

Application of Library and Other Teaching Resources in the Analysis of Improving University Education Reform

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Abstract: With the development of education informatization, computer network technology has become one of the most important and influential tools in the information society. Teaching resources such as libraries play a vital role in the process of college education reform. The purpose of this article is to analyze the role of library resources in education reform and put forward the importance of attaching importance to library resources. This article mainly uses the survey method and quantitative qualitative method to explain the role of library teaching resources in college education. The survey results show that the current utilization of library resources by students is not high, but 72% of people agree with its usefulness in education reform.

1. Introduction

With the rapid development of my country's higher education, the educational reform of university libraries has become a requirement of the times. As an indispensable part of education reform and talent training, teaching resources such as libraries play a very important role in promoting students' interest in learning and stimulating reading enthusiasm. Under the background of reforms in the new era, all sectors of society have higher and higher requirements for the quality of education, teaching level and talent training, which has prompted people to pay more attention to the construction of disciplines such as libraries.

There are many theoretical results of applied research in the analysis of teaching resources such as libraries to improve the educational reform of colleges and universities. For example, Ma Benhui said that with the rapid development of computerization in today's society, the educational resources of colleges and universities have become increasingly diversified, and the opportunities for students to acquire knowledge have also become diversified [1]. Pan Yue'e considers the

library's participation in university education reform and library service improvement, and emphasizes that the library should actively change its concept, optimize the funding structure, rely on characteristic resources, strengthen cooperation with other institutions, and make contributions to the long-term development of the school [2]. Guo Changjin believes that the construction of university libraries also faces many challenges, and some traditional libraries face innovation challenges and urgently need to be reformed and improved [3]. Therefore, this article uses the library and other teaching resources to study ways to improve the educational reform of colleges and universities.

This article first studies some relevant theoretical knowledge of library teaching resources. Secondly, it analyzes the role of library resources in university teaching. Then it elaborated on the library teaching resources in sections. Afterwards, the application of digital mining in the analysis of college education reform is discussed. Finally, the relevant research is carried out in the form of questionnaire survey, and the data results are obtained.

2. The Application of Libraries and other Teaching Resources in the Analysis of Improving the Educational Reform of Colleges and Universities

2.1 Library Teaching Resources

Library statistics belong to departmental statistics. It is an applied science that uses the principles of statistics to study library phenomena. The library collects, processes, organizes, stores, selects, transforms and transfers material knowledge carriers. System structure, equipment, collection resources, readers, librarians, technical methods and management elements constitute a system. Library statistics aims to study the phenomenon of the library in the dialectical unity of quality and quantity. At the same time, it analyzes and investigates the qualitative content contained in quantity, explores the quantitative boundary that determines quality, and reveals the essence of library phenomenon[4-5].

The statistical work of the library mainly includes three parts: the collection, sorting, calculation and evaluation of statistical data. The library statistics system includes collection composition statistics, digital resource statistics, periodical statistics, book classification statistics, borrowing system statistics, faculty library statistics, library collection equipment statistics, etc. Statistical analysis methods mainly include mean analysis, variation analysis, dynamic analysis, index analysis, correlation analysis, sample inference analysis, analysis, etc.

Library statistics have very important meaning and functions. It is an important means to supervise the work of the library, and it is also the basis of library research. To judge the performance of the library in practice, the language description is not scientific enough. Only accurate numbers can be very reliable. The use of statistical data and analysis results to judge and evaluate the work of the library is more scientific and more convincing [6-7].

The university library is an information platform for the school to carry out educational activities, teaching and scientific research. To achieve the goal of upgrading high-quality talents, the level of talent development is an important indicator of the overall level of the school.

Abundant books, reference books, periodicals and magazines, electronic resources and various preferential conditions of the library provide teachers with a wealth of curriculum preparation and research resources and information, and provide students with a learning environment for independent learning. Exploration is beneficial to the education of students. Information literacy provides favorable conditions and practical opportunities. With the help of the information resources and powerful editing tools provided by the library, teachers can understand the limitations

of the development of modern science and technology. And they can explore the new era education system and reform teaching content, create online multimedia courses, increase resources completely free of charge and save course time. Improve the quality of courses, improve teaching methods, and improve teaching effects [8-9].

In order to improve students' practical and innovative abilities, the design of practice and experience should be strengthened. This series of educational reforms requires corresponding adjustments to the structure of the university library's resource pool, optimizing the existing resource pool, and combining it into a new characteristic resource pool. In recent years, some college libraries have made reform attempts in this area, and successively created teaching reference books and teacher preparation resource banks. Textbooks are a kind of materials that only university libraries have [10]. They are the most important manifestation of supporting teachers' teaching and guiding students to carry out scientific research activities.

2.2 The Role of Library Resources in University Teaching

Contribute to the enrichment of educational resources. The use of library resources for college education is conducive to enriching the teaching resources of colleges and universities. Library resources are an important part of the extracurricular project resources of colleges and universities, but at this time most middle schools are using most of the school's resources. Less development and use of extracurricular curriculum resources. Libraries are very important but underutilized extracurricular resources in colleges and universities [11-12].

Encourage the full use of local educational resources in college education. The library is a centralized display of local colleges and universities, and the resources of the local library can be used in college classrooms. Therefore, when conditions permit, teachers can appropriately allocate relevant local academic resources represented by libraries for teaching.

Conducive to the transformation of traditional teaching methods. Today, traditional teaching methods and university classrooms that focus on teacher reading are still being used. The traditional teaching method emphasizes the leading role of the teacher. This method is objectively useful for students to remember what they have learned. However, with the continuous deepening of curriculum reforms and the full implementation of quality education, this traditional teaching method has become increasingly unsuitable for changes in the times and the needs of educating talents. The library has rich collections of resources, provides comprehensive materials for teachers to organize multimedia courses, and provides students with independent, collaborative and exploratory learning. Due to the requirements of the new curriculum reform at this stage, college teachers should pay more attention to the development of new curriculum resources and serve their own teaching activities, so as to introduce some students who are more interested in teaching to activate the teaching atmosphere. University curriculum atmosphere, more appropriate use of library and other extracurricular project resources, enrich teaching methods, and improve teaching efficiency.

Conducive to changing the way students learn. Simply put, university learning methods are the signs of personal learning habits that students show when they understand university facts, interpret university development, and summarize university laws. Students' learning styles are often related to teachers' teaching methods and personal styles, as well as students' inherent views on higher education disciplines. Because library resources contain a large amount of professional knowledge, rich and diverse collection resources, and their own unique educational functions, the correct and wise use of them in colleges and universities education will help change the way students learn.

2.3 Library Teaching Resources

The library is a complete process of document collection, sorting and retrieval from macro to micro, from big data collection system to small-scale analysis and processing. Library management mainly relies on book resources, which has an additional impact on teaching. The resources in the book contain a large amount of cultural knowledge, historical allusions, etc., which can be used as reference materials for student learning materials and teacher learning materials. Books in each grade of the school can also be used as classroom materials for teachers to read or use. The various documents in the library can allow administrators to keep abreast of the latest developments, adjust the structure and bibliographic types, and allow readers to obtain more resources to meet their own needs in a limited time.

In order to better serve readers, libraries need to integrate information technology into teaching and use modern technology to provide higher-quality educational content, which requires extensive research. As a special and important existence, university library is one of the important places for school education and scientific research activities. In today's era of rapid development of the Internet, we must make full use of this useful resource in order to provide students with higher quality services. By continuously improving the quality of the teaching staff, strengthening the construction of physical facilities, strengthening public relations, and improving the overall level of university libraries.

Library resources include: books, audiovisual materials, pictures and videos, multimedia, etc. Books are a medium for educators to convey their ideas. We need to improve the quality of library resources in a variety of ways to better serve education and support academic research.

Abundant library resources have a major impact on education funding. People can get a lot of information, educational content, and other related content through the Internet. Library resources play an important role in educating and improving students' learning skills. One is to encourage teachers to improve their educational level. The second is conducive to improving school conditions and ecological construction. The third is conducive to strengthening the ideological and moral construction of teachers and students and creating a good social atmosphere.

The role of library resources in promoting education. It plays an important role in the construction of national culture and the process of socialist modernization. Library resources provide rich and diverse teaching.

Promote the sharing of educational resources. Therefore, the management of bibliographic information and related documents needs to be strengthened. Realize resource sharing through network technology. The school library is an important place for college students to acquire knowledge, practice their will, and improve their overall performance and social adaptability. It can not only provide students with a wide range of information, but also allow teachers and students to understand the latest developments.

2.4 Application of Data Mining Technology in the Analysis of College Education Reform

In order to more effectively use the data in the data warehouse, the possible university reform rules are extracted from the relevant datasets in the data warehouse, determine the relationship between the university reform and the program relevance. And propose the higher education reform to explore the application of the data warehouse-based data in the data warehouse.

Data mining allows users to access or process large amounts of information. The goal of data mining is to develop intelligent tools to evaluate and extract information from the database.

Association rule mining is used to discover interesting and common patterns, associations and

correlations between event element sets in transactions, relationships, and other information stores. Medium is used to measure the frequency of occurrence of a group of items. It can be expressed as:

$$s(R \rightarrow T) = s(R \cup T) = \frac{c(R \cup T)}{|K|} \quad (1)$$

Among them, $R \rightarrow T$ represents a rule, and the database is represented by K .

Confidence, the confidence of a rule $R \rightarrow T$ in a transaction set is the ratio of the number of transactions including R and T to the number of transactions including R .

$$con(R \rightarrow T) = \frac{c(R \cup T)}{s(R)} \quad (2)$$

The support and trust of association rules reflect the statistical significance or reliability of the rules found in the database as a whole. Generally speaking, only association rules with high support and trust are important and useful association rules for users. The data mining association rule algorithm is used to discover the laws that exist between different majors and different courses that match the given support and trust value, and obtain some valuable laws to guide their behavior. At the same time, it can also guide teachers to organize the teaching progress and content reasonably, and play a positive role in promoting the improvement of teaching quality.

3. Survey and Statistics on the Current Situation of Resource Utilization in University Libraries

3.1 The Design Ideas of the Questionnaire

The first part contains readers' personal information, including individual characteristic indicators, social characteristic indicators, behavior characteristic indicators, and library use behavior indicators. The second part, library indicators, including library environmental facilities, paper resources, electronic resources and libraries. Comments, bad reading behavior and daily library services. The third part analyzes the attitude of university library resources to improving university teaching methods. These include expanding text data, adding audio and video data, flexible learning methods, and improving students' learning level.

The questionnaire in this article has two forms: answering questions and closed questions. Closed questions are divided into two-part questions and multiple-choice questions. Multiple choice questions include two forms: single choice and multiple choice. The maximum number of multiple choice questions is two.

3.2 Data Acquisition Method

During the survey process, students and doctoral students were used as test subjects, and personal data of students and related information about library resource usage were collected through questionnaire surveys. Since grades and majors are related to the factors that affect the utilization of university libraries, in order to ensure the validity, rationality and scientificity of the collected documents, the questionnaire surveys are organized in hierarchical and clustered samples in an orderly manner.

In order to ensure the authenticity and efficiency of the questionnaire return, the following measures have been taken: to facilitate the timely return of the questionnaire, distribute the questionnaire on the spot, and return it immediately to ensure the authenticity and validity of the

questionnaire, and to improve the response rate of the questionnaire.

3.3 Basic Situation of Questionnaire Collection

With the support of teachers and supervisors in each class, the survey was successfully completed. There are 20 questions in the test, the first 2 are completion questions, and 3 to 20 are multiple-choice questions; unanswered questions or more than two multiple-choice questions are considered waste paper. A total of 400 questionnaires were issued this time, and 390 questionnaires were returned, with a recovery rate of 97.5%, of which 360 were valid questionnaires with an effective rate of 92.4%.

4. Analysis of Survey Results

4.1 Usage of Library Teaching Resources

According to the survey and research in this article, it is found that the number of invited freshman to senior students into the school library to use learning resources accounted for a small part. The specific situation is shown in Table 1:

Table 1: The Use of Library Teaching Resources

	Frequently use	Use	Non-use
Freshman	16%	8%	76%
Sophomore	20%	10%	70%
Junior	22%	15%	63%
Senior	37%	20%	47%

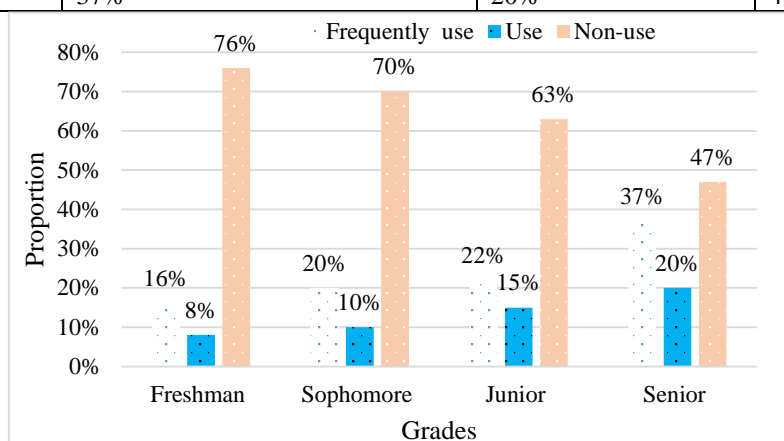


Figure 1: The Use of Library Teaching Resources

As shown in Figure 1, we can find that among the invited students, the most frequently used library resources are seniors. They are more willing to enrich themselves through various resources due to their mature postgraduate entrance examinations and ideological maturity. However, few freshmen students go to the library to study.

4.2 Students' Attitudes towards Library Resources in Education Promotion

According to the survey in this article, Table 2 shows the attitudes of students. Library resources

can expand text materials and add audio and video materials for students and teachers, so that they can have flexible learning methods and improve students' learning level.

Table 2: Students' Attitude towards Library Resources in Improving Education

	Agree	General	Disagree
Expand the text	52	23	5
Add more audio and video materials	56	37	8
Flexible learning methods	59	23	7
Improve the learning level of the students	60	24	6

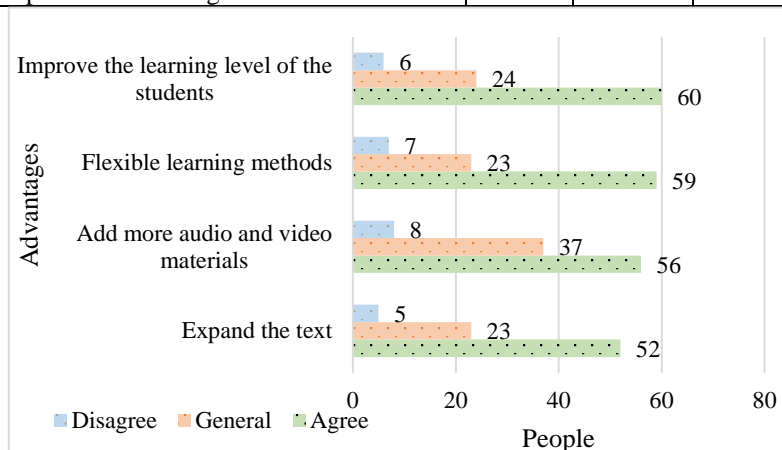


Figure 2: Students' Attitude towards Library Resources in Improving Education

As shown in Figure 2, we can find that most people still think that the benefits of library learning outweigh the disadvantages. They feel that using library teaching resources can improve their learning efficiency and change their learning methods, making them realize that they are the masters of learning. The opening of library resources can transform teacher teaching into self-study, making learning more active.

5. Conclusion

University library is an indispensable place for college students to acquire knowledge, exercise willpower, and improve comprehensive ability and social adaptability. It is not only able to provide students with a large amount of information. At the same time, teachers and students of the school can be informed of the latest developments. The establishment of an evaluation system for the effect of library resources on education promotion is based on the analysis and quantification of factors that reflect the current situation, problems, and development trends of the use of information resources. To strengthen the awareness of library resources education, it is necessary to improve people's ideological understanding, so that readers and teachers can fully understand the importance of their own interests. The use of library resources can effectively improve students' learning enthusiasm.

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