In addition, through both observation and participation, these
7 students are more adept at analyzing problems encountered in the field and better able to
8 create workable solutions. Professional experience, gained outside the classroom, enhances a
9 student's sense of commitment to the community, as well as a personal sense of confidence,
10 that can enable creativity (Sen and Ford, 2009).

11 Through experiential learning, internships usher future LIS professionals into the field
12 and allow them to engage with their future colleagues in the real world of professional work.
13 The benefits accrue not only to the student, LIS programs benefit by using the results of
14 internship experiences to assess and align their curricula to current practice. In addition, the
15 practitioners who engage with the interns are afforded a chance to renew their own skills and
16 reconnect to current research and theoretical approaches to their work (Bird and Crumpton,
17 2014).

18 The relative importance of the work experience has been debated in LIS education from
19 its beginnings in the United States (US) (Crowley, 2004; Grogan, 2007). Indicative of the
20 continuing debate are statements like that made by John Berry in the *Library Journal*, "Given
21 the great value of experience in professional practice for the job seeker and students and faculty
22 in the classroom, an internship must become a required component of any program leading to
23 the master's degree in our profession" (2005). At the same time, studies showed that library
24 education programs were not requiring internships or other work experience (Hall, 2009).
25 Although less controversial in other parts of the world, most notably in Germany where it is

1 regular practice (Ratzek, 2006), there is still discussion of the value of these experiences and
2 how they can be implemented in an increasingly interconnected and virtual world (Searing and
3 Walter, 2012).

4 In 2011, a re-conceptualization of the possibilities for an internship experience that
5 would serve a more global world was proposed; one that imagined them as intentional,
6 interconnected, interdisciplinary, and international (Bird et al.). It frames the present research
7 that used survey methodology to examine these attributes at the international level to
8 compare how different countries view and implement this important aspect of LIS education.
9 The main questions that guided the research were:

- 10 1) What is the status of required internship for LIS education internationally?
- 11 2) Are alternative options, like virtual and international internship, available?

12 **Literature review**

13 *Experiential learning and internships*

14 Studies focused on library and information science (LIS) curriculum and the role of
15 practice-based training within it often use the term “internship” interchangeably with “field
16 experience,” “field work,” or “practicum.” Coleman’s definition of internship appears to
17 capture its true essence as “a relatively short-term, professionally supervised work experience
18 offered as part of the school’s curriculum and taken during the academic sequence [of course
19 work]” (Coleman, 1989). Grogan’s in-depth look at British and American attitudes shows a
20 constant back and forth between proponents of work experience and extensive requirements
21 for field experiences. In one such debate, the students were the most vociferous opponents,
22 finding the required placements lacking in interest and rigor (Grogan, 2007).

23 Training of librarians within the LIS curriculum has been researched and discussed
24 regularly over the years in the United States and in international arenas like the International
25 Federation of Library Associations and Institutions’ (IFLA), Section on Education and

1 Training. Research done primarily from the North American perspective shows that bridging
2 the gap between theory and practice has been a topic of discussion even before the
3 establishment of library schools in the US (Grogan, 2007; Howden, 1992). In Germany, by
4 way of contrast, the emphasis on preparing students for practice has always been on hands-on
5 learning incorporated into the educational program through extensive internship (Ratzek,
6 2006).

7 In North America, standards promulgated by the American Library Association for
8 accredited master's degree granting institutions have emphasized combining theory and
9 practice (American Library Association, 1992, 2008), but stopped short of requiring an
10 internship. Therefore, since the expectation is for students to gain and master a level of real
11 world library experience before graduating, library programs have often responded to this
12 need by incorporating various experiential learning opportunities (Ball, 2008) such as
13 practice-based assignments, projects, or service learning initiatives. Course-based
14 experiential activities are designed to emulate workplace experience through the development
15 of solutions that are applicable to information organization problems. In the process, students
16 can gain experience with tools used in the field while accomplishing class work. Service
17 learning is a more intentional experience that requires the student to apply classroom
18 knowledge and university resources to an identified need while working with a community-
19 based organization to accomplish it. These projects are designed to enhance students' civic
20 engagement and appreciation of the people that they will ultimately serve (Ball, 2008;
21 Peterson, 2009).

22 An internship provides a professionally guided experience when compared to the
23 other experiential learning activities for the student. Students immerse themselves in daily
24 routines of an information organization where they can experience the professional world,
25 observe a variety of role models, and put theory and academic rigor into practice. When

1 combined with a technique called reflective practice (Schön, 1990; Schön, 1983) students can
2 come close to achieving a level of artistry that is much deeper than a course-based
3 assignment can grant. The effectiveness of using reflection was confirmed by two in-depth
4 studies conducted in the United Kingdom with LIS practicum students (Sen and Ford, 2009).

5 The internship experience is typically completed in one library or information agency
6 for its entire duration. Although Coleman (1989) notes that in most internships the student
7 does not receive compensation in the form of salary or wage, some institutions pay students
8 an internship stipend and in some countries, for instance, Peru, the government requires that
9 the intern be paid in order to protect paid staff positions (personal communication).

10 Students who participate in internships often work with a local, physically co-located
11 site to meet the requirements. As LIS education in North America is offered increasingly in
12 an online environment, students can now complete course work without setting foot at a
13 physical site, but little evidence exists for an equivalent change in the nature of the internship
14 experience (Oguz, 2013). There are isolated examples of the internship being conducted
15 online, for instance, the Internet Public Library has been used as a site for teaching LIS
16 digital librarianship skills (Lin and Abels, 2010; Mon et al., 2008). There are also examples
17 of international internships, notably at the University of British Columbia, but there has been
18 little or no documentation of such experiences.

19 *The four Is model to describe new internship possibilities*

20 In a paper conceptualizing the internship for LIS education in the 21st Century, Bird,
21 Chu, and Oguz outlined ideas for providing students with more and richer learning
22 opportunities by using four English language concepts beginning with I: intentional,
23 interconnected, interdisciplinary, and international. Thus internships are re-conceptualized to
24 include experiences that are *intentional* so that students, LIS program faculty, and
25 practitioners have a clear idea of their purpose, the process that will be used to achieve it, and

1 the role of each participant. In turn, the participants must exhibit *interconnectedness* in their
2 work together through shared dialogue and joint learning outcomes. In addition, internships
3 must be *interdisciplinary* to reflect the intrinsic nature of LIS as a profession that
4 encompasses a broad range of disciplines. Finally, experiences should be *international* so that
5 students can look beyond their local situation and prepare for a globally connected
6 information environment. These concepts guide an approach to internships that is
7 appropriate as they are made increasingly possible through the availability and affordability
8 of information and communication technologies (ICTs).

9 It is rare for a single internship to incorporate all four of these important
10 characteristics, but some projects were cited as examples to highlight the possibilities for
11 implementation (Bird et al.). The Real Learning Connections Project (RLCP), a joint venture
12 of the University Libraries and the Library and Information Studies Department at The
13 University of North Carolina at Greensboro, was cited as illustrating intentionality,
14 interdisciplinarity, and interconnectedness (Bird and Crumpton, 2014). Several other projects
15 highlighted the possibilities of using virtual connections to provide international experiences
16 (Lin & Abels, 2010, Mon et al., 2008).

17 A project-based program, the RLCP has demonstrated the importance of intentionality
18 as the library departments submit proposals to host one of three internships available
19 annually, since 2010-11 (Bird & Crumpton, 2014). These intentionally-designed projects,
20 with buy-in from the whole department and focus on one particular practitioner with
21 individualized goals to accomplish, were in contrast to informal agreements with particular
22 students. The choice of student to participate in these opportunities was also intentional since
23 LIS students competed for the spots by submitting resumes and cover letters outlining their
24 goals for participation. The connection with LIS faculty was intentional, too, since the student
25 committed to enroll in a particular class that would complement the internship experience. In

1 addition, the faculty-learner participant had goals for learning about how the curriculum
2 might change in response to the activities in which both the student and the practitioner were
3 engaged.

4 Interdisciplinarity was obvious in several of the RLCP internships that have been
5 hosted in the archives and special collections. In these internships, there is a mix of
6 practitioners who were trained in LIS programs, archival studies programs, and as historians.
7 In each internship, there has been a negotiation between the training that the LIS department
8 offers and that from the practitioner's background. In these instances, the faculty member
9 tried to be more involved by immersing herself in the training and bridging disciplinary
10 differences that resulted between the student and the practitioner. Although many libraries,
11 archives, and museums are now merging, especially in digital environments, there is much to
12 be done in education and practice to unite the cultural heritage fields (Marty, 2010).

13 Interconnectedness has been a theme throughout the RLCP. In the ten projects, all
14 participants, the faculty advisor, the professional supervisors, and the student intern have
15 been interested in deep learning from the experience. For one project, the student had training
16 in music while the practitioner was an experienced digital projects librarian. The team was
17 able to complete a specialized digital collection showcasing a cello virtuoso and his music
18 (University of North Carolina at Greensboro University Libraries, n.d.). A further example of
19 interconnectedness is that some internship experiences led to independent research by the
20 student. Such independent work can be used for both coursework and to further inform the
21 field. In addition, the practitioners, some of whom are in tenure earning positions, have been
22 able to complete publishable research during the projects.

23 Experiences outside of the local vicinity have been pursued through international
24 internships in a limited fashion. With access to ICTs virtual internships provide new
25 opportunities for experiential learning. The concept of virtual internship may sound relatively

1 new, but the underlying idea of carrying out tasks and gaining experience at a distance is
2 more realistic. As organizations and people have become more interconnected because of
3 increased access to broadband internet and high-speed computing devices, telecommuting is a
4 large part of the workplace. A European Union funded project, Enterprise - University
5 Virtual Placement (EU-UV) attempts to place students virtually at various organizations
6 across national boundaries so that they can enhance their skills and competencies at an
7 international level while not leaving their country of residence (Vriens et al., 2010). Students
8 are interviewed by host sites via web/video conferencing, and initial training is provided
9 online before students are placed at their respective sites. All of the work is completed
10 virtually.

11 The Internet Public Library (IPL) in the US provides LIS students virtual and
12 international internship experiences. IPL recruits LIS students to serve as Digital Reference
13 Librarian (Lin & Abels, 2010; Mon et al., 2008). Students are responsible for the daily
14 functioning of the library's email reference service while mostly helping an international
15 audience of youth and teens with their research. For example, several LIS students at
16 Valdosta State University successfully fulfilled requirements of their internship experience at
17 IPL (personal communication).

18 The GALILEO Knowledge Repository in the State of Georgia in the United States
19 also created virtual internships as part of a state-wide digital repository initiative (Yang,
20 2012). Selected students received training via online conferencing, and this training was
21 supplemented with a set of electronic readings and tutorials. Upon completing the training,
22 students were placed at participating institutions and worked on the daily functioning of the
23 host institution's digital repositories. Students completed their tasks virtually and maintained
24 their communications with the host institution electronically or via phone. Students also
25 stayed in touch with the faculty member to get support for questions or concerns.

1 The phenomenon of embedding librarians in online learning management systems has
2 been increasing in the United States and provides opportunities for virtual internships. A
3 recent internship collaboration between a local community college library and an LIS
4 program has proven that it can work (Coltrain, 2014). To address the growing demand for
5 service to online community college students, interns were recruited and trained to answer
6 reference questions, provide instruction, and support student research projects.

7 *Surveying the present state of the internship*

8 The 4Is conceptual model is useful for informing the design of internship
9 opportunities as described above, but there was little evidence in the literature for whether
10 LIS programs were actually encouraging these innovations. A first step to understanding
11 whether or if the internship experience can be re-designed internationally, is to understand the
12 present state of experience in multiple countries. The research presented here is an attempt to
13 describe the characteristics of internships in LIS programs in the international arena,
14 especially in terms of requirements, international or virtual availability, and implementation.

15 **Methodology**

16 The present research sought evidence about the characteristics of internship in library
17 education worldwide through a mixed-methods approach. Because the US and Canadian
18 programs accredited by the American Library Association had been examined in the past
19 (Crowley, 2004; Hall, 2009), the team sought, first, to update internship information gathered
20 from those schools websites. Specifically, the researchers were looking for whether the
21 internship was required and for mentions of virtual or international experiences.

22 To broaden the view beyond US and Canada (*hereafter*, North America), a survey
23 funded by the International Federation of Library Associations and Institutions (IFLA) and
24 sponsored by its Section on Education and Training (SET) was constructed and distributed to
25 LIS education programs outside North America, and to national libraries and library

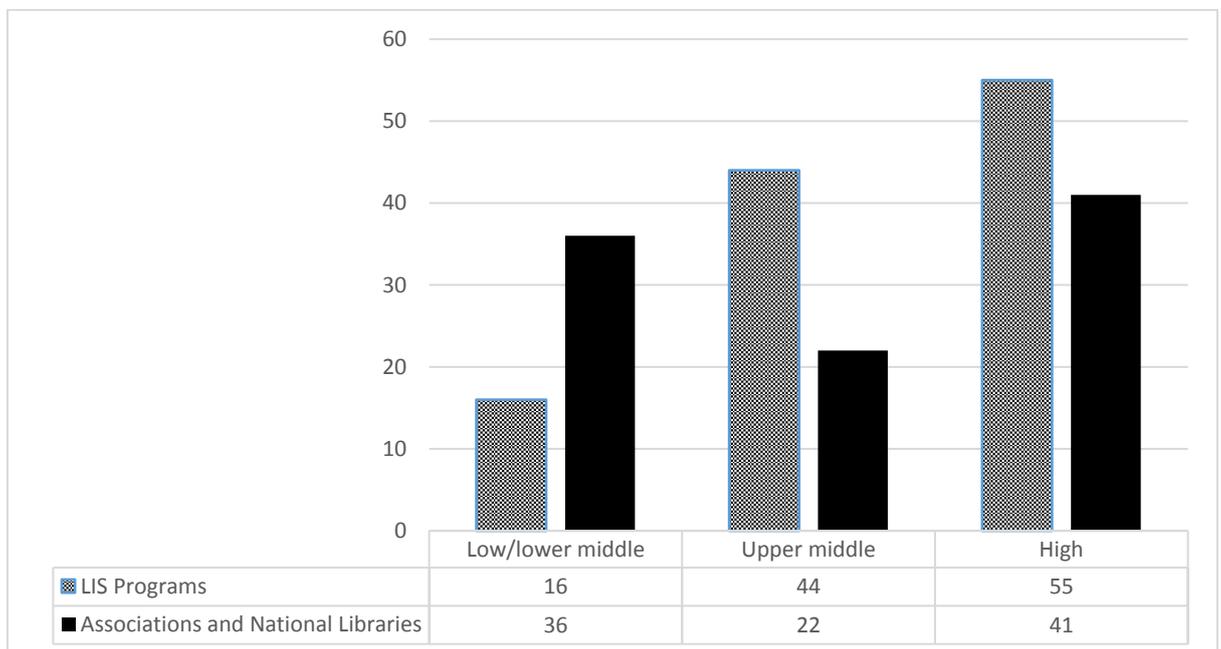
1 associations worldwide. In order to reach the maximum number of countries, an initial list of
2 427 potential international survey recipients was produced by examining the publication,
3 *World Guide to Library and Information Science Education* from 2007, and updating
4 addresses, email contact addresses, and other information from their websites. In the first
5 round, only major educational programs (those with greater than 100 students) were chosen,
6 except when the program was the only one listed for a particular country. Three months later
7 additional smaller educational programs and associations were added to the contact list and
8 emails were sent to those addresses. The survey was distributed twice in summer and fall,
9 2013, with email contacts removed when a response was received from that person or
10 program. Each participation request was accompanied by three follow-up emails. The
11 researchers also contacted members of the IFLA SET directly to gain additional data.

12 The focus of the questions was internships for each of the degree programs at each
13 university. Internship was the word used throughout the survey and it was distributed only in
14 English. Participants were allowed to name the particular degree program available in their
15 school and this led to a wide variety of names. Analysis was done by the degree level,
16 certificate, undergraduate, and master's rather than by the program name so archival,
17 documentalist, and other degrees may have been included with those concentrating on
18 librarianship.

19 *Demographics/characterization by income of survey participants*

20 There were 135 respondents; at least one from 69 Countries, with 98 Library and
21 Information Science (LIS) programs from 55 countries, 11 National Libraries, and 23 Library
22 Associations. The full list of respondents is in Appendix A. Countries represented in the
23 dataset were grouped according to the World Bank's classification of world economies by
24 gross national income per capita in 2012. The groups included low income, \$1,035 or less;
25 lower middle income, \$1,036 - \$4,085; upper middle income, \$4,086 - \$12,615; and high

1 income, \$12,616 or more (Country and Lending Groups, n.d.). For analysis purposes, low
 2 income and lower middle income countries were combined as low/lower middle income
 3 countries. Survey respondents were either from LIS programs or were from national libraries
 4 or associations in individual countries. Figure 1 illustrates that there were more respondents
 5 from high income countries (55% of LIS Programs and 42% of associations and national
 6 libraries) in the sample. More respondents from lower/lower middle income countries were
 7 from associations or national libraries.



8
9

10 **Figure 1. Respondents by type and country income category.**

11 **Results**

12 The results of the document review and survey paint an international picture of the
 13 status of internship in LIS education. The results are separated into North American schools
 14 and those in other countries. Where there is data gathered only from national libraries and
 15 associations it is noted in the text.

16 *Results from ALA-accredited (North American) programs*

17 The document review of North American LIS programs revealed that the internship is

1 required in only ten out of 59 (17%) of programs, except for students who intend to work in
2 school libraries. Interestingly, at the University of Maryland, this requirement is active only
3 when a student selects the non-thesis option in the program; while at the University of
4 Denver a capstone project can be substituted. Also, noted during this review was the fact that
5 several alternative terms were used in addition to “fieldwork”, “field experience”, and
6 “practicum” (Coleman, 1989), including “professional field experience,” “professional
7 experience,” “co-ops” (co-operative education), and “clinical experience.”

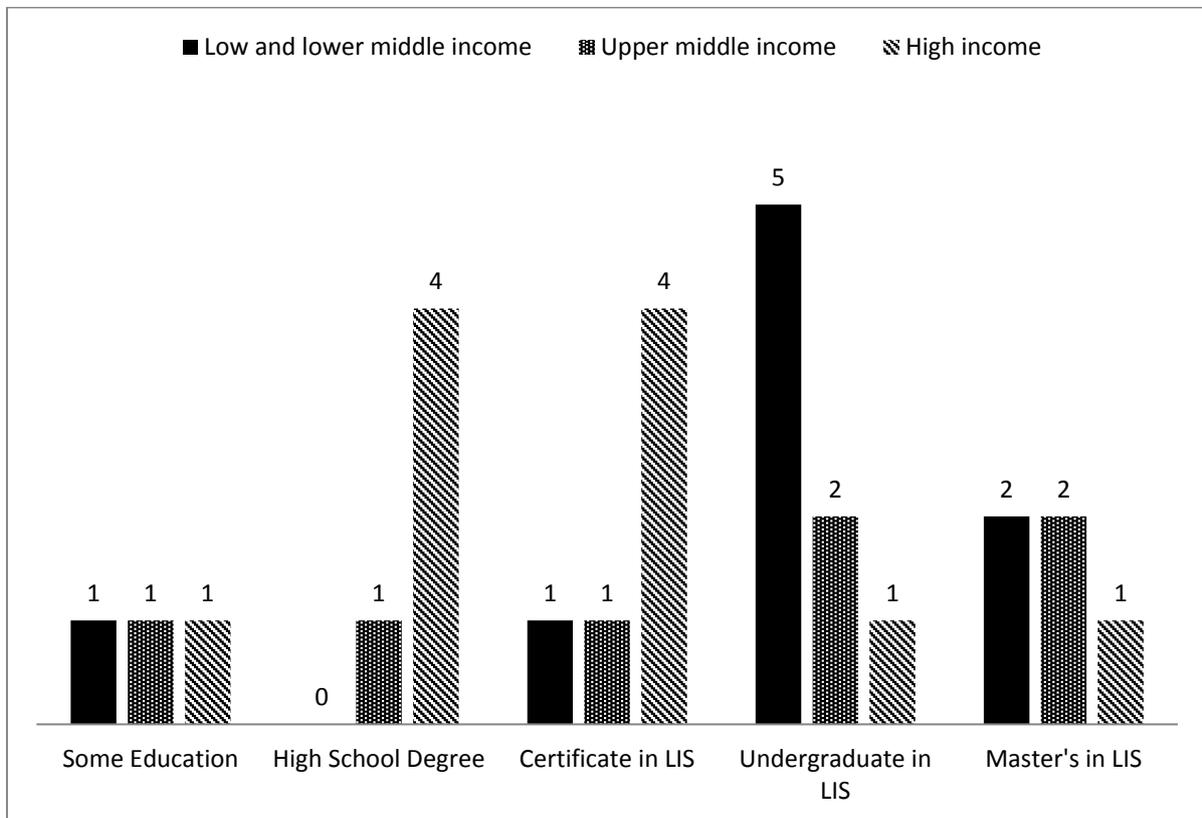
8 In addition, only three out of fifty-nine (5%) of the programs specifically noted that
9 virtual or international experiences were available or encouraged. The University of British
10 Columbia is especially noteworthy because the internship documents specifically state,
11 “There is no limitation on locality...placements have been arranged in almost every province
12 and in many foreign countries.” (University of British Columbia School of Library, Archival
13 and Information Studies, n.d.) Similarly, Syracuse University notes that, “internships and co-
14 ops can be done locally in the Syracuse area, nationally, and even internationally.” (Syracuse
15 University Course Catalog, 2012). A few programs mentioned study abroad opportunities
16 with some practical aspects, but these are not complete work experiences in a different
17 country and were not counted here.

18 It was rare for the fifty-nine programs to mention the possibility of a virtual internship
19 in their documentation. Only three mentions were made. The University of Kentucky noted
20 that it was not possible to do a virtual internship; while the University of Alberta, Canada,
21 and San Jose State University in the United States, allowed them. Considering that almost all
22 of the programs offer an online degree, the lack of any mention in official program
23 documents is noteworthy.

24 *Outside North America: survey results*

25 For comparison purposes, especially in light of the fact that North American

1 employers often show a preference for the master’s degree for professional positions and
 2 Europe has recently adopted the principles of the Bologna Process (Ratzek, 2006), the
 3 following results concentrate on data gathered about the master’s degree in LIS. The data
 4 about other levels of education were not analyzed deeply here but are shown where available.
 5 One question was asked only to the national libraries and associations (n=27 excluding
 6 duplicate responses from same country) about the level of education required in the
 7 responding country in order to work in libraries. The results were analyzed by income of the
 8 country and are reported in Figure 2.

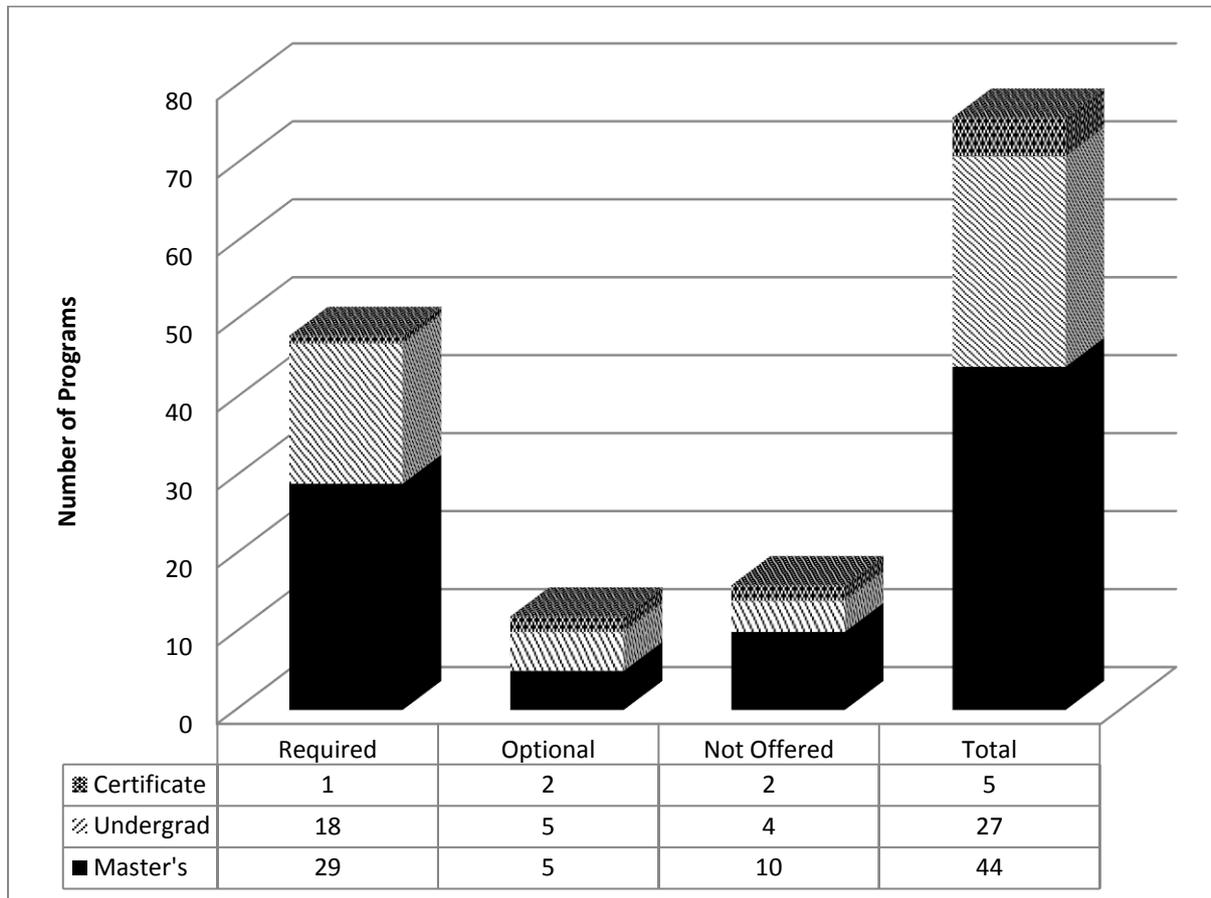


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10 **Figure 2. Level of education required by respondent country World Bank Classification.**

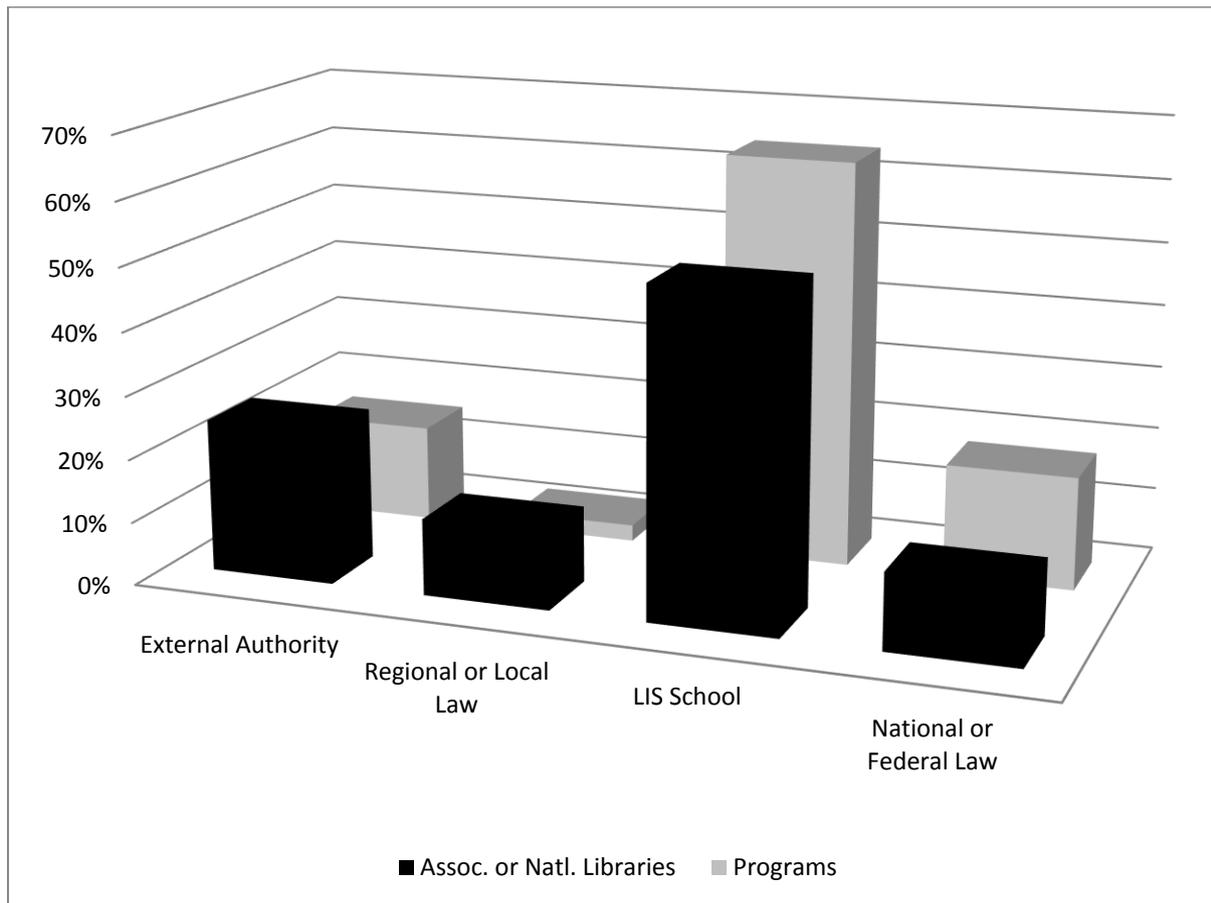
11 The survey asked whether internships are required in that country to obtain the degree
 12 and at which program level. Looking specifically at the Master’s level, as shown in Figure 3,
 13 the majority of countries represented said that it was required. Compared to the findings from
 14 the ALA-accredited programs, internship requirements are more common in other countries.
 15 Yet, in 11% (5 of 44) of the responding countries the internship is optional, and in 23%

1 (10/44) it was not offered as part of the master's degree program. Certificate and
 2 undergraduate degree requirements are shown in Figure 2 but cannot be compared to North
 3 American results because only master's programs, the professional degree, were included in
 4 the document review.



5
 6 **Figure 3. Internship requirements by program level.**

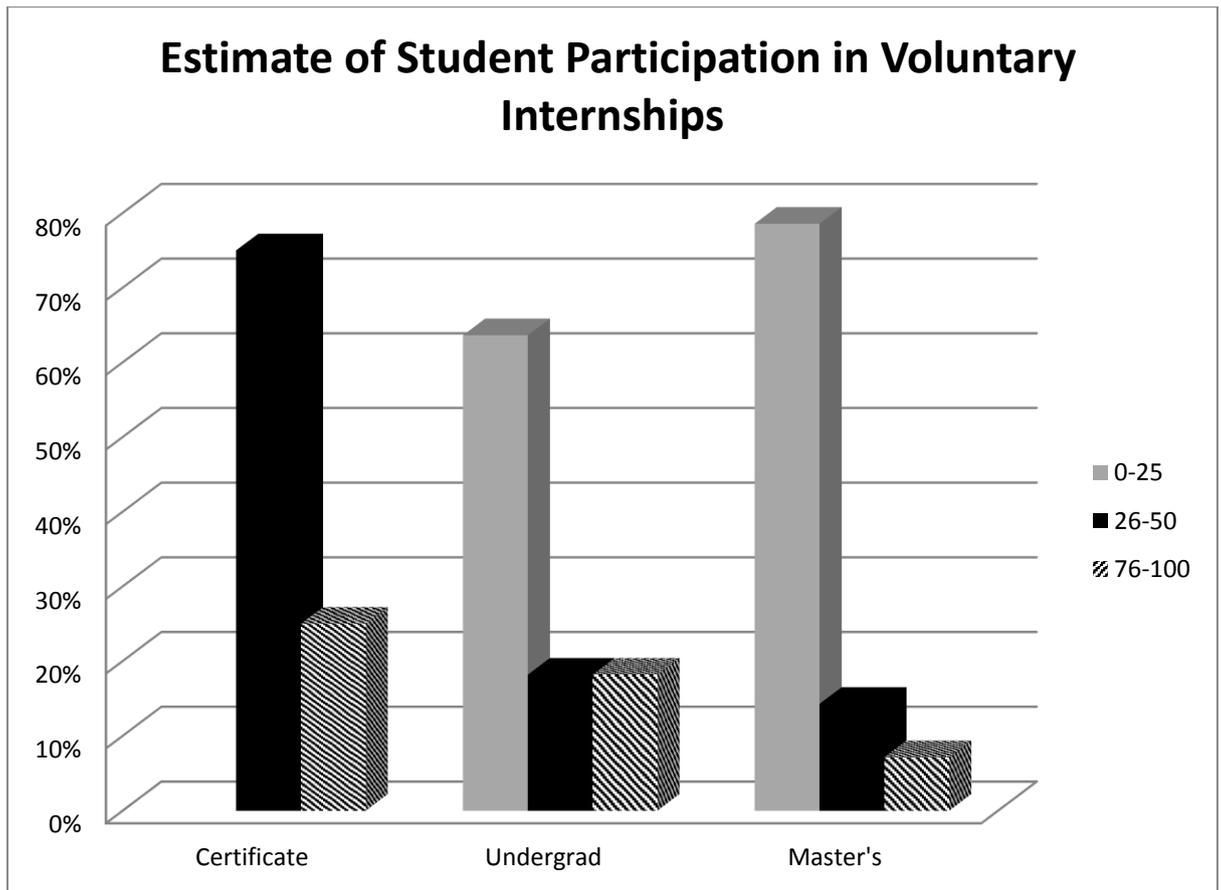
7 Respondents were asked to provide a reason for the requirement when that was the
 8 case. In Figure 4, the results are divided between what associations or national libraries
 9 reported and what LIS programs stated for their reasons. In the main, the LIS programs
 10 attributed the requirement to their own programmatic decisions while associations and
 11 national libraries chose a mix of answers, including that the internship was required by
 12 external authorities or by national or federal law.



1

2 **Figure 4. Reason for internship requirement.**

3 When LIS program respondents noted that internships were not required, a follow-up
4 question asking for an estimate of student participation was presented. The data in Figure 5
5 indicates that at the Master's level most respondents (89%) estimated that less than 25% of
6 their students took advantage of an internship opportunity when it was voluntary, while only
7 7% said that a high level of student participation was seen in non-required internships.
8 Certificate programs reported a higher rate of participation, perhaps due to the lack of
9 emphasis on academics in these programs.

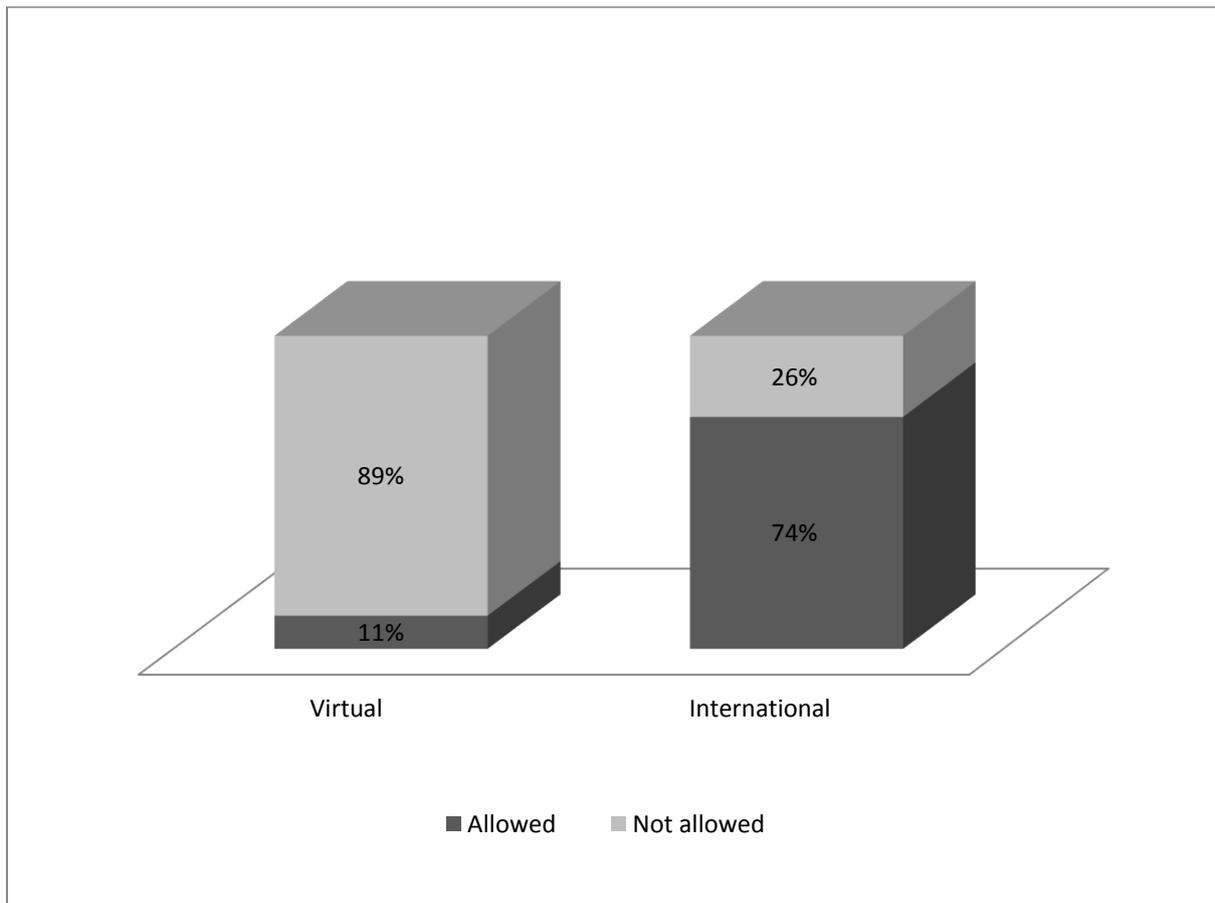


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2 **Figure 5. Estimated internship participation rate in voluntary internships.**

3 *Virtual or international internships allowed?*

4 Similar to the results from the North American LIS programs, very few survey
 5 respondents reported that they allowed virtual internships (see Figure 6). On the other hand,
 6 74% indicated that international experiences were allowed. The number of students
 7 participating in these and the nature of that participation was not investigated in this survey.



1

2 **Figure 6. Virtual or international experiences allowed for required internships.**

3

4 **Discussion**

5

6 Although it was a small part of the survey, results showed a remarkable range of
7 professional preparation requirements for employment in libraries across the respondent
8 countries (See Figure 2). When viewed by World Bank country the data show that richer
9 countries are more likely to require master's level degrees. However, the growth of
10 undergraduate information degrees in the United States I-schools and the results of the
11 Bologna process for Europe, reveal a dynamic context for LIS education.

12

13 Library and information science programs in North America continue to offer the
14 internship as a voluntary experience despite calls from practitioners such as Berry, who call
15 for some work experience to enhance the master's level education (Berry, 2005).

16

17 Internationally, however, there is strong support, whether by program or law, for requiring an

1 internship, with over 65% of the sample already having such a requirement. More in-depth
2 follow-up is needed about how these requirements are met and the student response to
3 required opportunities. As Grogan noted about required experiences in his insightful history
4 of internships, many students felt that they sometimes devolved into make-work projects
5 (Grogan, 2007). This can be countered by introducing concepts of intentionality to the
6 students and the supervisors before the work experience begins. The promise that both the
7 work supervisor and the student can learn from each other as the experience progresses is one
8 worth making explicit at the outset, so that reflective activities can lead to deeper learning
9 (Sen and Ford, 2009; Bird and Crumpton, 2014).

10 The lack of student participation when the internship is not required speaks volumes
11 to the importance of building an experience that emphasizes intentionality and
12 interconnectedness. The connection between the student's goals for the future beyond their
13 LIS education and the short term experience of the internship can be fostered with stronger
14 intentions on the part of the LIS program. In the same way, the organizational host, must feel
15 that the work of the student fulfills the goals of the institution and the supervisors who are
16 giving their time to train the student. Intentionally designing mutually beneficial goals for all
17 of the parties as was done in the Real Learning Connections Project described above (Bird
18 and Crumpton, 2014), can create better required experiences.

19 Despite the increasing deployment of e-learning in LIS education there is a decided
20 lack of official support for virtual internships. Perhaps, more documentation of successful
21 placements, like the case study examples above, would result in better understanding of how
22 they might work for many more students. As Coltrain (2014) notes, virtual interns are a
23 welcome addition for under-resourced institutions. Certainly, more research is needed into
24 diverse aspects of internships as experiential learning, for example, the cost/benefit of
25 internships for the hosting institution, the value for all participants, the extent of the learning

1 achieved, the need for remuneration, and comparison of face-to-face versus virtual
2 experiences.

3 There was much stronger support for international experiences but we have little
4 information about how these arrangements are encouraged or accomplished. For North
5 American students there is little support for travel, board, and other expenses connected with
6 participation, resulting in few who can afford to take advantage of these opportunities. In
7 addition, there is no central place for students to seek out the programs that are available.
8 Partnerships between LIS programs in different countries might work to create better and
9 more of these opportunities going forward.

10 **Recommendations for further research**

11 ICTs have enhanced not only access to communication and information, but also to
12 education. Further research that builds on the findings reported here needs to not only
13 examine different aspects of experiential learning, but how online education program can
14 effectively offer internships and other modes of experiential learning. To start, an
15 international study such as this one faces challenges that may be due to language, technical
16 terminology, different degree and professional training requirements, the status of the LIS
17 profession, and the diversity of higher education policies found around the world. For
18 example, the use of the word “internship” may have skewed the results in unpredictable
19 ways. It would also be helpful to know whether internships are paid or not, and when they
20 are required, whether it is for all students or is an exemption given to those with
21 paraprofessional experience. These are areas that this survey did not address and would merit
22 study.

23 A survey in multiple languages may reach a broader range of respondents. A better
24 understanding of the role of study abroad programs as a prelude to work experience in a
25 different country would be valuable for increasing international experiences. Certainly, a

1 deeper understanding of the variety of programs offered at LIS programs outside the United
2 States would be beneficial, especially to address the issues of *interdisciplinarity*, still a
3 desirable part of a better internship and not addressed in this particular survey.

4 The notion of *intentionality* can be addressed by studying the value of internships to
5 students, professional supervisors, and faculty advisors. Did it meet the expectations of all
6 involved? Was there shared learning and/or understanding of the connection of theory and
7 practice that would address the notion of *interconnectedness*.

8 Lastly, there needs to be attention paid to the expanded opportunities afforded by
9 online education. Such programs can offer students virtual internships, and given that there
10 would no longer be geographic boundaries, the opportunity for *international* experiential
11 learning becomes a reality. Research that examines the four Is (interdisciplinary, intentional,
12 interconnected and international) of internships will provide educators and students the
13 necessary information to not only design better experiential learning programs, but would
14 ensure that they will be meaningful in a 21st Century context.

15

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5

1 **Appendix A: countries represented in sample**

2

Australia	Malta
Austria	Mauritius
Belgium	Mexico
Brazil	Micronesia
Bulgaria	Mongolia
Canada	Namibia
China	Netherlands
Colombia	New Zealand
Croatia	Nigeria
Cyprus	Norway
Czech Republic	Pakistan
Denmark	Palau
Djibouti	Papua New Guinea
Egypt	Peru
Estonia	Philippines
Finland	Portugal
France	Romania
Gabon	Slovakia
Germany	Slovenia
Greece	South Africa
Hong Kong, SAR	Spain
Hungary	Sri Lanka
Iceland	St. Vincent and the Grenadines
India	Sweden
Ireland	Switzerland
Italy	Taiwan
Jamaica	Thailand
Japan	Turkey
Kenya	Uganda
Latvia	UK
Lebanon	Uruguay
Luxembourg	Vietnam
Malaysia	Zambia
Maldives	Zimbabwe