

# Analysis of the Current Situation of Library and Information Science from a Multi-dimensional Perspective

Qian Wu

Tianjin Polytechnic University Library Tianjin 300387 China

**Abstract:** Nowadays, the library and information science gradually develops in the academic field with the aid of various interdisciplinarity and it is still in the process of constantly improving itself. In this regard, this paper analyzes the current research situation of library and information science based on the multi-dimensional perspective, and puts forward a series of academic problems such as the strict barriers among the fields of library and information science, the incomplete system of cultivating innovative talents in library and information science, and further proposes improvement methods. It will build the library and information science into a research discipline that tends to resource integration management and has comprehensive performance.

**Keywords:** Library and information science; Resource integration; Talent reserve; Discipline construction

## 1. Introduction

Since the beginning of the 21st century, scientific information technology has advanced continuously, and the concept of digitalization has continued to enter academic research, industry scale development and even social life. With the progress and development of the times, many scholars have carried out academic researches, understanding and analysis of library and information science according to different dimensions<sup>[1]</sup>. In the field of electronic computer science, scholars sort out various types of textual materials, and then sort out and summarize related issues in the digital era; in the professional informatics, scholars make statistics and explanations for the current development situation of library and information science from the perspective of statistical measurement, and analyze the four aspects of data collection, calculation and reporting of the library and information science. These academic researches provide an opportunity for us to research the development of the library and information science. However, they did not separately summarize the field of library and information science, and there are few analytical researches on the use of documentary data. And, there are many items in the cross-disciplinary research disciplines of the library and information science, and the connection with the field of library and information science is also obvious. Therefore, this paper analyzes the current situation of the field of library and information science through the Look Cite Space software, and presents them in the form of graphs, which enables researchers to understand and know the current

research situation of library and information science more intuitively.

## 2. Analysis of the Current Situation of Library and Information Science System

### 2.1. The strict barriers of the library and information science

After the founding of New China, the development of disciplines in library science and information science in China was probably divided by the year of 1978. In the early period, the main task was to restore and rebuild. It was the inheritance, development, and continuation of library science and information science before and after the "Cultural Revolution"<sup>[2]</sup>. First of all, domestic library science and information science immediately established their own discipline construction systems, a variety of academic types and multiple levels of school structure are gradually formed, and the number of enrollment increases. All these provided professional talents for the library and information science major and its application and development. Second, domestic library science and information science have experienced a series of theories, turbulence, and changes. Starting from the establishment, study, and reference of foreign research results, they have gradually developed our own theoretical structure and built a theoretical foundation system. Then, the theories and exploration of domestic library science and information science have made certain progress and development. A large number of relevant academic theories of high-level knowledge and high-level talents have been published, which make contributions to the theoretical re-

search and the progress of the education professional level in domestic library and information science. Since the establishment of relevant academic seminars, academic activities in various academic researches and related fields have increased significantly, and international exchanges and sharing have developed gradually. Various types of related institutions in books and information have been established and developed steadily. A large number of academic journals have been established one after another, providing a basic base for large-scale academic discussions and exchanges in the research community<sup>[3]</sup>. At this stage, the hot spots, themes, and types of activities that people value are mainly library and information education, library preparation, bibliographic arrangement and literature review. It can be seen that research activities in the field of library and information science are gradually moving toward systematic, professional, and theoretical development, especially with regard to the development strategy of the library and the research level of the information industry has reached a higher level. In this regard, it is necessary to take the national politics, economic level, education development, cultural progress, and scientific and technological development as the theme and background to formulate a series of preparations for the construction of libraries, documents, and information, and gradually incorporate it into the national economic structure and social progress regulations of state organizations and local governments. Therefore, we need to gradually change the traditional work philosophy of the library and further develop the reading function of the library. While relying on the national economic strength, we will continue to establish various types of libraries, paying attention to the number of library construction, and paying more attention to the

quality of library's construction and development. It is necessary not only to pay attention to the construction of its hardware scale, but also to strengthen internal level management and improve the library's level of cultural knowledge<sup>[4]</sup>.

## 2.2. The incomplete system of cultivating innovative talents in library and information science

The electronic revolution is one of the important reasons for the advancement of library information science. Practice has shown that every library in the st of practical development can reflect the level of information in its era. This is a regular phenomenon of the era. The revolution in information technology has helped the library develop from handwork to automation, internet, and electronization, and has reformed traditional management concepts, service systems and methods<sup>[5]</sup>. For example, information technology has promoted the academic development of library science and information science to experience the process of attaching importance to data texts - admiring electronic messages - advocating scientific and technological knowledge. This has led to a series of changes and academic freedom in the basic disciplines constructions of library and information science and the academic attitude of seeking truth from facts, providing some innate resources for the progress of the library and information industry, such as the proposition of the concept of data text construction. In the late of 1985s, the book publishing industry developed rapidly, and the production scale of books was greatly improved. Diversified book types and resource carriers promoted the continuous expansion of the number of newspapers, magazines, and periodicals, resulting in higher prices and higher demand for reading.

Table 1. Library knowledge needs of different academic qualified personnel

Bachelor's degree	Master's degree	Doctor's degree
Online information consultation 67. 18%	Library and information science's network resources navigation 78. 08%	Library and information science's new book arrival and 100%, academic service 100%
Library and information science discipline's navigation 89.23%, library user communication platform 69.83%	89.50% Library and information science discipline's navigation 97. 50%, project tracking service 89.50%	
Library and information science's new book arrival and book review 51. 36%, academic search new service 71. 36%	Library and information science's new book arrival and online book review 65. 38%	Subject librarian advisory service 65.00%, guide for authors 79. 00%
Library and information science's search guide 50. 09%	Subject tracking service 63. 46%	Online real-time information consultation 62. 50%, library user communication platform 62. 50%
Guide for authors 86.82%	Subject librarian advisory service 61. 54%	50. 00% Library and information industry and library and information department's news 50. 00%
Resource push 94.55%	Guide for authors 57. 62%, resource push 57. 62%	
Library and information industry and library and information department's news 42.27%, Subject tracking service 42.27%	Network resource search service 63.85%	
Library and information science discipline's navigation 60. 00%.		

It can be seen that the library is facing a shortage of construction costs in terms of information, related systems and facilities construction, and the collection of books is limited, which shows the reality is more and more serious<sup>[6]</sup>. In spite of facing this dilemma, the library has put forward many practical and effective construction systems. However, if it only considers from the perspective of its own development and reality, it cannot be fundamentally overcome the problems. So, it is necessary to require the library to turn around and seek solutions to the problems from the real society.

### 2.3. Incomplete communication between library and information science and other disciplines

International advanced concepts, institutional theories, teaching tools, and teaching practices related to the library and information science have an important impact on the progress of domestic library and information science and the construction of the discipline. Domestic library and information science should continue to develop on the premise that they are able to absorb the essence of foreign researches as much as possible and realize the innovation of its own discipline. It should regard research theories and methods as the academic foundation, guide the modern information concept and system construction,

and form a complete research system. In the research system, the company's planning and management, national academic research, library information and its related legal research, human relations, evaluation summary, knowledge system and information comparison, sorting and convergence research have become new topics for researchers. Schools' library and information science system have developed to some extent. In addition, related departments of the schools can also introduce data visualization technology, digital integration technology, resource integration, convergence analysis and so on to conduct a deeper discussion on the intelligence concept system.

## 3. Library and Information Science Improvement

### 3.1. Enrich curriculum system of the discipline

It can expand the specialized courses required by the discipline of library and information science, provide integrated resources for academic research in the field of library and information science, and lay the theoretical foundation for the research of its knowledge system. See Figure 1.

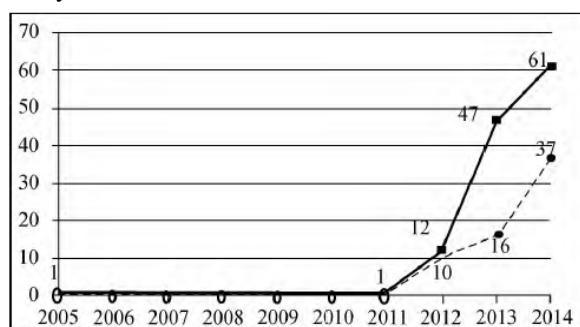


Figure 1. The number of papers published by relevant disciplines

The discipline of library and information science can be interconnected with many first-class related disciplines. The first-level disciplines include computer science, scientific management, finance and economics. As the backbone discipline, the library and information science needs to provide courses based on the discipline construction priorities related to the cross-discipline of library and information science. At the same time, it needs to share secondary related disciplines with each other, of which secondary disciplines include journalism and communication science, legal system, international studies, statistics, electronics, and philosophy. Moreover, it needs to continuously pay attention to the three-level disciplines related to library and information science, including energy science, genetics, literature, engineering, geography, geology and oceanography, agriculture, ethnology, meteorology, electrics, population resources,

physical studies and botany. These discipline construction majors provide a substantial knowledge base for the future research area of the library and information science.

### 3.2. Construct a cross-disciplinary platform

Through the construction of a cross-disciplinary platform to improve the related construction of library and information science, the platform operation refers to scientific research platform and teaching platform. The scientific research platform is the organization and structure of the cross-disciplinary. It is an important preparation stage for planning academic research activities, and it is conducive to building and transforming academic groups with solidarity and scientific research to promote important contributions the construction of library and information science among interdisciplinarity, making the process

of library and information science to enter the excellent cycle. Therefore, it needs to organize multi-disciplinary cross-competencies, establish groups that are centered on major academic research and regard national scientific research projects as a means of contact, and demonstrate strong organizational strength for the progress of library and information science. Priority should be given to the purchase of advanced machinery and equipment, the transformation of the school's research platform, and the accomplishment of the academic effects of resource sharing among interdisciplinarity. The teaching platform is an effective way to transform students' classroom knowledge into practical ideas. The discipline structure of library and information science should be based on teaching, applying the concept of students learning in the classroom to reality, and helping students fully understand scientific research and development, production management and product supervision.

#### 4. Conclusion

This paper analyzes the current research situation of library and information science from a multi-dimensional perspective, relies on the development of domestic library and information science, and adjusts the library

work according to the cross-data of library and information science. It is hoped that the research in this paper will provide a theoretical basis for the progress and development of the library and information science.

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