

# **Research on the Application of Big Data in Ancient Chinese Teaching**

Baolin Zhang<sup>1,\*</sup> Jianyu Zhang<sup>2</sup>

<sup>1</sup>College of Humanities & Sciences of Northeast Normal University, Changchun, Jilin 130117, China <sup>2</sup>Northeast Normal University, Changchun, Jilin 130024, China \**Corresponding author. Email: 491350959@qq.com* 

# ABSTRACT

At present, big data has been applied in various fields and plays an important role in all aspects of society. Colleges and universities are gradually introducing relevant contents, and ancient Chinese teaching is also introducing relevant concepts and applying them to actual teaching. This paper expounds the application of big data in ancient Chinese teaching from two aspects of curriculum resource reserve and specific application, hoping to be helpful for ancient Chinese teaching.

Keywords: big data, ancient Chinese, curriculum resources, application

# I. INTRODUCTION

The term "big data" originated from NASA in the last century. Specifically, it uses computers to make statistics, collation and analysis of data in related fields and draw conclusions. It gives correct guidance to the direction of the research field and helps the research field make wise decisions in various changes. Nowadays, big data analysis has been widely used in various fields, and ancient Chinese teaching database has emerged. In the selection process of "Provincial Excellent Courses" and "Provincial Excellent Courses", the ancient Chinese task force attaches great importance to the construction of course database. Although the number of data is not huge, it is comprehensive and specific, which benefits the students in the specific use process.

## **II. RESOURCE RESERVE**

## A. Reserving the e-book library related to ancient Chinese teaching, so as to facilitate students' independent learning

Ancient Chinese is a huge subject. If you want to learn this course well, you should not only learn the teaching materials, but also read widely and read many related books. At the same time, students should consult related reference books when they study. Because of the large reading demand, many books in the library are not enough to meet the borrowing demand of students. Through the specific investigation of students, we can get feedback information to learn about the reference books that students want to read, and introduce a lot of e-book resources of the school into the ancient Chinese database of our college of Arts, which is convenient for students to read. In the process of introducing e-books, we constantly make statistics on the number of students' downloads, and then analyze that students are more interested in that kind of books, have greater demand for that kind of books, and make corresponding adjustments in the use of those reference books to meet the needs of students. For example, at the beginning, we reserved basic reference books such as exegesis, vocabulary, phonology and grammar. Later, through data feedback, students were also interested in rhetoric and culture books, so we continued to add relevant books. In recent years, students' demand for reference books has increased, so we have added ancient Chinese dictionaries, Oracle dictionaries, seal script dictionaries, tongfeizi dictionaries, synonym discrimination dictionaries, etc. to the database, which provides great convenience for students to learn independently.

# B. Uploading the teaching content to the database to provide convenience for students to study after class

The ancient Chinese teachers upload the courseware after class to the database by stages and in batches. If the students fail to complete the class notes, they can log in to the website to download the courseware. The teachers can adjust the course progress according to the amount of courseware downloaded by the students, and adjust the content of the courseware according to the feedback of the students until the students are satisfied. The courseware we upload is divided into professional courseware and elective courseware. The courseware of professional course is mainly the courseware of "Wang Li" version of ancient Chinese textbook, and the courseware of elective course is mainly "phonology, grammar, vocabulary, exegesis, rhetoric, Chinese language and culture". In order to facilitate the postgraduate entrance examination, we also made the teaching material part of the professional courses self-



taught by the students into the courseware upload database, especially the part of the regular questions in the postgraduate entrance examination, we made a detailed explanation on the courseware.

#### C. Uploading all kinds of exercises, contacting students closely after uploading, and providing online guidance for students

1) Uploading exercises of ancient Chinese major courses and elective courses: Due to the tight curriculum arrangement and less time for class practice, we upload the relevant exercises of professional courses and elective courses to the database, and arrange the students to download the exercises after class. The database provides the students with exercise answers. According to the proportion of errors in students' practice, teachers should strengthen the teaching of students' easy to make mistakes in class.

postgraduate 2) Uploading the entrance examination questions of the headquarters of Normal University and other colleges to facilitate the postgraduate entrance examination: After class, the teacher collects the examination questions of relevant majors from the students and uploads them to the database. Because there are a large number of postgraduate entrance examination questions in the database, it not only greatly facilitates the postgraduate entrance examination students' study, guides the correct review direction for the postgraduate entrance examination students, but also saves the students' expenses economically. Through the click rate of students downloading test questions, we make relevant adjustments in the classroom. The more students download the test questions of which school, we will imperceptibly integrate the test questions of which school into the teaching in the classroom, so that students will not feel strange when they see the test questions, and enhance their confidence in the test.

According to the ratio of students' downloading test questions for postgraduate entrance examination, we should constantly enrich the types of test questions for postgraduate entrance examination in the database, increase the number of test questions for school entrance examination, and arrange them according to the age, so that students can download and use them at a glance. At the same time, according to each school's postgraduate entrance examination questions over the years, help students to summarize the rules of the questions and grasp the direction for students' review. In order to help students get better guidance, we also have online answers. Teachers are always ready to accept students' questions and better serve students.

3) Uploading the previous final test questions of professional courses and elective courses to facilitate

*the final review of students:* Sophomores have just come into contact with the ancient Chinese course. Although they listen carefully in class and finish their homework after class, they still can't grasp the key points in the final exam. Therefore, we upload the final exam questions of each year to the database for students' reference.

#### D. Uploading course videos of professional courses and elective courses

1) Selecting the professional courses and elective courses videos of famous schools as a useful supplement to this professional course: Although there are already teaching courseware and exercise solutions in the database, there is also an indispensable part of the database construction, which is "teaching video". Due to the large space occupied by teaching videos, the difficulty of recording and the lack of funds, there are not a large number of teaching videos in the database. However, with the expansion of database space, we will continue to increase the number and categories of videos to provide more convenient conditions for students to learn. At the same time, in order to expand the resources, we select the course videos of famous schools as a useful supplement to the video resource base, so that students can have a broader vision and expand their vision, rather than stay on a single level.

2) Uploading the pre class video recorded by the students to provide the model for the students: In order to train students' teaching ability and enhance their expression ability, we have set up pre class lectures in ancient Chinese course, and some of them have also recorded videos. In order to facilitate the new students' study, we choose a good video upload database to provide a model for the new students' lecture before class, so as to avoid the new students' detour.

# III. THE WAY TO INSTALL AND USE THE ELECTRONIC RETRIEVAL SYSTEM OF SI KU QUAN SHU

The Si Ku Quan Shu, compiled in Qianlong period, has a large scale and many volumes. Since it was compiled, it is very inconvenient for ordinary scholars to consult it. In addition, the book can not be widely spread, which is rare for the world to see. The single version of the original and full-text search edition of the four books by wenyuange was jointly launched by Shanghai People's Publishing House and Hong Kong dizhi culture company in 1999. This has played a great role in preserving and carrying forward the 5000 year old Chinese culture and promoting the study of ancient culture and history. The full-text retrieval edition of Si Ku Quan Shu contains all the documents of the classics, history, books and collections of Si Ku Quan Shu, with a total collection of more than 3460 books, about 99000000 words, and 17 installation CDs.

#### A. Installation method

The step is to put the first installation CD-ROM into the drive, run setup.exe in the file manager of Windows operating system (Win98, WIN2000, WINXP), and enter the user name, user unit and serial number to start the installation. By default, the installer will install the full-text retrieval system of Si Ku Quan Shu under the D:  $\$  4kbrowser folder of the hard disk. After the installation of the first CD, it will prompt to insert the second CD into the CD-ROM drive and copy the remaining data files.

After the data copy of the second disc is completed, you will be prompted to insert the third disc for copy. Copy the data one by one until the data of the 17th CD is copied. The program will prompt that the installation is completed. After the system is restarted, the full-text retrieval system of Si Ku Quan Shu can be used.

## B. The way to use

The step is to click the 4kbrowser icon on the desktop of Windows operating system to enter the full-text search program interface of the four libraries. In the lower right corner, there are six main buttons: "content retrieval", "publishing instructions", "ordinary cases", "online services", "making album" and "exit".

The "content retrieval" label is the most important tool menu in this database. Click to enter the query interface. Click the "search" menu in the upper left corner, and five options will appear: "full text search", "classification search", "title search", "author search" and "open current search conditions". Users can easily search the full text, classification, title and author according to their own needs. In addition to the "content retrieval" tag, the program also provides a "tool" tag, under which there are six small tools, namely "data manager", "single word meaning query", "WordPad", "ancient and modern chronological conversion", "Ganzhi / AD conversion", "Bagua, 64 hexagram table", for users to query. In addition, there are "printing", "setting", "description", "layout control" and other labels on the top of the program, and there are some function labels on the right side, through which users can set the program independently. It is worth mentioning that the database also provides real-time tagging and annotation functions, users can add tags at any time according to their own needs.

# IV. THE CONTENT AND CONSULTING METHODS OF THE WEBSITE OF SINOLOGY MASTERS

#### A. Content

1) Ancient Chinese literature search: The library of Sinology includes the Department of history, the Department of Zi, the Department of collection, the Department of poetry, the Department of Confucianism, the Department of Yi, the Department of medicine, the Department of art, and the Department of Cong. There are also the Department of Buddha and the Department of Tao with a total of about 2.4 billion words for inquiry and use. At present, it is free.

2) Photocopying ancient books: Photocopies of ancient books include Siku Quanshu, Shulei, Li, Le, Primary school, Chunqiu, Xiaojing, Wujing Zongyi and Ancient Book Bibliography.

3) Dictionary category: There are more than ten dictionaries, such as the great Chinese dictionary, the sea of Chinese characters, the great Chinese dictionary, the modern Chinese dictionary, the source of Chinese characters, variant characters, the source and flow of Chinese characters, the ancient Chinese exegesis forest, the Shuowen Jiezi exegesis forest, the middle and upper ancient phonology, and the oracle bone dictionary.

## B. The way to use

The way to look up this website is very simple. If you want to look up a certain word, you can directly input it. You can find the oracle bone inscriptions, gold inscriptions, big seal characters, small seal characters and other ancient characters of this word. At the same time, it also provides a photocopy layout of the dictionary, which is very convenient. If you want to look up ancient books, you can click on the ancient book link, and then enter the short content to look up, you can look up the relevant content.

## V. CONCLUSION

The introduction of big data into ancient Chinese teaching is only a concept up to now, but the introduction of advanced concepts will inevitably bring about the innovation of teaching concepts. Through the analysis of data resources and feedback information, a large number of data resources will be provided for the improvement of ancient Chinese classroom teaching, which will bring greater convenience to students' learning and better place for ancient Chinese teaching in the future Good service.



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