

History of Curriculum Development in Library Science Education in China

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Abstract:

Library science education in China has experienced several stages of developments and changes in curricula. There is some research on an overview of the history of library science education. However, little research has been conducted only on curriculum development from a historical perspective. This study examines the historical and current status of curriculum development in China. It compares the changes in curricula of various stages and analyzes the factors influencing the curriculum development. The main problems in curriculum development are discussed. Suggestions and recommendations are helpful for library schools to successfully adapt themselves to the digital age and to develop future curriculum effectively.

Keywords: History, curriculum developments, library science education, comparison of curricula, factors, problems, suggestions and recommendations

Introduction

China has a long history of books, libraries and archives, which can be traced back as early as about 4000 years ago [1]. Libraries have experienced five significant periods of developments: “ancient library (pre-1840), modern library (1840-1912), post-modern library (1912-1948), contemporary library (1949-1977) and post-contemporary library (1978-present)” [2]. The library developments resulted in the existence of librarianship in ancient China [3]. In 1913, the first library science courses were offered at Jinling University [4]. With the developments of four types of libraries: public, college, society and special, Mary Elizabeth Wood, an American librarian, “saw the need for library education for herself as well as those who worked with her on library projects”, and founded the Boone Library School with Zurong Shen and Qingsheng Hu who studied library science in the USA, the first library school, at Wuchang in 1920 [5] [6]. Since then, more programs of library science education have been established in China. During recent decades, library science education

has gradually developed. Therefore, library science education have experienced four important periods of developments: pre-1912; 1913-1948; 1949-1977; and 1978-present.

With the developments of library science education during various periods, the literature on the history and development of library and information science (LIS) education is increasing [7] [8] [1] [9] [10] [11] [12] [13] [5] 14]. The curriculum is the foundation of learning and teaching of library and information science education. The development of library and information science education is closely related to the curriculum development. Currently, there are few studies on the analyses of LIS courses [15], and the construction of curriculum resources [16]. Until now, little research has been conducted on the curriculum development in library science education in China from a historical perspective.

With the rapid developments of economy, science, technology, education and culture, Chinese library science education is currently facing numerous challenges such as how to adjust current curricula to meet the social needs, and to improve information professionals to successfully select, organize, retrieve and transmit relevant and appropriate information to their clients. In order to design and implement the relevant courses more successfully, it is important and necessary to explore the past successful and unsuccessful curriculum development experiences from a historical perspective.

This study examines the historical and current status of curriculum development in China. It compares the changes in curricula of various stages and analyzes the factors influencing the curriculum development. The main problems in curriculum development are discussed. Suggestions and recommendations are helpful for library schools to successfully adapt themselves to the digital age and to develop future curriculum effectively.

This paper provides an important and historical overview of curriculum development in library science education in China. It is a useful addition to the literature on curriculum development worldwide. This study with useful information can significantly help China's educational governments at all levels and programs of library science education to better design and implement future curricula to keep pace with the rapid developments of economy, science, technology, education and culture. Additionally, this study may prompt further research on a much larger history of curriculum development in information science and archives education in China.

Four Periods of Curriculum Developments

Ancient Period (Pre-1912)

Little research has mentioned the library science education in ancient China, let alone curriculum development in librarianship during this period. Two thousand years ago, there existed a book classification system resulted from ancient catalogue with the purpose of cataloguing and preservation of books and documents [17] [18]. This technical knowledge was passed from generation to generation and librarianship actually existed in ancient China [3].

What is curriculum? There are a variety of definitions. The curriculum is viewed as a list of specific courses or "a set of planned learning experiences offered by teachers" [19]. Curriculum can also be "concerned with what is planned, implemented, taught, learned, evaluated and researched in schools and at all levels of education" [20]. Based on this definition of curriculum, it could be said that the curriculum development in librarianship existed in ancient China.

Ancient Chinese libraries, synonymously called book-storage houses or book repositories originated from the Xia and Shang dynasties. From Zhou dynasty to Qing dynasty, four types of libraries were gradually established: (1) private; (2) official; (3)

college; and (4) monastery. The functions and processes of these types of libraries included acquiring, lending, cataloguing, processing, weeding, and preserving. The main educational approach to cultivating professional staff to run these libraries smoothly was apprenticeship. In Northern Song Dynasty (AD 960-1127), Ju Cheng wrote the first library science book entitled “Lin Tai Gu Shi”, comprehensively discussed how to establish, operate and manage a library, and “described the functions of the national library, buildings, professional staff and the acquisitions, classifications, storage and use of the collections in a detailed way” [3]. The areas covered in this book were the origins of the courses for library science. Many books about how to collect, classify and utilize knowledge were written during this period.

Near the end of the 19th century and at the beginning of the 20th century, Western library practices and curricula were introduced to China by the Western missionaries as well as Chinese intellectuals and reformers. This laid a solid foundation for the curriculum development as well as the establishment and development of modern and contemporary library science education.

Modern Period (1913-1948)

After the overthrow of the Qing dynasty in 1912, libraries developed very quickly. “The New Culture Movement”, “The New Library Movement” and even ordinary people’s participation in the vigorous librarianship construction made it necessary to train library staff and to establish library science programs. In 1913, Harry Clemons, an American reference librarian, introduced the first library science courses at the University of Nanjing Jinling [1] [21]. In 1920, a vocational library science program for the training of library staff was established at Peking High Normal College, and there were such programs offered during the 1920s and a few vocational library science schools [1].

In March 1920, the Division of Library Science at Boone University in Wuchang was officially set up after two-year preparations and Mary Elizabeth Wood, an American librarian, founded the Boone Library School with Zurong Shen and Qingsheng Hu who studied library science in the USA, the first library school, at Wuchang in 1920 [5] . “Parallel courses, one in Chinese and one in English, were offered for cataloguing, filing, book selection, reference, and bibliography” at Boone [1]. In 1925, another library science program was established at Shanghai Guomin University [1]. Table 1 below demonstrates the specific courses offered by these two library science programs.

Table 1. Courses in Library Science at Boone College and Shanghai Guomin University

Boone College	Shanghai Guomin University
Cataloguing	Introduction to library science
Filing	Principles of library science
Book selection	Library administration I and II
Reference	Cataloguing
Bibliography	Classification
French	Bibliography
German	Book selection
Study of stone and bronze inscriptions	Research methods
Practical training	Sociology
Thesis	Chinese bibliography

Source: [1]

At Boone College, library science program was a 3-year program and “was a part of the regular college curriculum”, and archival service and training courses were offered to students and library staff in order to meet the social needs at that time [1]. In 1928, a Division of Library Science was founded at the University of Nanjing, and it was closed in 1943 [1].

In 1941, the Department of Library Science at the National College of Social Education was established [1]. The curriculum requirements for students during the Second World War were a little bit higher. The requirements were “four years of residence, including two years of general education, one year of professional courses, one year of laboratory training, and a thesis” [1]. The Department of Library Studies were founded in 1947 at Beijing University [22].

Contemporary Period (1949-1977)

With the establishment of the People’s Republic of China in 1949 and the rapid developments of all types of libraries, the library science education and its curricula had steadily developed until 1965 and were stagnated during the period of the Cultural Revolution from 1966-1976.

In 1950, the Department of Library Studies at Beijing University offered a variety of professional courses and changed its program from three years in 1953 to four years in 1956 [1]. In August, 1953, the Boone School of Library Science was merged into Wuhan University and became Wuhan University’s Department of Library Science [5]. With the new education policies developed by the central government and the new requirements for library science education, library science programs and teaching plans at Wuhan University were revised and “the curriculum system made relatively large adjustments, such as strengthening the course of Marxist theories, the additions of the introductory courses for natural and social sciences, the course for a second foreign language, thesis writing and practicum, and focusing on the construction of the basic courses” [5]. At the national level, the curriculum of library science education did not develop from 1966-1976 because of the Cultural Revolution.

Post-contemporary Period (1978-present)

Since the reform and opening to the outside world in 1978, Chinese libraries have developed at a rapid and steady speed. With the rapid developments of science and technology, more and more library and information science programs have been created in colleges and universities across the country. The post-contemporary period (1978-present) is the best period of the developments of China’s library and information science education and its curricula.

Since 1979, four main levels of library and information science education have been formed. The first level consists of doctoral and graduate education programs. The undergraduate education of library science is the second level. The third level is secondary school library education. The final level is adult education and continuing education. These levels of library and information science education have quickened the corresponding curriculum development. In the 1990s, the curriculum design and reform were conducted through “the integration of information science courses into the traditional curriculum and the division of students into two specific subject groups according to their future interests” [9]. Before 1985, each library and information science program decided its own core courses and electives [9]. After the national symposium held by the Chinese Society of Library Science in 1985, each level of library science education program should at least offer such core courses as introduction to library and information science, classification and subject headings, cataloguing books, bibliography, reference materials and services, scientific and technical literature searching, management of library and information services, collection development and user services, library automation and computerized information retrieval systems, and for each information science program, “courses such as mathematics, statistics and computer science are added” [9].

The rapid developments of science and technology and the use of technologies of computer, information, digitization, multimedia, network, optical disc, microforms and audio and video in libraries and information centres brought the trend for the name change of the library and information education programs in the 1980s and 1990s. The name change of the departments or schools resulted in “addition of a large number of information subjects to the main subjects of traditional courses and the recognition and development of information studies” [23]. With the word “library” dropped from the name of departments or schools, most of the following traditional courses might be replaced [23]:

Introduction to library and information science, classification and subject headings, cataloguing books in both Chinese and Western languages, bibliography, reference services, library automation, non-book materials, management of library services, collection development, history of Chinese books, history of libraries in China, rare editions and ancient books, library literature, the applications of computers in libraries, patent knowledge, periodical management, comparative librarianship, literature of social sciences, literature of science and technology, to name a few.

The above-mentioned common courses reflect the curriculum development in the 1980s.

Since China’s opening to the outside world, four large-scale academic undergraduate major amendments had been conducted in 1987, 1993, 1998 and 2012. In 2012, “the Ministry of Education released *the Undergraduate Major List for Colleges and Universities*” which includes three majors: library science, archives and information resources management, and lists the core courses for these majors [24]. The core courses for library science major are “foundations of librarianship, literature bibliography, information resource development, information organization, information retrieval, information services, information analysis, library management, and digital libraries” [24]. It is for the first time that information resources management major has been regulated as an essential one in the major list and it will make a direct impact on the undergraduate curriculum of library science [24]. To compete with the newly established information resources management major as well as the majors of information management, information systems, and computer science and technology, library science major needs to reform its curriculum system and to strengthen technical courses, and library science curriculum must reflect the characteristics and needs of the library profession [24].

Comparison of Curricula and Influencing Factors

Table 2 below demonstrates the curriculum development in the undergraduate library science education during different stages at Beijing University.

Table 2: Comparison of Curricula in Library Science at Beijing University

Courses in 1950	Courses in the 1997	Courses in 2014
Introduction to Library Science	Professional Archaic and Ancient Chinese	Information Storage and Retrieval
Introduction to Bibliography	Selected Readings on Marxist-Leninist Culture	Computer Networks
General Reference	Advanced Mathematics	Information Economics
Introduction to Books	Principles of Computing	Management Information System
Chinese Bibliography	PASCAL Programming	Computer Networks (Computer Operation)
Classification and Cataloguing	Collection Development and Reader Service	Information Storage and Retrieval :Computer Operation
Textual Criticism	History of Chinese Books	Principle of Management
Filing	Chinese and Western Reference Sources	Information Policy and Law
Indexing	Chinese and Western Cataloguing	The Organization of Information

History of Chinese Block Editions	Introduction to Library Science	Media and Society
Library Administration	Library Management	Study of Publishing Culture
Library Practice	Scientific and Technical Literature Searching	Electronic Commerce
Politics	General Bibliography	Library Management
Chinese Culture	Classification and Subjects	Professional Readings in Information Management
	Library Automated Systems	Introduction to Information Management
	Social Investigation Practice (field work)	Introduction to Library Automation
	Thesis	Information Resource Development
		Western Reference Sources
		Cataloguing for information resource
		Introduction to Advertising
		Statistics and Data Analysis
		Object-oriented Programming with Java
		Object-oriented Programming with JAVA (Computer Operation)
		Data Structures and Algorithm (Lab.)
		Data Structure and Algorithm (B)
<i>Source:</i> [25]	<i>Source:</i> [21]	<i>Source:</i> [22]

As indicated in Table 3 below, the courses of library science for undergraduate students are different at various stages at Wuhan University.

Table 3: Comparison of Curricula in Library Science at Wuhan University

Courses in 1928	Courses in the 1997	Courses in 2001	Courses in 2014
Chinese Bibliography	English	Foundations of Librarianship	Fundamentals of Digital Library Era
Western Bibliography	Higher Maths	Foundations of Philology	Information Resources
Chinese Reference	Chinese Revolutionary History	Bibliographic Science	Information Users and Services
English Reference	Marxist Theory	Foundations of Information Management	Information Organization
Chinese Book Reviews	Basics of Library Science	Introduction to Computer	Information Retrieval
English Book Reviews	Reader Research	Basics of Programming	Library and Information Center Management
Chinese and Western Classification	Literature Resource Building	Computer Application Systems Design and Analysis	Information Resource Database
Chinese and Western Cataloguing	Chinese Books and Library History	Multimedia Technology Application	Information Consultation and Decision-making
Indexing	Classification Basics	Computerized Information Retrieval	Metrology Information
Typing	Computing Operating	Utilization for Network Information Resources	Intellectual Property Law
Practicum	Cataloguing	Theory and Technology about Digital Library	Evaluation of Network Systems
Library Administration	Chinese Reference Books	Collection Development Construction	Web Design and Site Construction
Research on All Types of Libraries	Bibliography	Classification and Subject Methods	Principles and Techniques of Digital Libraries
Children's Libraries	Computer Application Basics	Cataloguing	Introduction to Knowledge Management

History of Chinese and Western Libraries	Literature Protection	Information Service and User Research	Government Information Management
Physical Education	Classification Research	Social Science Document Retrieval	
English	Western Language Cataloguing	Science and Technology Document Retrieval	
French	Microcomputer Database	Consultation and Decision Making	
German	English Reference Books	Information Marketing	
	Information Retrieval	Advanced Mathematics	
	Scientific and Technical Literature Retrieval	Introduction to Management	
	Library Automation	Introduction to Economic Marketing	
	Library Management		
<i>Source:</i> [5]	<i>Source:</i> [21]	<i>Source:</i> [10]	<i>Source:</i> [26]

The library science programs at Beijing University and Wuhan University have a long history in China. The courses in Tables 2 and 3 reflect that the goals of these programs focus on the provision of comprehensive knowledge, skills and abilities for students and the high quality training of students in how to discover, collect, organize, manage, evaluate, and exploit information and knowledge resources, how to provide high quality services for clients, and how to play an important leadership role in information and knowledge practice, research and education in their professional careers and the curricula have been gradually widened.

In Table 3, the courses in 1928 show a preliminarily established library science curriculum with Chinese and Western curriculum characteristics [5]. These courses were the main ones offered to students before 1948 when the society with wars was unstable, there were not many libraries, and the curriculum establishment was influenced by Western librarianship [27]. In Table 2, the courses in 1950 display traditional ones, and courses in 1997 were only specialized compulsory ones and compulsory courses, four groups of restricted elective courses and unlimited courses were also offered at Beijing University [21]. At the end of 1980s, related technology courses such as computer principles, basics of programming, and programming languages were added to the traditional curriculum [14]. In the 1990s, the required courses, specialized elective courses and non-specialized elective courses were “mixed with both traditional courses and modern technology” [7]. In 1992, twelve core courses in library science were identified at the national level [28] [29]. The number of core courses varied from 1985 to 2012.

During the 1990s, an emergence of an information industry and of a new type of information services, the stability of labor market, social value, increased pressure on education from economic and market factors, and the renaming of departments and schools influenced the developments of library and information science education [7] [12]. Undoubtedly, they had an impact on the curriculum development in library science.

The courses in Tables 2 and 3 mirror that the key factors influencing curriculum development in library science are economy, science, technology, society, education and culture. These factors have kept the curricula in library science on changing.

Problems

Currently, there are 24 formal undergraduate library science programs in Chinese universities [30] and the curricula in library science have developed well. However, there still exist some problems [31] [32] [33] [16] [15] [34] [35] [36].

In terms of the innovation and practical ability training in the undergraduate education of library science, the key problems are that the curriculum is in lack of innovation and practice, some library science programs are in lack of practicum courses, and some traditional core courses in librarianship are ignored [31] [32] [35] [36] [15].

With regard to the curriculum systems of the undergraduate majors of library, information and archive management style in China, the problems includes “the convergence and unitarization of training goals and objectives, the weakness of curriculum systemization and flexibility, the insufficiency of interdisciplinary professional curriculum system, uneven quality of practicum curriculum resource development, and lack of professional curriculum resource construction and idea sharing and collaboration” [16].

In the library science programs, not many librarianship-related elective courses are offered. For example, the percentage of the credit hours for librarianship-related elective courses is only 11.1 percent in the percentage of the total credit hours for the library science curriculum at Beijing University [34].

Suggestions and Recommendations

Contemporary society has entered a digital era. The future developments of curricula in library science should focus on the relevant courses related to future information technology application. Library science curricula need to be regularly reviewed by all the stakeholders, and library science programs should update the courses based on the review results and add more librarianship-related elective courses. “Courses submitted should however, provide students with appropriate knowledge and skills to enable them to enter the profession” [37].

To solve the problems in the curriculum systems of the undergraduate majors of library science, it is recommended to “improve the standards of training, curriculum and curriculum contents, to integrate curriculum resources among colleges and universities, and to rationalize the relationships between undergraduate course and graduate courses, compulsory courses and elective courses, theoretical courses and practical courses, traditional courses and network courses” [16].

New courses should be continuously introduced to take into account the changes in information and communication technologies. Traditional courses should be revised to reflect the current social needs and trends in all areas, and the traditional contents of library science courses should be updated. To satisfy current and future professionals, a variety of courses should be offered, and the flexibility and diversity in the library science curriculum should be greater in the future.

Conclusion

What is the historical and current status of curriculum development in Chinese library science education? What are the courses in library science during various periods and the factors influencing curriculum development? What are the main problems influencing the developments of current curricula and suggestions and recommendations? This study concentrates on the brief responses to these questions.

An overview of all the periods of curriculum development in Chinese library science education and a brief comparison of the curricula in library science during different periods have demonstrated that the curricula have gradually developed and been widened to take into account the transformations in technology, economy, society, culture, and education which are the key factors influencing curriculum development.

Since the reform and opening to the outside world in 1978, great changes in technology, economy, society, education and culture have taken place in modern China. These changes have quickened the curriculum development in library science education. Generally speaking, the curriculum developments in library science education have made positive responses to changes and needs of the society, taken into account “the changing role of the information professional” and “the attitudes, skills and competencies required of information professionals”, and focused on the integration of “theory and practice, profession and generic skills and new and traditional disciplines” and “what should be taught and learned of the profession” [19]. Currently, there are many relevant elective courses related to information technology. However, the related management elective courses are lacking. The related management elective courses such as management basics, marketing, project management, human resource management, and knowledge management “should be part of a LIS curriculum” [38]. More librarianship-related elective courses should be offered. The curriculum should closely follow the development of the times and the needs of society, and courses and their contents should be revisited, reviewed, adjusted and updated.

This study is helpful for people to better understand the general curriculum developments of Chinese library science education during all the periods, and for Chinese library science programs to be well developed in the digital age. The key limitations are that this study is solely focused on the history of curriculum development in library science education, not in information science and archives education, and the specific courses in library science only at the undergraduate level, not at the master’s and doctoral levels. Future research will focus on a much larger history of curriculum development in information science and archives education in China.

Notes

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