

Research on Developing a Professional Qualification Certification System for Librarians (Post-print)

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Abstract

[Purpose/Significance] Against the backdrop of the persistent absence of a professional qualification certification system for librarians in China, this study integrates theoretical exploration with practical research to explore a librarian professional qualification certification system suited to China's national conditions. [Method/Process] Utilizing literature research and grounded theory methods, it reviews and investigates the development of librarian professional qualification certification systems both domestically and internationally, elaborating on the necessity and feasibility of establishing such a system in China; it collects supply-and-demand data from the employment market and university training programs for qualitative research, extracting an element model based on practical realities. [Results/Conclusion] Based on this foundation, it constructs an implementation pathway for China's librarian professional qualification certification system, comprising objectives, principles, promotion strategies, and certification mechanisms. It is hoped that these theoretical achievements will attract widespread attention, facilitate the establishment of China's librarian professional qualification certification system, and promote the sustainable development of the library profession in China.

Full Text

Research on the Construction of a Librarian Professional Qualification Certification System

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Abstract

[Purpose/Significance] Against the backdrop that China has yet to establish a librarian professional qualification certification system, this study combines theoretical exploration with practical research to develop a certification system suited to China's national conditions. **[Method/Process]** Using literature research and grounded theory methods, this paper reviews and investigates the development of librarian qualification certification systems both domestically and internationally, elaborating on the necessity and feasibility of establishing such a system in China. It collects supply-and-demand data from the job market and university training programs for qualitative research, extracting a factor model based on current practice. **[Result/Conclusion]** Building upon this analysis, the study constructs an implementation pathway for China's librarian professional qualification certification system, encompassing objectives, principles, promotion strategies, and certification mechanisms. It is hoped that these theoretical findings will attract widespread attention, facilitate the establishment of China's librarian professional qualification certification system, and promote the sustainable development of the country's library industry.

Keywords: librarian; professional qualification; qualification certification

The librarian professional qualification certification system originated in the United Kingdom in the late 19th century. It refers to "a system where, according to national or library association-established vocational skill standards and qualification requirements, government-authorized assessment institutions evaluate the skill levels and qualifications of library practitioners. Those who pass the assessment are awarded corresponding certificates, thereby obtaining the qualification to work as librarians." This standardized and procedural training and evaluation system provides a solid talent foundation for library development and enhances professional identity.

Globally, countries such as the United States, United Kingdom, Japan, and South Korea have established well-developed certification systems with distinct characteristics. In contrast, China has long lacked a unified certification system for librarian qualifications. At the macro level, this study provides a theoretical framework for the librarian qualification certification system, filling a gap in recent academic research in this field. At the micro level, it constructs a theoretical model of supply-demand relationships in the job market through empirical analysis and identifies major practical obstacles. At the application level, it proposes specific solutions regarding system objectives, principles, and module design to explore practical pathways for system construction.

This research holds both theoretical and practical significance. Theoretically, due to complex market and institutional environments, domestic research interest in this topic has seemingly waned in recent years, with increasing uncertainty about whether and how to establish such a system. Practically, China's library

industry suffers from problems such as overemphasis on academic credentials at the expense of practical competence, inconsistent entry requirements, uneven librarian quality, and poor articulation between professional education and vocational training, which severely constrain the comprehensive improvement of librarians' capabilities and the sustainable development of the library profession. Since the 21st century, discussions and research on this topic have continued to emerge, yet the domestic system remains unformed and practice lacks unified guidance. Research on the alignment between professional education and the job market is relatively insufficient compared to international studies, and few studies propose specific implementation plans tailored to China's national conditions.

Therefore, this research employs a combination of theoretical exploration and practical investigation, drawing on advanced international institutional experiences while grounding the analysis in local practice. It extracts supply-and-demand factor models for China's library profession and develops a qualification certification system with appropriate objectives, principles, and implementation pathways suited to national conditions. This study primarily utilizes literature research and grounded theory methods.

1. Distinctive International Practices

International practices in librarian professional qualification certification can be categorized into three management types: lifetime certification, non-lifetime certification, and a combination of both. Different library systems have varying requirements for professional certification. For example, school libraries require teaching qualifications, while special libraries demand relevant professional degrees. All certification pathways are based on vocational competence assessment, combining principle with flexibility, with professional institutions playing a leading role and maintaining close ties with continuing education.

International research on this topic focuses on the impact of traditional libraries' transformation into digital libraries. Some scholars have mined digital librarian position requirements from job advertisements, while others examine the important role of information technology in librarian qualifications. Additionally, researchers concentrate on optimizing existing certification systems, considering the different roles of educators, employers, and practitioners to provide improvement recommendations, and establishing national qualification frameworks through supply-demand analysis. Regarding the importance of certification systems, scholars have analyzed the necessity of professional qualifications in library settings, arguing that professional credentials and vocational training are essential for organizational development, and recommending the integration of professional thresholds with practical skill levels.

Evidently, international literature focuses on improvement strategies within existing systems. This paper therefore emphasizes existing achievements from

various countries to extract lessons, adopts a cutting-edge research perspective to analyze the alignment between China' s professional education and job market, and uses this as a reference for system construction to explore practical implementation pathways.

Through investigation of certification institution websites and relevant literature, this section summarizes the development history, current status, and certification models of various countries to provide theoretical and practical experience for China' s system design and optimization.

1.1 United Kingdom

The UK's librarian professional qualification certification dates back to the 1880s, representing the origin of such systems worldwide. Currently, the UK has two main certification pathways. The first is association certification through the Chartered Institute of Library and Information Professionals (CILIP), which operates as a public service institution under Royal Charter, providing library and information services. Members are listed on a public register through professional registration, with categories including Chartered Members, Certified Members, and Fellow Members. The association accepts applications from individuals of any academic background and provides registration services and development resources. The second pathway is national vocational qualification certification through the National Vocational Qualifications in Information and Library Services (ILS/NVQs), which assesses practitioners through learning unit evaluations and interviews, awarding three levels of certification: Level 2 (IL2), Level 3 (IL3), and Level 4 (IL4).

CILIP supports three types of accreditation: degree accreditation, short course accreditation, and international accreditation. Degree accreditation requires completion of CILIP-recognized university programs, while short course accreditation involves completing courses certified by CILIP-approved organizations. International accreditation recognizes librarian qualifications from countries including the US, Ireland, and the UK. The evaluation criteria for these accreditation types are based on CILIP' s Professional Knowledge and Skills Base (PKSB), which specifies competency standards for recognized assessments.

1.2 United States

The US librarian professional qualification certification system originated with the 1925 "Minimum Standards for Library Schools." Public librarian certification is largely governed by state laws and managed by specialized certification committees. Beyond legal certification, the American Library Association (ALA) provides unified professional licensing nationwide by accrediting library and information science education programs, requiring professional degrees for professional librarian positions.

ALA' s primary certification methods involve degree and program accreditation, certifying master' s programs that meet accreditation standards and pass exter-

nal review. ALA also provides extensive professional support, including scholarships and online learning resources. Due to the country's federal structure, state libraries and associations also have the authority to certify librarians with varying requirements for different library types, demonstrating a coexistence of centralized management and decentralized certification. Additionally, the US system features high educational requirements, minimal certification costs, and close integration with continuing education.

1.3 Japan

Japan's librarian qualification certification system originated in the 1950s, with the Japan Library Association as the dominant certification body. The system demonstrates high systematization, legalization, and rigor. According to Japanese laws including the Library Law and School Library Law, as well as library association regulations, lower-level librarian and library assistant qualifications can be obtained through coursework, including association-organized courses and university professional education. However, becoming a professional librarian requires passing the Shisho (librarian) qualification examination system, which combines civil service examinations with professional tests. With an acceptance rate of only 3-4%, successful candidates are assigned to library positions. Librarian ranks are divided into Shisho and Shisho-ho (assistant librarians), with school libraries having Shisho-kyoyu (librarian teachers).

Japan's certification methods primarily include degree accreditation and short course accreditation, both based on selection methods stipulated in library law implementation regulations. Degree accreditation recognizes university program participation, requiring completion of prescribed coursework in four-year or junior colleges. Short course accreditation similarly follows approved lists, specifying implementing universities, enrollment limits, and recognition methods. Overall, Japan's system features diverse certification forms, integration with civil service examinations, and strong legal institutionalization.

1.4 South Korea

South Korea's librarian professional qualification certification system resembles Japan's, also combining with the civil service examination system and emphasizing educational credentials. The Korean Library Association serves as the certification body. Since 1957, library training courses and gradually improved legislation including the Library Law and Library Law Enforcement Decree have provided standardized implementation frameworks.

Korean librarian ranks are divided into Level 1, Level 2, and Associate Librarian. Continuing education for librarians can be conducted within university curricula and the civil service system.

1.5 Model Summary

The certification systems of the US, UK, Japan, and South Korea can be abstracted into four models: legal certification, association certification, degree/program certification, and examination certification. These four models often combine and complement each other in practice, forming distinctive systems suited to each country's national conditions.

Common features across all models include continuously adjusting legal protections, clarifying basic librarian competencies, and having professional institutional support and oversight. Combining multiple certification models is also a practical requirement worth learning from.

2. Domestic Development Status and Necessity

Since 2001, under the leadership of the Chinese Library Society, various professional institutions and government departments have conducted key research projects, primarily investigating international and domestic librarian qualification systems, China's current status and obstacles, and potential methodological pathways. These efforts have achieved certain progress at both academic and practical levels. In 2003, the Chinese Library Society submitted a research report titled "Professional Qualification Certification Systems for Librarians in Major Countries" to the Ministry of Culture. In 2004, China's Ministry of Labor and Social Security and Ministry of Culture jointly issued relevant professional standards for library and information professionals, including the "National Occupational Standards for Cultural Industries: Librarian (Trial)" and "National Occupational Standards for Cultural Industries: Ancient Books Librarian (Trial)."

Beyond official research projects and policy documents, scholars in the field have produced fruitful theoretical research. Overall, the main research paradigms involve international comparative studies and localized theoretical construction from a domestic perspective.

Regarding basic institutional concepts, Wang Shiwei in 2003 proposed the proposition of a Chinese librarian professional qualification certificate and outlined its integration with reference librarian systems. Wu Weici defined the concept of the librarian qualification certification system and provided policy considerations for its establishment and implementation in China, laying a foundation for subsequent academic research. Scholars' in-depth analysis of the necessity for new systems and the current state of library development has also driven the promulgation of library policies and regulations such as the Public Library Law, providing policy guarantees for library reform and optimization.

Regarding international systems, scholars have investigated the librarian qualification certification systems of the United States, United Kingdom, Japan, South

Korea, New Zealand, and other countries, primarily employing literature research and comparative analysis to examine historical evolution and summarize implementation characteristics, thereby absorbing international experiences.

Regarding domestic implementation pathways, scholars have studied transitional forms combining the system with existing title appointment systems, subject librarian systems, and continuing education systems, as well as construction pathways involving professional associations promoting bottom-up implementation and advocating top-down national legislation. The proposed system contents cover industry entry, competency standards, professional qualification examinations, certification validity periods, and legal status. Scholars have also explored distinctive certification standards and operational methods from the perspectives of public libraries and university libraries, and conducted empirical surveys on system construction based on regional libraries.

Overall, domestic research on basic institutional concepts has provided theoretical paradigms and promoted relevant systems, clearing obstacles for early-stage development. Studies of international systems have provided excellent models for learning and adaptation, summarizing existing experiences. Research on domestic implementation pathways has offered constructive suggestions for China's system establishment and explored future development. However, the system remains unformed to this day; theoretical research cannot replace concrete practice. Existing studies lack attention to the alignment between professional education and the job market and lack specific implementation plans at the institutional construction level—precisely the focus of this paper.

The establishment of a librarian professional qualification certification system in China is necessary for three reasons. First, it would facilitate the modernization of China's library industry by absorbing and adapting international experiences to form a Chinese-characteristic model that better integrates with global practices. Second, it addresses the need to improve China's library workforce, which suffers from low entry barriers, inconsistent business proficiency, unstandardized continuing education, disconnects between professional education and job requirements, and low professional attractiveness. A qualification certification system would provide institutional constraints to promote continuous improvement and healthy development of library teams to meet the demands of the smart library era. Third, it considers the future development of library and information science as a discipline. Since civil service examinations and professional title evaluations for library positions have little connection with university LIS curricula, and continuing education systems for librarians remain incomplete, departmental development momentum may be insufficient, preventing effective alignment between talent cultivation and job positions and limiting the development of professional library teams and specialized reader services.

3. Factor Analysis Based on Supply-Demand and Practical Status

3.1 Structured Factor Analysis Based on Supply-Demand Status

This study obtained library-related employment and education information from online sources as analyzable archival documents. Using the qualitative analysis tool NVivo 11 and grounded theory as guidance, it established a structured factor model based on the practical perspective of supply-demand status.

First, purposive sampling was conducted. Market information from the demand side was collected from library recruitment WeChat accounts and library official website job postings, while supply-side course information was collected from required courses in undergraduate, master's, and doctoral programs at eight universities ranked B or above in the fourth-round library and information science discipline evaluation, supplemented by relevant online resources. The data collection cutoff date (i.e., the latest data publication date) was March 31, 2022. After preliminary screening, 100 library position recruitment postings nationwide and 38 training program course documents from eight universities were selected as raw data for analysis.

3.1.1 Open Coding The demand side yielded 261 key statements, while the supply side yielded 228. These key statements were coded to extract initial concepts, which were further categorized. The demand side formed 22 categories, and the supply side formed 27 categories.

3.1.2 Axial Coding After identifying potential relationships between categories and ensuring sufficient emergence of initial categories, subordinate categories from open coding were clustered and rearranged to abstract main categories. The demand side obtained 10 main categories, while the supply side obtained 12.

3.1.3 Selective Coding Selective coding, or core coding, further developed relationships among main categories to distill core categories encompassing all others. The demand side obtained three core categories: research competence, applied competence, and foundational professional competence. The supply side obtained five core categories: management-oriented, theory-oriented, technology-oriented, application-oriented, and user-oriented.

3.1.4 Reliability and Validity Testing To ensure high research reliability and validity, this study conducted inter-coder consistency tests and theoretical saturation tests.

To avoid excessive subjective bias, a student from Peking University's Department of Information Management was recruited to code 50% of the raw data from both demand and supply sides. Using NVivo 11's coding comparison

function, their coding was compared with the author' s. Initial coding consistency was poor, primarily due to missed codes from individual interpretation differences. After multiple discussions and revised coding standards for content with kappa coefficients below 0.75, over 85% of kappa values exceeded 0.75, indicating high research reliability.

To ensure coding saturation, new data were continuously introduced for cyclic testing at each coding level. Specifically, 10 newly posted librarian recruitment announcements and 3 LIS program curricula from universities ranked below B in discipline evaluation, published between March 22-30, 2022, were collected for saturation testing. No new high-frequency features or relationships emerged, suggesting high conclusion credibility.

3.1.5 Theoretical Model and Integrated Analysis Based on the theoretical construction above, a supply-demand factor model was developed as shown in Figure 1 [Figure 1: see original paper]. Specifically, the three categories of research competence, applied competence, and foundational professional competence reflect three important dimensions of competency requirements for the library profession. The supply-side model' s five categories of management-oriented, theory-oriented, technology-oriented, application-oriented, and user-oriented reflect five major dimensions in professional talent cultivation for library employment.

For more detailed and insightful information, NVivo 11' s data analysis function was used to conduct structural analysis by merging recruitment postings and course information, thereby identifying obstacles preventing effective supply-demand alignment in the librarian profession and providing references for subsequent system pathway construction. The hierarchical structure diagram uses different colors to distinguish main categories, with area representing the number of nodes in each category. (Note: For clearer visualization, Figures 2 [Figure 2: see original paper] and 3 [Figure 3: see original paper] were created using Flourish website tools. Since the data are consistent, the results are identical.)

As shown in Figure 2, the supply side (professional talent cultivation) emphasizes basic theories and application methods, focusing on developing disciplinary literacy and knowledge systems, as well as teaching applied methodologies. School education involves little actual business content and lacks obvious practical courses. Technology competence cultivation receives some attention but occupies a small proportion in professional learning, with theoretical learning remaining dominant.

As shown in Figure 3, the demand side (library recruitment) emphasizes applied competence and foundational professional competence—areas where supply-side alignment is inadequate. First, the demand side places great importance on technical tool competence, which constitutes the largest proportion of applied competence. However, technology courses do not dominate in university talent cultivation, making it difficult to meet the job market' s demands for librarians' s

digital capabilities during the library transformation stage. Second, compared to the supply side's emphasis on school-based theory and methodology teaching, the demand side prioritizes applied competence in practical contexts. Therefore, transforming the basic theories and applied methods learned in LIS programs into job-required applied competence is key to achieving good alignment. Additionally, professional credentials—including work experience, professional titles, and qualification certifications—play a significant role on the demand side. The job market's emphasis on these qualifications is difficult for academic education to provide, thus requiring individual experience accumulation and official qualification certification. This further demonstrates that establishing and implementing a librarian professional qualification certification system benefits both individual employment and talent recruitment.

3.2 Obstacle Factor Analysis Based on Practical Status

Given that China's exploration of a librarian professional qualification certification system has persisted for over 20 years without implementation, this section uses literature research to analyze obstacles to system establishment from policy, industry, and talent perspectives, aiming to identify pain points and breakthroughs that have prevented system implementation and provide supplementary key content for subsequent practical pathway construction.

3.2.1 Lack of Certification Institutions and Legal Guarantees China's National Occupational Qualification Catalog stipulates that access-type professional qualifications are based on legal provisions or government decisions. Librarian professional titles are organized and evaluated by government departments. China's Public Library Law, promulgated in 2018, specifies requirements for professional title evaluation of public library directors and professional technical personnel, but how to implement the principle that "library staff should possess corresponding professional knowledge and skills" remains problematic. More detailed regulations, occupational standards jointly formulated by labor departments and professional institutions, government-recognized assessment agencies, and complete supporting guarantee systems are needed to replace rule-of-man with rule-of-law.

3.2.2 Impact of Professional Qualification Standardization Process China has implemented a national occupational qualification certificate system since 1995, which subsequently faced issues such as redundant qualification types and increased personnel burdens, leading to gradual cleanup and standardization. In December 2019, the State Council decided to phase out level-evaluation skill personnel qualifications and implement a socially recognized vocational skill level system, allowing social organizations and employers to conduct skill evaluations and certification according to national standards. In 2021, the National Occupational Qualification Catalog reduced qualifications by 68 items compared to the 2017 version. However, qualification standardization and introducing new types are not mutually exclusive. Under the national standard guidance, social

organization forces can conduct librarian qualification certification following the socialized vocational skill level certification system.

3.2.3 Insufficient Financial Support Administrative appropriation is the main source of income for China's public libraries, but disbursement is often untimely and inadequate. Public libraries nationwide, especially county-level and below grassroots libraries, lack complete financial support and social resource supply, making it difficult to support adequate librarian employment and effective training. The promulgation of the Public Library Law has actively alleviated financial pressure through encouraging social donations.

3.2.4 Professional Title System and Historical Legacy Issues Current Chinese law still stipulates that library professional technical personnel management should follow the professional title evaluation route. However, the title system has been implemented since the 1970s and lacks professional and flexible constraints on librarian competence. Additionally, outdated personnel systems, lack of supervision, and rule-of-man rather than rule-of-law create stubborn obstacles to new system implementation.

3.2.5 Coexistence of Academic Education and Vocational Education Problems The library profession widely suffers from disconnects between academic education and job requirements and weak continuing education links. School education has limited effect on cultivating students' practical vocational skills, and employment attrition among LIS graduates is severe. Some scholars have proposed "defending the vocational nature of library science education." Meanwhile, training institutions supporting librarian continuing education are insufficient, constraining the practice of qualification certification systems.

3.2.6 Impact of Internet and Market Environment In the information age, numerous online and offline knowledge service providers are squeezing the library market and gradually weakening libraries' professional advantages. The public no longer relies solely on public libraries for information access; convenient network devices and intelligent applications have become primary information channels. This not only reduces libraries' social influence but also creates the problem of library profession "marginalization."

4. Exploring System Implementation Pathways

4.1 Macro-Level Considerations

4.1.1 Clarify Certification Types and Leading Institutions China's occupational qualifications include professional technical personnel qualifications and skill personnel qualifications. Professional technical qualifications are further divided into level-evaluation qualifications and access-type qualifications.

Since librarians, especially professional librarians, require high-level professional skills, the target for establishing a librarian professional qualification certification system should be incorporating librarians as access-type professional technical personnel qualifications. Therefore, the leading institution cannot be solely undertaken by organizations such as the Chinese Library Society but should promote amendments to the Public Library Law to add relevant content on librarian qualification certification requirements. Based on the Labor Law and Vocational Education Law, specialized librarian qualification certification institutions should conduct certification work under supervision, with labor departments issuing professional qualification certificates.

Additionally, drawing on major international certification models, China's practice requires legal guarantees and should leverage professional institutional forces through flexible combinations of degree, program, and examination certification.

4.1.2 Establish Phased Objectives and Pilot Promotion Achieving access-type professional technical personnel qualification certification for librarians is difficult and currently lacks supporting institutions and policy guarantees. Therefore, implementation requires phased approaches, such as establishing “five-year plans” to gradually achieve objectives. Initially, the academic field should design highly operable institutional plans. The Chinese Library Society can lead expert groups to develop specialized work, utilizing expert resources to provide professional guidelines. Following the models of teacher qualifications and lawyer qualifications, expert committees should compile examination materials and programs.

Pilot promotion should then be conducted, aiming to achieve integration and replacement of the title system within a certain timeframe and promote further library legislation. After achieving phased pilot results, proposals should be made to include it in the National Occupational Qualification Catalog.

4.1.3 Actively Promote System Linkage First, linkage with the title system. Current domestic librarian ranks are generally divided into Assistant Librarian (primary), Librarian (intermediate), Associate Research Librarian, and Research Librarian (senior). This classification can provide reference experience for establishing three levels in the librarian qualification certification system: primary, intermediate, and senior librarians. Simultaneously, deepening title system reform and implementing the librarian qualification certification system can proceed in parallel, facilitating smooth transition between the two systems. Therefore, the librarian qualification certification system can coexist with the title system in the short term, gradually replacing the title system to make library human resource management more scientific and professional.

Second, linkage with the current education system. The qualification certification system must combine with the library science education system. Grounded theory analysis of supply-demand status reveals that talent cultivation and job

requirements do not align well in applied competence. Therefore, promoting innovation in practice-oriented library science professional education models is necessary to facilitate synchronized, 良性 (positive) development and interaction between library undertakings and library science education.

4.2 Micro-Level Considerations

4.2.1 Scope of Application The certification applies only to professional library positions, covering management and professional technical positions, with non-professional positions excluded from the system. Professional librarian qualification levels are divided into three categories—primary, intermediate, and senior—with different requirements for competencies, education, and certificate levels.

4.2.2 Certification Methods Certification is conducted within the national occupational qualification certification framework, adopting a “combination of degree certification and examination certification” approach. The degree certification system targets individuals with bachelor’s degrees or above in library and information science, allowing authorized universities to organize evaluations independently. Those meeting graduation requirements and passing practical ability assessments are deemed to have obtained librarian professional qualifications without requiring national unified examinations. The examination certification system targets non-LIS professionals who must participate in unified training before taking the national librarian qualification examination. Universities offering undergraduate library science programs or LIS discipline points are recommended as training venues.

Based on the 2004 trial standards, literature investigation, and the preceding supply-demand analysis, and under the basic principle that examination subjects should align with training subjects, this paper proposes the competency indicator system shown in Table 2 for training and examination reference, and the examination subject outline shown in Table 3. The examination subject setup references China’s “National Standards for Undergraduate Library Science Education.” Each examination should organize relevant experts to develop question banks and answer keys to facilitate systematic candidate preparation, with examinations held during designated summer and winter vacation periods.

Table 2. Competency Indicator System

Competency Dimension	Specific Indicators
Basic Professional Competence	Communication, teamwork, professional ethics, innovative thinking, learning ability, self-management

Competency Dimension	Specific Indicators
Disciplinary Professional Knowledge	Library basic theory, branch discipline knowledge, related discipline knowledge
Communication Ability	Communication skills in different environments, reading, writing, presentation skills, proficiency in at least one foreign language
Technical Tool Competence	Proficiency in computer network technology and applications, ability to access and transmit information, providing technical assistance to users
Teamwork Ability	Aligning team action goals and coordination to maximize efficiency
Applied Competence	Effective information acquisition, analysis, organization, and evaluation; user needs analysis and targeted knowledge services
Research Competence	Accepting new knowledge, technology, and concepts; proactive learning drive; report writing and paper publication ability
Reference and Reading Promotion	Familiarity with basic principles and methods, mastery of traditional and new skill tools, conducting reference and reading promotion through multiple approaches
Leadership and Planning Ability	Institutional strategic decision-making, staff development planning, crisis management capability
Information Resource Management	Full lifecycle responsibility for information resources, promoting organization, sharing, and optimal allocation
Information Resource Evaluation	Evaluating information resource utilization value and effectiveness in meeting information needs

Table 3. Examination Subject Outline

Subject Category	Examination Content
Library Science Theory	Library science basic theory, bibliography basic theory, digital library theory, library and information research methods; history of Chinese books, foreign library development
Library Methods	Information resource construction, information organization, information resource management basics; bibliometrics, network information organization, ancient book collation
Library Services	Information users and services, information storage and retrieval, library reference consultation; social science and science & technology information sources, information analysis and decision-making
Library Information Technology	Digital library technology, database principles and applications, metadata technology; library system maintenance and development, information system analysis and design
Library Management	Library and information center management, information resource intellectual property management, library professional ethics and legal knowledge; knowledge management, management information systems

Conclusion

Based on reflections on the development of librarian professional qualification certification systems both domestically and internationally, this paper summarizes advanced international institutional experiences as references, demonstrates the necessity and feasibility of establishing such a system in the current era, and conducts in-depth analysis of supply-demand status and practical obstacles. It explores the construction of a librarian professional qualification certification system suited to China's national conditions, proposing objectives, principles, promotion strategies, and certification mechanisms.

It is hoped that this research will facilitate the early establishment of China's librarian professional qualification certification system, benefiting the future development of the country's library industry and ultimately serving the national

labor market and cultural soft power development.

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