

Analysis on the Collection Evaluation System of University Library under the Support of Information Technology

Hongwei Zhang

Library of Zhongyuan University of Technology, Zhengzhou, 450007, China

Abstract

This paper discusses that with the development of information technology, university libraries should actively respond in many aspects. By analyzing the collection quality evaluation indicators from different dimensions, this paper reveals how to promote the construction and development of university library collections through the continuous expansion and improvement of the collection evaluation system indicators.

Keywords

Informatization; University Library; Evaluation System.

1. Introduction

The collection of books is the material basis for the survival and development of libraries. Quality of collection will directly affect the effectiveness of service work. Collection quality control is an important aspect of library management level, and is the premise for the library to complete various tasks and play various functions. To measure whether a modern library is worthy of its name, we cannot simply look at its actual collection. A high-quality library must have high-quality collection. As a complete evaluation indicator, only the unity of quantity and quality is the accurate standard for evaluating collection. The quality composition of the collection is multifaceted. The collection composition of modern libraries under the support of information technology has realized the transformation from simple print resources to the coexistence of print resources, electronic resources and network resources. It is urgent to launch a set of integrated and unified collection evaluation index system, so the evaluation index should also comprehensively include all aspects of content. The collection quality evaluation index can be evaluated from four aspects: collection quality, collection structure, use frequency and collection time[1-2].

Under the support of information technology, the evaluation of the quality of library collection should not be conducted in a single dimension or isolated way from a single aspect of quantity or quality, but from multiple aspects and multi-dimensional integration.

The quality of the collection is closely related to the construction, construction and use of the collection, whether in terms of quantity or quality. Building is the collection and selection of books; Structure refers to the composition of the collection; Use is the use of books. The evaluation of the collection quality can be divided into three aspects: the collection quality evaluation, the composition quality evaluation and the use quality evaluation. The evaluation of these three aspects constitutes a three-dimensional space for book collection quality evaluation. However, measuring the quality of library collection only from these three aspects alone is still not enough to fully assess the quality of library collection construction. We should also place the evaluation of these three aspects in a linear time dimension to view and evaluate the quality of library collection in a developing way.

Under the support of information , technology, the construction, structure, use and time of the library's collection quality, in addition to the multi-dimensional structure in space, in the time dimension, the construction, structure and use of the collection also show a certain degree of

sequential connection. The collection building is the foundation and prerequisite work, which is the prerequisite for determining the composition quality and use quality of the collection. If the collection building quality is improved, the composition quality and use quality of the collection will also be improved accordingly. The collection, composition and use of books are the necessary process to control the collection quality of the library. The collection quality control of the library continuously improves the collection quality level of the library through each round of construction, construction and use. In each link, we should set up corresponding evaluation quality indicators to make the library collection quality construction develop healthily in the expected direction[3-5].

2. The Quality of Selection

Under the support of information technology, we should establish an overall quality index system when planning the book collection. The index system should be measured from the use of library purchase funds, the amount of books collected, the quality of selected books, and the construction of characteristic collections.

2.1. Use of Funds

Library staff should start from the actual situation and take practical measures to use the limited funds for book purchase, reasonably allocate the proportion of funds, so that they can maximize their economic benefits and meet the needs of teachers and students in colleges and universities. The allocation of books funds is generally divided into three parts, namely, Chinese and foreign language books funds, periodical books funds and other funds. In order to facilitate control, the use of book funds must be specific, such as the estimated amount of paper books and electronic books, the amount of natural science and social science books, foreign language books, and the number of books directly purchased on site.

2.2. Collection.

The book collection is the basic indicator to evaluate the scale and service capacity of the library. The evaluation of the book collection can be divided into the following aspects:

(1) Number of books. The number of books collected can measure the size of a library. The total number of books collected by a library over the years is consistent with its size. For example, provincial libraries, prefecture level libraries, county level libraries and university libraries must have a total number of books that are consistent with their size. Under the support of information technology, the statistics of the total collection of books include both paper resources in collection and electronic documents purchased.

(2) Literature coverage. It refers to the proportion of documents in various disciplines, which is an important indicator to measure the completeness of documents collected by university libraries. From the perspective of the overall construction of literature resources, the higher the coverage rate of literature, the better. However, as far as university libraries are concerned, they should also pay attention to the needs of teachers and students and the conditions of the school, so that the literature collection of the main service objects can reach a high degree of completeness. Otherwise, it will be difficult to form the characteristics of book collection literature, and the satisfaction of teachers and students' readers will also be reduced.

2.3. Quality of Selected Books.

(1) Clarifying the principles of mining and beneficiation. The library must make a perfect purchase plan and handle the relationship between quantity and quality in the purchase.

(2) Ensuring the quality of books purchased. Not buying pirated books and not harming the physical and mental health of readers are the most basic requirements for selection.

(3) Improving personnel quality. The development of library functions cannot be separated from selection, especially under the support of information technology, university libraries have outstanding requirements for the quality of selection personnel and the level of disciplines and specialties. University libraries should focus on strengthening the construction of book collection and selection teams, improving the quality of interviewers, improving their professional level, and being good at using information technology to select various books that are conducive to improving the quality of book collection from the information system.

2.4. Characteristic Book Collection Construction.

The collection construction should have its own characteristics. Part of the collection of books in university libraries should meet the needs of the discipline construction, teaching and research of the university, and should have long-term accumulation and unique literature resources. University libraries should be encouraged to build and develop library resources with their own characteristics according to the actual situation of the university.

3. Collection Structure

The collection structure is an important part of examining the overall quality of the collection system, which includes the content quality and structure quality of the collection composition.

3.1. Content Quality

The content quality of the collection is mainly reflected by the subject categories of the collection and the knowledge and information value of various types of books and documents. The content quality of the collection is the unity of scientific value, practical value and reference value. The evaluation of the quality of the book collection can be carried out from the depth and freshness of the collection.

(1) The depth of book collection mainly refers to ensuring the systematicness and integrity of the collection of key books. Key books are the systematic and complete books and periodicals within the scope of certain disciplines, specialties or topics selected according to the main tasks of the library and the needs of the main readers. They are the core and main part of the collection. All kinds of libraries should establish key collections with distinctive features for paper documents and electronic resources.

(2) The newness of books collection refers to the proportion of books and periodicals within 5 years in the total number of books collected in various disciplines, that is, the novelty of books collection. It is a macro indicator of the quality of books collection. The newness of books collection is reflected in the number of new theories, new ideas, new materials, new methods and new technologies contained in books and periodicals.

The newness of the collection is usually reflected by the growth rate of new books, that is, the ratio of the number of new books to the total number of books collected, which is an important indicator to measure the timeliness of library collections, and reflects the quality of literature from the side. The formula is: $\text{new book rate} = \frac{\text{the number of new books (paper and electronic)}}{\text{the number of books collected}} \times 100\%$.

Through research, it is found that the Chinese science and technology books published in recent ten years by the readers of our library account for 75% of the total circulation of the published science and technology books over the years, and the half-life of the literature also reveals this law of change. That is to say, as long as 30% of the existing literature contains new information, it can ensure nearly 100% information completeness. Therefore, it is of great significance to take the growth rate of new books as the evaluation index of the literature quality of university libraries, which can promote university libraries to speed up the updating of literature.

3.2. Structure Quality

The structure quality of the collection system is the scientific and reasonable degree of the collection system structure. The collection structure is an important part of the collection evaluation. A reasonable collection structure must reflect the characteristics of university libraries. The evaluation of the collection structure is mainly carried out from the following aspects:

(1) Discipline category structure. That is, the proportion of books collected in various disciplines, which should adapt to the needs of teachers, students and readers. The scientific and standard classification method shall be adopted for classification, and the shelving shall be accurate to better reflect the subordination, juxtaposition, intersection, correlation and other relationships among disciplines. The classification and layout of the collection shall fully consider the characteristics of the collection and the need for the integration of collection and reading, and form a strict system, which is conducive to both management and overall effectiveness.

(2) Literature type structure. It mainly investigates the proportion of documents of different types and different publishing forms and the situation in line with the needs of readers.

(3) Time type structure. According to the production time of publications, they can be divided into collection resources belonging to different periods. The collection of books in some disciplines is systematic in historical development from ancient times to the present; Some periodicals and serials have accumulated a complete collection for decades and become historical materials and collections.

(4) Language structure. Investigate the proportion of languages in the collection resources, and analyze whether these proportions are compatible with the languages mastered by the readers of the library. Whether it is generally consistent with the publication volume of literature in various languages.

4. Frequency of Use

The collection construction should give full play to the use effect of the collection. Under the support of information technology, the effectiveness of the collection construction and the quality of the collection are ultimately reflected by the quality of the use of the collection, which is constrained by the provision of knowledge information by the collection and the demand of readers for knowledge information. The use quality of the collection includes the degree to meet the needs of the readers, the extent to which the collection is used and the reading effect produced after the use of the readers.

4.1. The Extent to Which the Collection Meets the Needs of Readers

The extent to which the collection meets the needs of readers can be reflected by the collection security rate, collection refusal rate and collection application rate.

(1) Collection security rate. The book collection guarantee rate is the average amount of books that each reader of the library holds, or the average amount of books that each reader can obtain once he arrives at the library. The calculation formula is as follows:

Collection guarantee rate = number of paper and electronic collections / total number of readers $\times 100\%$.

The collection guarantee rate is not only an indicator to evaluate the collection documents from the perspective of quantity, but also the basis for the evaluation of the collection documents quality. The quantity is the basic guarantee of the quality. Therefore, the guarantee rate of collection documents is an important aspect of evaluating the quantity of collection documents and one of the important indicators to measure the development of a library or the ability to meet the needs of readers.

(2) The rate of book refusal. The book collection rejection rate refers to the percentage of the number of books and periodicals that have not been borrowed in a certain period of time among the reasonable borrowing requirements of readers. The calculation method is as follows:

Refusal rate of books collection = number of books and periodicals not borrowed / total number of books and periodicals required to be borrowed $\times 100\%$.

The rate of refusing to borrow books is affected by many factors, and the high or low rate of refusing to borrow books indicates the quality of the collection.

(3) Collection application rate. According to the aging law of the literature, the average half-life is about 5 years. The maximum borrowing period of books is similar to that of journal citations, which is also 2 to 4 years later. Since the number of types ordered by each library every year is basically stable, the periodicals have the characteristics of continuity and stability, except for the suspension or the need to add new ones. The application rate is calculated by the ratio of the number of books used by readers in the year to the number of books collected in the previous five years. The formula of book collection application rate can be expressed as follows:

Collection application rate = number of books used by readers in the year / number of books collected in the first five years $\times 100\%$.

4.2. The Extent to Which Books are Used

The extent to which the collection is used can be quantified by the collection utilization rate. Collection utilization rate refers to the percentage of the total number of books and periodicals borrowed by readers to the total number of books and periodicals in a certain period of time. The calculation formula is:

Collection utilization rate = number of library books / total number of books $\times 100\%$.

The utilization rate is a comprehensive reflection of the quality and structure of the collection. Generally speaking, the higher the utilization rate of the collection, the better the collection readers' reading needs, and the more fully the knowledge and information of the collection are developed and used. On the contrary, the low utilization rate of books indicates poor quality. In addition to libraries that are responsible for long-term preservation, the utilization rate of the collection should reach about 75%.

4.3. The Social Effect Produced by Readers after Use

Anything that promote technological progress, scientific research and productivity improvement can bring huge economic benefits to society. The improvement of human civilization can be regarded as having produced good social effects, and also reflects the high quality of books collection.

5. Old Book Culling

With the passage of time, the quality of library collection will also change. The collection of books is a dynamic system as well as a metabolic process. It includes not only the supplement of new books, but also the elimination of old books. In the collection construction, the general library often only pays attention to the collection supplement, but neglects the collection elimination.

In order to do a good job in eliminating books, libraries should be active, prudent, organized, planned and step by step. In addition to establishing clear principles, scope and steps for weeding, a certain rate of weeding should also be guaranteed. Doing a good job in eliminating books can not only improve the quality of the collection, but also ease the saturation state of the library, making room for new books and periodicals. It is of great benefit to delay or not build new libraries, save the purchase funds, and also make the collection achieve the best effect and play the largest role.

6. Conclusion

In recent years, with the development of information technology, university libraries have responded positively in many aspects, such as talents, technology and funds. The quality of books has been strongly supported, and the construction of characteristic resources has become the source of the survival and development of university libraries. By analyzing the collection quality evaluation indicators from various dimensions, the evaluation indicators are further expanded and the collection evaluation system is improved. Through the continuous expansion and improvement of the index of the collection evaluation system, we will promote the comprehensiveness, rationality and accuracy of the collection quality evaluation of university libraries, thus promoting the development of the collection construction of university libraries.

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