What is Library and Information Science (LIS) in Latin American Library schools

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Library Science or Librarianship has been defined as the systematic body of knowledge related to the book and the library, including diverse aspects dealing with books as autonomous entities, but also those related to the entity of which they are a part[1]. On the other hand, it has also been pointed out that Information Science is concerned with the principles and practices of production, organization and distribution of information and the study of information from its generation to its use and transmission in a variety of ways[2]. Likewise, that Library Science and Information Science are specific disciplines with their own study subject and specific activity, which together with others like Archival science and Bibliography integrate an interrelated field.

There is also another point of view which views the study of recorded information as a general discipline, which agglutinates other disciplines, as branches or specialties. This proposal has been successful in the United States of America and and it also has had great influence in the Latin American Spanish-speaking countries, where Library and Information Science has been used as the name of a general discipline covering all study aspects of recorded information (in numerical, alphabetical and graphic symbols)[3]. Nevertheless, the terminology used has motivated an intense debate among scholars and professionals in this region, and they have not yet reached a conclusion. For example, the name of library schools are different in diverse Latin American Spanish-speaking countries, and in some of them Librarianship, Library Science and Library and Information Science have been used synonymously.

The above highlights the need for studies to achieve a closer approximation of the way in which Library and Information Science (LIS) is conceptualized and how it is used, including possible answers to the following questions : « Is LIS one or different disciplines ? » In either case, what are the differences or convergences ? What are the study fields ? What kind of study subjects or phenomena are approached ? The present work aims to achieve possible answers to these questions, as well as to identify, analyze and discuss how these terms are conceptualized and used at library schools in Latin American Spanish-speaking countries.

From past to present : evolution of LIS conceptualization

One of the most recent definitions of Library and Information Science is included in the work *Foundations of Library and Information Science* by R. Rubin[4]. In this work, LIS has been defined as a « discipline oriented toward providing access to vast amounts of accumulated knowledge and information ». Certainly, this definition fits the actual features of our field which are the products of many decades of growth and change.

Indeed,

> Library and Information Science (LIS) has been an academic discipline since the 1960's, but the history is much longer. Forerunners are primarily found in Library Science and Information Science. Library Science dates back to the early 19th century, when Martin Schrettinger introduced the concept « Bibliothekswissenschaft » in a handbook for librarians[5]. In the 1870's, the Columbia School of Library Economics became the first university affiliated school for training librarians ; and in the 1920's, the Graduate Library School was founded at University of Chicago, establishing Library Science as an academic field of research by the creation of a PhD program…
>
> The origin of Information Science can be traced to the late 19th and early 20th century ; and the documentation movement in Europe. Problems concerning the management and diffusion of increasing amounts of scientific information were first defined by Paul Otlet[6].

Thus, according to these statements, LIS is the integration of two different fields, Library Science and Information Science.

Nevertheless, the professional literature shows that sometimes LIS and Library Science are used indistinctly in spite of the significant differences between them. Likewise, the term Librarianship is used for talking about Library Science and even for LIS. It has been pointed out that:

> There is no generally agreed distinction between Library Science, Library and Information Science, and Librarianship. To a certain extent they can be considered interchangeable, perhaps adopted to increase the « science » aspect, or improve the popular image of librarians. The term Library and Information Science (LIS) is often used ; most librarians consider it as only a terminological variation, intended to emphasize the scientific and technical foundations of the subject, and its relationship with Information Science[7].

It can be seen in these definitions that LIS is used to give to the field a more scientific significance. A review of the terms Library Science and Librarianship in the *Online Dictionary for Library and Information Science* shows that Library Science has been defined as :

> the professional knowledge and skill with which recorded information is selected, acquired, organized, stored, maintained, retrieved, and disseminated to meet the needs of a specific clientele, usually taught at a professional library school qualified to grant the post baccalaureate degree of MLS or MLIS. The term is used synonymously in the United States with Librarianship[8].

On the other hand, Librarianship has been defined as :

> the profession devoted to applying theory and technology to the creation, selection, organization, management, preservation, dissemination, and utilization of collections of information in all formats. In the United States, it is often used synonymously with Library Science[9].

Clearly there are noticeable similarities in the definitions for Library Science and Librarianship, since their subject of study is the same, recorded information in all kind of supports ; however, the Librarianship focus is on « applying theory and technology ».

In 2008 C. F. Cheong, in answering the questions « what is Librarianship » and « what is it about now », makes the point that Librarianship is « the preservation and transfer of knowledge in all recorded forms across time and space for the benefit of humankind ». He mentions as well that

we can draw on our practical day to day work and define Librarianship as « being concerned with the principle and practice of selecting, acquiring, organizing, disseminating and providing access to information in accordance with the specific needs of groups of people or an individual »[10]. However, this author also points out that « to some people, Librarianship may sound like an old-fashion term – something that smells of mothballs and is wrapped in parchment ». This is one of the possible reasons why the term Library Science may be preferred and is more commonly used than Librarianship.

There is another term that along with Librarianship and Library Science has been used in our professional field : « Library economy ». Regarding to this term, M. Gorman has stated :

> Long ago, people wrote about something called « library economy », a term that stresses the practical, results oriented nature of our profession. Later, Ranganathan coined the term « Library Science », a term that embodied his idea that Librarianship could be thought of in terms of scientific principles that governed all the activities of librarians. Today, both seem to be old-fashioned terms, but indeed does « Librarianship », but what are we to use in its place ?[11]

Certainly, a possible answer to Gorman´s question would be : Library and Information Science (LIS).

Library economy is an older term used for Library Science or Library and Information Science (LIS) :

> Dewey Decimal Classification (DDC) used the term « Library economy » for class 19 in its first edition (1876)[12]. In the second edition (and all subsequent editions) it was moved to class 20[13]. The term « Library economy » was used until (and including) 14th edition (1942)[14]. From the 15th edition (1951)[15], class 20 was termed Library Science, which was used until (and including) 17th edition (1965)[16] when it was replaced by « Library and Information Science[s] » (LIS) from 18th ed. (1971)[17] and forward[18].

Nevertheless, this term continues to be used, for example, in French, for the *École de bibliothéconomie et des sciences de l'information*, in Montréal, Canada ; in Italian for the *Master Archivistica e biblioteconomia,* Sapienza Università di Roma, Rome, Italy ; and in Spanish for the *Departamento de bibliotecomonía y documentación* at the Universidad Complutense in Madrid, Spain. Likewise, the term library economy continues to be used in some European countries like Spain and Italy (Biblioteconomía), France (Bibliothéconomie), and Germany (Bibliothekswissenschaft) to refer to the science that studies the library as a system (Italy), the techniques used in libraries (France), or the set of knowledge dealing with library management (Germany)[19]. Moreover, nowadays in those institutions, this term reflects the new specific approaches of Librarianship, Library Science and LIS.

Thus the terms Library economy, Librarianship, Library Science and Library and Information Sciences (LIS) have been used at different times and settings to identify particular features and development stages of our profession and discipline. The most antique term was library economy, mostly associated with the practical activities carried out in the library, particularly acquisition, cataloging and classification of materials. This term was substituted by the terms Librarianship and Library Science, emphasizing the principles and scientific status of the discipline. At the present time, the most common term in use is Library and Information Science (LIS) which

emerged as a consequence of our disciplinary and professional evolution. Likewise, it has been pointed out that Library Science and Information Science are two terms with different connotations that are jointly integrated in LIS.

The classical definition of Information Science stated by H. Borko stresses the independent status of Information Science, but at the same time, its close relationship with Library Science is emphasized :

> Information Science is that discipline that investigates the properties and behavior of information, the forces governing the flow of information, and the means of processing information for optimum accessibility and usability. It is concerned with that body of knowledge relating to the origination, collection, organization, storage, retrieval, interpretation, transmission, transformation, and utilization of information. This includes the investigation of information representations in both natural and artificial systems, the use of codes for efficient message transmission, and the study of information processing devices and techniques such as computers and their programming systems. It is an interdisciplinary science derived from and related to such fields as mathematics, logic, linguistics, psychology, computer technology, operations research, the graphic arts, communications, library science, management, and other similar fields. It has both a pure science component, which inquires into the subject without regard to its application, and an applied science component, which develops services and products[20].

Recent definitions of Information Science also state convergences and differences with LIS :

> The systematic study and analysis of the sources, development, collection, organization, dissemination, evaluation, use, and management of information in all its forms, including the channels (formal and informal) and technology used in its communication[21].

Likewise, this definition notably stresses the technological components of this field, which are significant elements in many definitions, such as :

> Information Science is concerned with the generation, collection, organization, interpretation, storage, retrieval, dissemination, transformation and use of information, with particular emphasis on the applications of modern technologies in these areas. As a discipline, it seeks to create and structure a body of scientific, technological, and systems knowledge related to the transfer of information[22].

The debate about LIS conceptualizations, their components and the subordination of them has been ongoing for several decades. Many conceptualizations and definitions for Library Science or Librarianship and Information Science can be found ; however, it is clear that regardless of any subordination or hierarchy that exists among them, they are separate fields with strong interdisciplinary relationships. Likewise, Library Science and Information Science constitute the two main fields of Library and Information Science (LIS).

Library and Information Science (LIS) schools

LIS schools have undergone a continuous process of adaptation mirroring the development of the profession and discipline by encouraging future professionals to acquire the knowledge and skills necessary for successful professional practice and scholarly work. Therefore, changes in the

conceptualizations and terminology of the discipline are reflected in the library schools denominations, degrees awarded, and programs offered. As it has been mentioned, LIS is a term that includes a mix of two fields, Library Science and Information Science, and at the present time is the term most commonly used. Professional schools were not unfamiliar with this trend, particularly when they changed their status from professional schools to research based university institutions, mostly during the second half of the twenty century.

> In the last part of the 1960s schools of Librarianship began to add the term « Information Science » to their names. The first school to do this was the University of Pittsburgh in 1964. More schools followed during the 1970s and 1980s and during the 1990s almost all Library Schools in the USA added Information Science to their names. A similar development has taken place in large parts of the world. For example, in 1997 the Royal School of Librarianship in Copenhagen changed its name in English to the Royal School of Library and Information Science[23].

In the United States of America, library professional positions require an American Library Association (ALA) accredited master's degree. Most of the more prestigious universities in the United States and Canada offer such degrees with names such as Master of Library Science (MLS), Master of information (MI), Master of Library and Information Science (MLIS), and Master of Library and Information Studies (MLIS) (Annex 1). This last denomination, Information Studies, has been used as an umbrella term at some universities for a curricular division that includes Library and Information Science (LIS) and allied fields (informatics, information management, etc.)[24].

A review of the directory of institutions offering master's programs accredited by the American Library Association shows the terms Library and Information Studies or Information Studies are included in the professional school or department names at diverse universities in the U.S. and Canada[25] : Universities of Alabama, California (Los Angeles), Maryland, North Carolina at Greensboro, Oklahoma, Rhode Island, Wisconsin-Madison, Alberta, Western Ontario ; Florida State University, Valdosta State University (Georgia), State University of New York (Buffalo), Queens College (New York), Syracuse University, University of Texas Woman's University. However, the degree awarded by some of them is Master of Library and Information Science (MLIS).

Likewise, diverse schools and departments have dropped from their names the word « library », which has caused many discussions[26]. Schools and programs that have dropped the word « library » from their names are at the following universities : Universities of California (Los Angeles), South Florida, Maryland, Missouri, Washington, Wisconsin-Milwaukee, Toronto, Valdosta State University (Georgia), State University of New York (Albany), Syracuse University, Dalhousie University, McGill University. Nevertheless, some of them are granting Master of Library and Information Science (MILS) degrees.

Moreover, many of the master's degrees granted by the schools and programs accredited by the American Library Association (ALA), either in « Information Science » or « Library Science », have changed from a Master of arts (M.A.) to a Master of science (M.S.) category. Indeed, a M.A. degree has a broader scope, with a strong emphasis on the humanities and theoretical and general knowledge in a recognized discipline, interdisciplinary field, or professional study. Conversely, a M. S. degree is more focused on an approach with a scientific base, including technological knowledge, math and computer oriented skills, and practical skills needed for a particular discipline.

All the above indicate that Information Science or Information Studies constitutes a broad term related to the information field, which would include Library Science and even LIS. This is not at all the case, since behind this kind of rationalization, there are also some practical explanations, as well as disciplinary ones. An example is when the Rutgers University School of Communication, Information and Library Studies (SCILS) decided to change its name to School of Communication and Information in 2009. Rutgers said the change will make them « more competitive ». Jorge Reina Schement, SCILS Dean, pointed out :

> Prior to the vote, I consulted with a number of library leaders, including the MLIS Program Associates, past ALA presidents, and others… We don't all agree, but I believe that most understand that success in the 21st century requires us to reposition ourselves within the university and across the country[27].

Certainly, Library Science and Information Science are two different fields with a strong interdisciplinary relationship, which has motivated their merger into the unique term (LIS) ; however, reasons of practical order have also motivated the union of these terms, Library and Information Science (LIS) or Library and Information Studies.

Library and Information Science (LIS) schools in Latin America

As in many other parts of the world, Library and Information Science are terms that have been widely used in Latin America. They have been used in journal titles, in the names of professional conferences, and commonly for the denominations of librarian schools, as well as for the programs and degrees they offer.

Unlike library education in the United States, Canada, and other countries, professional librarian training in Latin America is at the undergraduate level, which is called « *licenciatura* », instead of bachelor's studies. In the United States and Canada, a librarian normally has a one or two-year master's degree in Library and Information Science, Library Science or Information Science. In Latin America, a *licenciatura* is usually an academic degree awarded by a university or a higher education institution that generally lasts four years, but can range from three to five years depending on the country. University students obtain a *licenciatura* in their respective fields enabling them to work as professionals in their chosen areas ; for example, a *licenciatura* in Librarianship or Library Sciences enables a person to work as a librarian in public, academic or specialized libraries. Some universities also grant a technical degree before the students complete their *licenciatura* studies, usually after the second or third year. Likewise, there are some universities granting master's degrees, and only one in Latin America, the National autonomous university of Mexico, that grants a Doctorate in Library Science and Information Studies.

The beginning of library education in Latin America dates back to the second decade of the twentieth century, Argentina (1922). Between the 40s and 50s different library schools were opened in several countries : Panamá (1941), Peru (1943), Uruguay (1943), Mexico (1945), Chile (1949), Costa Rica (1950), Mexico (1945) and Colombia (1956). The library schools answered the need to train professional personnel for the proper functioning of libraries in diverse institutions, thus the first courses were focused on technical understanding and skills[28]. For this reason, some Latin American library schools and programs included in their first names the Spanish word « Biblioteconomía », or other similar ones : Escuela nacional de biblioteconomía y archivonomía [National School of « Biblioteconomía » and Archival Studies] (México, 1945), Colegio de bibliotecología [College of « Biblioteconomía »] of the Universidad nacional autónoma de México (México, 1956), « Licenciatura in biblioteconomía » of the Universidad

autónoma de San Luis Potosí (Mexico, 1980), Escuela nacional de bibliotecarios [National School of Librarians] (Peru, 1943), Escuela universitaria de bibliotecnia (Uruguay, 1959).

Etymologically, the term « Biblioteconomía » is formed from the Greek words *biblion* (book), *theke* (box or cabinet) and *nomos* (rule, norm). It was used for the Spanish version of the English terms « Library economy ». In this way, « Biblioteconomía » was conceptualized as the set of knowledge and practical expertise related to books and the administration and organization of a library, emphasizing practicalities, economics and standards rather than services like it was mentioned earlier. Obviously, this conceptualization was overtaken by time and the new library approaches and perspectives, which motivated the substitution of the word « Biblioteconomía » by « Bibliotecología ». A review of Annex 2 shows only one library school keeping the word « Biblioteconomía » in its name, the « Escuela nacional de biblioteconomía y archivonomía » (Mexico). This can be considered a special case since it is the only school run by the Ministry of Education instead of a university. Likewise, it was created by a Presidential Act, so a name change is a complicated issue.

The Spanish word « Bibliotecología » derives from the Greek words *biblion* (Book), *theke* (Box) and *logos* (word, verb). Its meaning is similar to the word « Biblioteconomía » ; however, the difference is the scientific approach stressed by the term « logos ». In this way, « Bibliotecología » encompasses the systematic body of knowledge and practices relating to books and other materials, as well as the library objectives, principles, content, services, systems, rules and standards. For this reason, Latin American library schools included in their names the word « Bibliotecología », whose English equivalent is Librarianship although sometimes Library Science has also been used.

As mentioned earlier, there are similarities and differences among both terms Librarianship and Library Science. Librarianship is focused on « applying theory and technology »[29]. Moreover, Library Sciences is most commonly used in the United States, particularly for librarian training at library schools that grant a post baccalaureate degree. In the UK and some other European countries, the term Librarianship is most commonly used, and a librarian, having a bachelor's degree, is able to plan, organize and manage library resources and services. They can work in school or college libraries, public or academic libraries, or learning resource centers[30]. For these reasons, the preferred term for the Spanish word « Bibliotecología » would be « Librarianship ». In this way, the term is used in Annex 2 to compare and analyze Latin America library schools names and degrees granted.

As a consequence of the disciplinary and professional evolution, but also as a consequence of the great influence that LIS in the USA has on this region, library education in Latin America Spanish speaking countries has been substantially modified. An analysis of the Annex 2, « LIS schools and programs in Latin American Spanish speaking countries », shows in school names, programs and degrees granted a shift from a perspective focused on Librarianship to a more broadly based information presence. Most of the programs are aimed to educate bachelors [« licenciados »] for professional practice and they have incorporated terms such as Information Science(s) and Library and Information Science(s) (LIS), like in the USA.

J. Escalona Ríos has pointed out that professional degrees (*licenciatura*) granted in the region are diverse, showing about eleven different names to refer to the same degree. Nevertheless, there is a prevailing trend to only append to degree names the term Library and Information Science(s) to « try to expand » the range of their studies but their objectives and the professional profile of their graduates continues being the same : to form librarians able to preserve, organize and disseminate

information in diverse formats in order to meet the information needs of society and individuals. In this sense, their focus tend to be the same that in the past, to train librarians for all types of libraries, information centers, documentation, information systems, archives and other units in which information is given. A few institutions are moving the field of study beyond the traditional settings, including courses like database creation, telecommunications networks, and learning resource centers management, among others31. As in other regions and countries, institutions respond to trends in terminology and make subsequent changes in their curriculum in their desire to reflect modernity. Terms used in Latin American library schools names and programs are as diverse as their curricula, leading us to consider the necessity of defining the meaning of Library and Information Sciences (LIS).

Final considerations

One of the issues that the library community has recognized as controversial is the question of relations between Library Science and Information Science as fields of knowledge. Nevertheless, it is regrettable that despite this recognition, there are not abundant studies from Latin American Spanish-speaking authors on this issue. Subordination, exclusion and inclusion are the three words that best identify the diverse positions in the relationships between these two disciplines : the first concedes the subordination of Librarianship or Library Science to Information Science. Exclusion considers both to be independent knowledge fields. Inclusion proposes an integration of both fields within a single space32. Indeed, this point of view adequately states that Library Science and Information Science are subjects that are related, but different. Likewise the inclusion and creation of an integrated discipline is one of the more realistic positions on this issue. The practice has demonstrated the unquestionable informational overlap between these two knowledge fields beyond the epistemological discussions, since there is a common subject : information or documents with different features and approaches are present in both spaces.

At this point, the reasons behind the extensive discussions on this issue could be questioned. It can be stated that these disciplines have emerged from two different settings, professional practice and scholarly endeavors. Those who support the practical point of view claim that Librarianship does not have a general body of knowledge, and that the future librarian can only learn through experience, either in a library, or in reference or cataloging classes. Those who support the theoretical point of view, argue that there is a general body of knowledge that constitutes Library and Information Science (LIS), and that the future librarian will be better prepared for professional practice by understanding the theories and principles underlying subjects such as management, book selection, and classification, and being able to apply them to specific situations33.

In discussing the meaning of Library and Information Science (LIS), one cannot ignore the double dimension in which LIS should be contextualized ; on one hand, an approach based on everyday reality, and on the other hand, a perspective based on a theoretical framework that attempts to shed light on processes and library activities. However, sometimes librarians in professional practice consider the LIS theoretical dimension unrealistic. Likewise, LIS theorists sometimes underestimate those working on the front lines. Then, LIS should be considered as a new conception of our discipline (Librarianship or Library Science) intended to emphasize its scientific and technical foundations but also its relationship with the professional practice related to information bearing entities.

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Annexes:

ANNEX 1
LIS SCHOOLS AND PROGRAMS IN THE UNITED STATES OF AMERICA AND CANADA

UNIVERSITY OF ALABAMA
School of Library and Information Studies
- Master of Library and Information Studies

UNIVERSITY OF ARIZONA
School of Information Resources & Library Science
- M.A. in Information Resources and Library Science

Other Related Degrees and Programs
- Digital Information Management Graduate Certificate
- Undergraduate Minor in Information Resources and Library Science with an emphasis on Digital Information Studies
- E-Society Bachelor of Arts

UNIVERSITY OF CALIFORNIA, LOS ANGELES
Graduate School of Education & Information Studies
Department of Information Studies
- Master of Library and Information Science
   Specialization in Library Studies
   Specialization in Archival Studies
   Specialization in Informatics

Other Related Degrees and Programs
- M.A. in Moving Image Archive Studies
- Post Master's Certificate of Specialization in Information Studies
- Information Studies Undergraduate Courses

SAN JOSE STATE UNIVERSITY
School of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Master of Archives and Records Administration
- Post-Master's Certificate Program in Library and Information Science Digital Archives and Records Management
   Digital Services and Emerging Technologies

Information Intermediation and Instruction
Web Programming and Information Architecture

UNIVERSITY OF DENVER

Morgridge College of Education
Library and Information Science Program
- Master of Library and Information Science

SOUTHERN CONNECTICUT STATE UNIVERSITY

School of Education
Department of Information and Library Science
- Master of Library Science

Other Related Degrees and Programs
- Undergraduate Program
- Information Management and Services

CATHOLIC UNIVERSITY OF AMERICA

School of Library and Information Science
- M.S. in Library Science

Other Related Degrees and Programs
- M.S. in Information Technology with a concentration in Health Information Technology

FLORIDA STATE UNIVERSITY

School of Library & Information Studies
- M.S. in Library and Information Studies

Other Related Degrees and Programs
- M.S. in Information Technology
- Specialist (post-master's) degrees in Library & Information Studies
- Certificates in
    Information Architecture
    Health Informatics
- B.S. in Information Technology
    Major in IT
    Major in Information, Communication and Technology

UNIVERSITY OF SOUTH FLORIDA

School of Information
- M.A. in Library and Information Science

Other Related Degrees and Programs
- B.S. in Information Studies

VALDOSTA STATE UNIVERSITY (GEORGIA)
Department of Information Studies
- Master of Library and Information Science

UNIVERSITY OF HAWAII
Library and Information Science Program
- Master of Library and Information Science

Other Related Degrees and Programs
- M.S. in Information and Computer Sciences
- B.A. in Information and Computer Sciences
- B.S. in Computer Science

DOMINICAN UNIVERSITY
Graduate School of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Master of Professional Studies in Library and Information Science

UNIVERSITY OF ILLINOIS, URBANA-CHAMPAIGN
Graduate School of Library and Information Science
- M.S. in Library and Information Science

Other Related Degrees and Programs
- M.S. Specialization in Data Curation
- M.S. in Bioinformatics
- Certificate in Community Informatics
- Certificate of Advanced Study (C.A.S.) in Library and Information Science
    Digital libraries
    Library and information center administration
    Information technology
    Information management
    Government information
    Science information
- Informatics Minor

INDIANA UNIVERSITY
School of Library and Information Science
- Master of Library Science
- Master of Information Science

Other Related Degrees and Programs
- Chemical Information Specialist and MIS
- Chemical Information Specialist and MLS

- Digital Libraries Specialization and MLS
- Library Technology Management and MLS
- Graduate Certificate in Information Architecture

UNIVERSITY OF IOWA
School of Library and Information Science
- M.A. in Library and Information Science

Other Related Degrees and Programs
- Health Informatics Certificate

EMPORIA STATE UNIVERSITY
School of Library and Information Management
- Master of Library Science

UNIVERSITY OF KENTUCKY
School of Library and Information Science
- M.S. in Library Science

Other Related Degrees and Programs
- Undergraduate minor in Information Studies

LOUISIANA STATE UNIVERSITY
School of Library & Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Information Management Specialization.

UNIVERSITY OF MARYLAND
College of Information Studies
- Master of Library Science

Other Related Degrees and Programs
- Master of Information Management
- M.S. in Human-Computer Interaction

SIMMONS COLLEGE
Graduate School of Library and Information Science
- M.S. in Library and Information Science

Other Related Degrees and Programs
- Digital Stewardship Certificate

UNIVERSITY OF MICHIGAN
School of Information
- M.S. in Information

Other Related Degrees and Programs
- Master in Health Informatics
- B.A./B.S. in Information

WAYNE STATE UNIVERSITY
School of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Graduate Certificate in Information Management
- Graduate Certificate in Records and Information Management
- Specialist Certificate in Library and Information Science

ST. CATHERINE UNIVERSITY
MLIS Program / Information Management Department
- Master of Library and Information Science

UNIVERSITY OF SOUTHERN MISSISSIPPI
School of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- B.A. in Library and Information Science

UNIVERSITY OF MISSOURI
School Information Science and Learning Technologies
- M.A. in Library Science

RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY
School of Communication and Information
Department of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Master of Communication and Information Studies
- B.A. in Communication
- B.A. in Information Technology and Informatics
- B.A. in Journalism and Media Studies
- Minor in Digital Communication, Information, and Media

UNIVERSITY AT ALBANY, STATE UNIVERSITY OF NEW YORK
College of Computing and Information
Department of Information Studies
- M.S. in Information Science

UNIVERSITY AT BUFFALO, STATE UNIVERSITY OF NEW YORK
Graduate School of Education
Library and Information Studies
- Master of Library Science

LONG ISLAND UNIVERSITY
College of Education and Information Science
Palmer School of Library and Information Science
- M.S. in Library and Information Science

PRATT INSTITUTE (NEW YORK)
School of Information and Library Science
- M.S. in Library and Information Science

QUEENS COLLEGE, CUNY
Graduate School of Library and Information Studies
- Master of Library Science

ST. JOHN'S UNIVERSITY
St. John's College of Liberal Arts & Sciences
Division of Library and Information Science
- Master of Library Science

SYRACUSE UNIVERSITY
School of Information Studies
- M.S. in Library and Information Science

Other Related Degrees and Programs
- M.S. in Information Management
- M.S. in Information Management for Executives
- M.S. in Telecommunications and Network Management
- Certificate of Advanced Study Programs
   Data Science
   Digital Libraries
   eGovernment Management and Leadership
   Information Innovation: Social Media
   Information Security Management

Information Systems and Telecommunications Management
- B.S. in Information Management and Technology
  Information security management:
  Project management
  Network and systems management
  Web design and management
  Database management
- Minor in Information Management and Technology
- Minor in Information Technology, Design and Startups

NORTH CAROLINA CENTRAL UNIVERSITY
School of Library and Information Sciences
- Master of Library Science

Other Related Degrees and Programs
- Master of Information Science

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
School of Information and Library Science
- M.S. in Library Science
- M.S. in Information Science

Other Related Degrees and Programs
- Certificates of Specialization
  Bioinformatics
  Clinical Information Science
  Digital Curation
- B.S. in Information Science
- Minor in Information Systems

UNIVERSITY OF NORTH CAROLINA AT GREENSBORO
School of Education
Department of Library and Information Studies
- Master of Library and Information Studies

KENT STATE UNIVERSITY
School of Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- M.S. in Information Architecture and Knowledge Management
- Certificate of Advanced Study in Digital Libraries
- Certificate of Advanced Study in Digital Preservation

UNIVERSITY OF OKLAHOMA
School of Library and Information Studies
- Master of Library and Information Studies

CLARION UNIVERSITY OF PENNSYLVANIA
College of Education and Human Services
Department of Library Science
- M.S. in Library Science

Other Related Degrees and Programs
- B.S. in Liberal Studies, Library Science Concentration

DREXEL UNIVERSITY
College of Information Science and Technology
- M.S. in Library and Information Science

Other Related Degrees and Programs
- M.S. in Health Informatics
- M.S. in Information Systems
- M.S. in Software Engineering
- Post-Master Specialization
   Competitive Intelligence and Knowledge Management
   Digital Libraries
- Advanced Certificate in Information Studies and Technology
- B.S. in Information Systems
- B.S. in Information Technology

UNIVERSITY OF PITTSBURGH
School of Information Sciences
Library and Information Science Program
- Master of Library and Information Science
   Digital Libraries
   Information Technology

Other Related Degrees and Programs
- Certificate of Advanced Study in Health Sciences Librarianship

Information Science and Technology Program
- M.S. in Information Science
   Database and Web Systems
   Geoinformatics
   Human Centered Computing
   Information Security

Telecommunications and Distributed Systems
- Undergraduate program
   Systems

Networks and security
User-centered design

UNIVERSITY OF PUERTO RICO
Graduate School of Information Sciences and Technologies
- Master of Information Sciences

UNIVERSITY OF RHODE ISLAND
Graduate School of Library and Information Studies
- Master of Library and Information Studies

UNIVERSITY OF SOUTH CAROLINA
Mass Communications and Information Studies
Library and Information Science
- Master of Library and Information Science

Other Related Degrees and Programs
- Certificate of Graduate Study in Health Communication
- B.S. in Information Science

UNIVERSITY OF TENNESSEE
School of Information Sciences
- M.S. in Information Science

Other Related Degrees and Programs
- Undergraduate Minor in Information Studies & Technology

UNIVERSITY OF NORTH TEXAS
College of Information
Department of Library and Information Sciences
- M.S. in Library Science
- M.S. in Information Science

Other Related Degrees and Programs
- B.S. in Information Science
- B.A.A.S. in Legal Information Management
- B.A.A.S. in Health Information Management

UNIVERSITY OF TEXAS AT AUSTIN
School of Information
- M.S. in Information Studies

Other Related Degrees and Programs
- Undergraduate minor in Information Studies

TEXAS WOMAN'S UNIVERSITY
School of Library and Information Studies
- M.A. in Library Science

Other Related Degrees and Programs
- Graduate Certificate in Evidence-Based Health Science Librarianship

UNIVERSITY OF WASHINGTON
The Information School
- Master of Library and Information Science

Other Related Degrees and Programs
- Master of Science in Information Management
- Certificate Programs
   Information Security and Risk Assessment
   Web Technology Solutions
   B.S. in Informatics

UNIVERSITY OF WISCONSIN-MADISON
College of Letters and Sciences
Library and Information Studies
- Degree Granted: M.A. in Library and Information Studies

UNIVERSITY OF WISCONSIN-MILWAUKEE
School of Information Studies
- Master of Library and Information Science

Other Related Degrees and Programs
- B.S. in Information Science & Technology
- Certificate of Advanced Study – Digital Libraries

UNIVERSITY OF ALBERTA
School of Library and Information Studies
- Master of Library and Information Studies

Other Related Degrees and Programs
- M.A. in Humanities Computing
- M.A. in Humanities Computing, Library & Information Studies Specialization

UNIVERSITY OF BRITISH COLUMBIA
School of Library, Archival & Information Studies
- Master of Library and Information Studies

DALHOUSIE UNIVERSITY
School of Information Management
- Master of Library and Information Studies

Other Related Degrees and Programs
- Master of Information Management
- Bachelor in Knowledge Management

UNIVERSITY OF TORONTO
Faculty of Information
- Master of Information

UNIVERSITY OF WESTERN ONTARIO
Faculty of Information and Media Studies
Graduate Program in Library and Information Science
- Master of Library and Information Science

MCGILL UNIVERSITY
School of Information Studies
- Master of Library and Information Studies
   Archival Studies
   Knowledge Management
   Librarianship

UNIVERSITÉ DE MONTREAL
École de bibliothéconomie et des sciences de l'information
- Maîtrise en sciences de l'information

Other Related Degrees and Programs
- Certificat en gestion de l'information numérique

Sources : American Library Association, *Library & Information Studies : directory of institutions offering accredited master's programs and LIS schools and programs websites*, 2012.

ANNEX 2
LIS SCHOOLS AND PROGRAMS IN LATIN AMERICAN SPANISH SPEAKING COUNTRIES

ARGENTINA
Pontifica Universidad Católica Argentina
Faculty of Humanities « Teresa de Ávila »
Department of Humanities
- Technical in Librarianship

Universidad de Buenos Aires
Faculty of Philosophy and Letters
Department of Library and Information Science
- Licenciatura in Library and Information Science
- Teacher in Library and Information Science

Universidad Nacional de Mar del Plata
Faculty of Humanities
Department of Documentation
- Licenciatura in Librarianship and Documentation

Universidad Nacional de La Plata
Faculty of Humanities and Education Sciences
Departamento de Bibliotecología y Documentación
- Licenciatura in Library and Information Sciences
- Teacher in Library and Information Sciences

Universidad Nacional de Misiones
Faculty of Humanities and Social Sciences
- Technical in Librarianship

Universidad Nacional del Nordeste
Faculty of Humanities
Department of Information Sciences
- Licenciatura in Information Sciences (Librarianship and Archival Studies)

BOLIVIA
Universidad Mayor de San Andrés
Faculty of Humanities and Education Sciences
Department of Library and Information Sciences
- Technical in Library and Information Sciences
- Licenciatura in Library and Information Sciences

CHILE
Universidad Bolivariana
Program of Librarianship
Technical in Librarianship
- Licenciatura in Information Science (Automation of Information Unities)

Universidad de la República
- Technical in Libraries and Information Centers

Universidad Tecnológica Metropolitana
Faculty of Management and Economics
Department of Information Management
School of Librarianship
- Licenciatura in Librarianship and Information Management

COLOMBIA
Pontifica Universidad Javeriana
Faculty of Communication and Language
Department of Information Sciences
- Licenciatura in Information Science (Librarian)

Universidad de Antioquia
Escuela Interamericana de Bibliotecología
- Licenciatura in Librarianship
- Licenciatura in Technology for Archives
- Specialization in Information Services Management
- Specialization in Publication Editing

Universidad de La Salle
Faculty of Economic and Social Sciences
- Licenciatura in lnformation Systems, Librarianship and Archival Studies
- Master in Documental Management and Archives Management

Universidad del Quindío
Faculty of Human Sciences
- Licenciatura in Information and Documentation Science

COSTA RICA
Universidad de Costa Rica
Faculty of Education
School of Library and Information Sciences
- Technical in Librarianship (Focus on Information Sciences)
- Licenciatura in Librarianship (Focus on Information Sciences)
- Master in Library and Information Sciences

Universidad Nacional
Faculty of Philosophy and Letters
School of Librarianship, Documentation and Information
- Technical and Licenciatura in Librarianship (Focus on Information Management)
- Technical and Licenciatura in Librarianship (Focus on Information and Communication Technologies)

ECUADOR
Universidad de Guayaquil
Faculty of Philosophy and Education Sciences
School of Librarianship and Archival Studies
- Licenciatura in Librarianship and Archival Studies

EL SALVADOR
Universidad de El Salvador
Faculty of Sciences and Humanities
- Technical in Librarianship

Universidad Panamericana de El Salvador
Faculty of Sciences and Humanities
School of Library and Information Sciences
Licenciatura in Librarianship

MEXICO
Escuela Nacional de Biblioteconomía y Archivonomía
[National School of Library Economy and Archival Studies]
- Technical in Librarianship
- Licenciatura in Librarianship
- Technical in Archival Studies
- Licenciatura in Archival Studies

Instituto Tecnológico y de Estudios Superiores de Monterrey
Area of Education
- Master in Information Sciences and Knowledge Management

Universidad Autónoma de Chiapas
Faculty of Humanities
- Licenciatura in Librarianship

Universidad Autónoma de Chihuahua
Faculty of Philosophy and Letters
- Licenciatura in Information Sciences

Universidad de Guadalajara
Virtual University System
- Licenciatura in Librarianship

Universidad Autónoma del Estado de México
Faculty of Humanities
- Licenciatura in Documental Information Sciences

Universidad Autónoma de Nuevo León
Faculty of Philosophy and Letters
- Licenciatura in Library and Information Sciences

Universidad Autónoma de San Luis Potosí
School of Information Sciences
- Licenciatura en Librarianship
- Licenciado en Archival Studies

Universidad Nacional Autónoma de México
Faculty of Philosophy and Letters
College of Librarianship
- Licenciatura in Library Science and Information Studies

Research Institute on Libray Science and Information
- Master in Library Science and Information Studies
- Doctorate in Library Science and Information Studies

PANAMA

Universidad de Panama
Faculty of Humanities
School of Librarianship
- Technical in Documental and Archival Management
- Technical in Library and Information Science
- Licenciatura in Library and Information Sciences

PARAGUAY
Universidad Nacional de Asunción
Polytechnic Faculty
- Licenciatura in Information Sciences

PERU
Pontificia Universidad Católica del Perú
Department of Humanities
Section of Library and Information Sciences
- Technical in Humanities (Information Sciences)
- Licenciatura in Information Sciences

Universidad Nacional Mayor de San Marcos
Faculty of Letters and Human Sciences
School of Library and Information Sciences
- Licenciatura in Library and Information Sciences

URUGUAY
Universidad de la Republica
University School of Librarianship and related Sciences
Technical in Archive Studies
- Licenciatura en Librarianship

VENEZUELA
Universidad Central de Venezuela
Faculty of Humanities and Education
School of Librarianship and Archive Studies
- Licenciatura in Librarianship

Universidad de Zulia
Faculty of Humanities and Education
School of Librarianship and Archive Studies
- Licenciatura in Librarianship and Archive Studies

Sources : *World list of schools and departments of Information Science, information management and related disciplines* <http://informationr.net/wl/>

Names of schools, departments, programs and degrees granted have been translated to English for a better understanding.