# Research on the Teaching Reform of Visualization in the course of Ancient Literary History under the background of "Digital Humanities"

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**Abstract.** In recent years, the "digital humanities" technology has developed vigorously, and the corresponding research results have emerged one after another. In this context, the scientific research of classical literature is developing in a more effective, accurate and comprehensive direction, both in terms of research methods and conclusions. Starting from the perspective of "visualization", this paper deeply discusses the teaching design issues related to the teaching reform of Ancient literature, mainly from the integration of the reality and academic nature of teaching content, the diversification of teaching methods with students as the main body, the integration of innovation and operability of the assessment mechanism, and tries to solve the problems of "obscure content", "time-space separation" and other problems in the course of Ancient literature, Explore a new path of teaching reform. The data comparison results showed that the new method can significantly improved the learning enthusiasm and performance of liberal arts students, and had certain application and practical value.

**Keywords:** Teaching Reform; Digital humanity; Classical Literature; Visualization.

#### 1. Introduction

"Digital Humanities" is a new term, which belongs to a new cross-disciplinary field. As Professor Unsworth said, its' one end is efficient computing, and the other end is humanistic communication'.<sup>[1]</sup> Specifically, it is the application of modern computer technology, electronic technology, network technology, etc. to the fields of literature, history, art, archaeology and other traditional Humanities.<sup>[2]</sup>

At present, digital humanities mainly carries out the in-depth development of the digitization of ancient books from four aspects: text mining, GIS technology, text visualization and ancient book corpus. The words with obvious disciplinary characteristics in the main field of digital humanities are "history", "cultural heritage", "map" and "library", among which the field of history is the most prominent. The "GIS technology" in digital humanities has brought subversive changes to the study of Ancient literature. After data association and integration, the literary chronicle map platform can visually present the writer's tracks. Professor Wang Zhaopeng's research can be regarded as an example of the current development of "new humanities".<sup>[3]</sup> Under his leadership, his team has completed the construction of the "Tang and Song Literature Chronicle Department Geographic Information Platform", and in August 2022, jointly authorized with Soyun Network, the project data was officially released in the Geographic Library Knowledge Base. This kind of technology, which integrates computer, geography and literature, brings new thinking to the research and teaching of Ancient literature.

# 2. Disadvantages in Classroom Teaching of History of Traditional Ancient literature

At present, in the teaching of Ancient literature, there have always been problems of outdated teaching methods and low enthusiasm of students. Professor Dai Jianye, an online celebrity, has a deep understanding of this and has clearly pointed out the low efficiency of classroom teaching of

Ancient literature, "For many years, the teaching of Ancient literature in the Chinese language departments of various universities has been mainly completed through the course of 'History of Chinese literature'. Teachers often teach students a long list of clues, a lot of concepts, a large number of writers, and many classics and masterpieces in Ancient literature. However, students do not read much, nor seek to understand them thoroughly, nor can they learn them. This teaching and learning method is similar to a modern version of 'buying a pot and returning pearls'."<sup>[4]</sup>

In addition, there is a prominent problem of "time-space separation" in Ancient literature. Mr. Wang Zhaopeng has deeply elaborated on this, "The separation of time and space in the study of Ancient literature is reflected in two levels. At the level of conceptual consciousness, it is a strong sense of time and a weak sense of space. In the study of literary history, it focuses on the change process of time, while ignoring the separation and distribution of space; there are many descriptions of time processes, and relatively few surveys of the geographical and spatial distribution of writers' activities and works.<sup>[5]</sup> For works such as the chronicles of writers, notes on the compilation of other collections, and literary chronicles, it pays more attention to the chronological process of time than to the spatial distribution of space Interstitially, temporal information is specific but spatial information is vague, with a strong sense of time and a weak sense of space.

# 3. Teaching Setup of the History of Ancient literature under the New Background

In order to realize the cultivation of innovative talents with the cultivation of ability and personality, the implementation of the new teaching infrastructure of Chinese higher education is finally the reform of teaching methods. At the same time, the digital achievements of the "time-space integration" chronological system of literary history provide a support similar to the new textbook for the teaching of the history of Ancient literature, which greatly facilitates the reform of teaching methods of the history of Ancient literature. Focusing on "learning as the main line", the paper redesigns the teaching objectives from the teaching content, teaching methods, assessment methods and other links, reconstructs the teacher-student relationship in the teaching of the history of Ancient literature course, imparts the methods and abilities of learning Ancient literature to students in the teaching process, evolves the teacher's functions from the traditional emphasis on "preaching and imparting" to "dispelling doubts", and mobilizes the students' internal drive, Realize the transformation from attendance to class -- effective participation -- active investment -- application orientation -- reflection and innovation, and finally enable students to realize active learning, in-depth learning, and constructive learning, so that the curriculum effect of the history of Ancient literature will be greatly improved.

### 3.1 Teaching content: Effective integration of modernity and cutting-edge

The teaching content of ancient Chinese literature history should be reformed in three aspects: first, the concept of literature history should be changed from selective analysis to holistic restoration, and the growth history of individual writers, the development history of literary circles in each period and the change history of literary space should be explored dynamically from the literary communication relationship; The second is to change the cognitive Angle and method of literary time and space, from one-dimensional to multidimensional, and the integration of time and space has been preliminarily realized, which is a function that the paper carrier cannot achieve; The third is to explore literary space from the three dimensions of point, surface and line, strengthen the activity space of literary history, and analyze the relationship between literature and geographical environment. Geographical environment and regional culture affect writers, and writers also have a profound impact on the literature and culture of the place where they live and the place where they are banished.<sup>[6]</sup>

While carrying out the reform of relevant teaching contents, we must see that writers are the smallest and most effective constituent unit in the history of Ancient literature, which can radiate

the literary history of different dimensions. The comparison and superposition of a writer's literary creation in different situations at different times and places can sort out a personal history of literature. Writers of the same dynasty are connected together in chronological order to form a dynastic literary history, and connecting writers of different dynasties according to chronological order is a chronological literary history. Therefore, in the process of teaching literary history, the core element of writers should also be implemented, and their activity space should always be the focus of attention in the pursuit of temporal linearity. Therefore, in the process of teaching the history of literature, we should also implement the core element of the writer, and always take its activity space as the foothold of attention in the time linear pursuit of it, so as to carry out the "visual" presentation of individual writers. In the process of visualization of writers, the routine of traditional writers' introduction must be broken, and the linear one-way attention from life experience and creative experience to the two-way attention of time-space integration must be realized.

### 3.2 Diversification of teaching methods: emphasis on interaction between teachers and students

The design should focus on how teachers teach and how students learn. These are the two dimensions of a problem, which are reasonably designed and beneficial to the effective development of teaching work.

Teachers should flexibly use heuristic, case based, participatory, and podium based teaching methods in teaching design. Students' learning corresponding to these methods should be autonomous, cooperative, exploratory, and debating learning activities. These teaching methods are designed to empower students and enable them to achieve Lifelong learning abilities such as acquiring knowledge, summarizing, questioning and thinking in classroom learning.

### 3.3 Research and innovation of assessment methods

The traditional student score mainly consists of two parts: daily homework and final exam. This assessment method mainly focuses on the ability of memorization and students' attendance, and the requirement of students' innovation is not very obvious. In order to demonstrate the innovation of assessment, teachers should reflect the research-oriented characteristics of teaching, so that students can learn how to search for information, summarize, question and speculate in the appreciation of unfamiliar literary works. By writing personal acquired innovative achievements, reading and writing abilities can be combined into one, thereby realizing the practical possibility of transforming knowledge into ability. Therefore, teachers should pay attention to the arrangement of relevant details in the classroom preview and the arrangement of homework. In the introduction of relevant writers' life experiences and literary creations, teachers should involve students as much as possible and ask them to prepare one of the small sections in advance. When assigning homework, teachers mainly take geographical space as the starting point and assign related preview tasks according to the natural distribution of students. For example, when learning the contents of the literary creations of Su Shi in Kaifeng when he was young, teachers should also include students in the preparation. Teachers can ask students from Kaifeng to report on relevant content. The regional familiarity brought by this kind of life experience will also overcome students' fear of difficulties to a certain extent, and bring them into the learning situation well, so as to increase their learning virtuous circle.

# 4. The "Visualization" treatment of the Development History of Ancient Literature in each time period

The above relates to the design of small units encountered in the course of teaching the history of classical literature, and the content of each class is basically composed of individual writers and their works. Only if this small problem is solved can students be provided with fresh, nutritious and

delicious meals in the classroom. On this basis, there is another big problem that needs to be clarified and positioned well in the course design, that is, the division of labor in teaching style of classical literature history in each specific period.

### 4.1 Teaching the history of traditional classical literature under "the literature of each generation"

Usually, teachers teach in a linear time order, in which "three ancient and seven periods" is a common time division. In the study of the history of literary development in these representative periods, the emphasis of teaching style is different. A survey of the current popular literature history textbooks in different versions shows that Mr. Wang Guowei's "literature of one generation after another" has an important guiding significance for the arrangement of the content of literature history and the teaching arrangement of teachers.

The development of literature requires a time span, and the completeness of literary style also requires a certain amount of time accumulation. Looking back at the development history of classical literature, we have a bird's-eye view of the development peaks of different literary genres that stand in the long river of history, and have the conditions to summarize literary genres. However, blindly emphasizing "one generation has one generation of literature" in teaching and following the previous approach of "only emphasizing the interpretation of Tang poetry, Song lyrics, and Yuan opera" in teaching practice not only hinders students' comprehensive understanding of the development of literature, but also easily leads to various errors. The result of doing so is that students have a deep impression of representative literary genres of the same period, while they do not attach importance to and do not remember the achievements of other literary genres. This teaching method of literary history is very unfavorable for students to have a comprehensive understanding of the development of literature, and it is also easy to bring it into a narrow learning perspective, with the feeling that a leaf blinds the eye without seeing Mount Tai. Let's take the teaching of literature in the Song Dynasty as an example to delve deeper into this issue.

For a long time, when it comes to the highest achievement of literature in the Song Dynasty, the academic community has unanimously targeted "Ci", which has become a representative literary style of the Song Dynasty. Influenced by this, Ci has always been a key teaching focus in the history of classical literature in the Song Dynasty. However, with the application of Big data technology and the gradual establishment of many ancient book databases, it seems that the traditional understanding that has already formed a consensus should be re examined. It should be noted that prose was also a highly successful literary style in the Song Dynasty, and there were already confident and affirmative expressions from relevant scholars during the Song Dynasty. The so-called "ancient and modern articles, to my great success in the Song collection" and "Song's literature surpasses Han and Yi Tang, and is pure as a king's law" are all records of this. But for a long time, the knowledge point of prose has often only been briefly mentioned when teaching the "Ancient Chinese Movement". This kind of handling cannot be said to be a regret. I believe that with the development of data-driven processing and analysis methods for literature related to prose in the Song Dynasty, coupled with the familiarity of classical literature teachers in universities with new technologies, the corresponding problems can still be solved.

### 4.2 Teaching Specific Periods of Literary History in the Context of "Dataization"

On today's website, we can easily search a large number of ancient poetry database resources. This can not only provide users with more comprehensive poetry literature resources, but also provide comprehensive retrieval functions, and even with some intelligent analysis technology. Under the premise of being familiar with these resources, classical literature teachers can flexibly design different teaching goals, and their teaching ability and effect will be improved accordingly through new lesson preparation. At the same time, its corresponding scientific research achievements will emerge one after another. The relevant digital human resources in the industry focus on the inquiry quantitative statistics of a certain research object, which is very beneficial to

the teaching and research of the course of classical literature history. During this period, with the help of many classical literature databases, teachers can design different research angles to pay comprehensive attention to literary works of the same theme in different times. this kind of work can kill three birds with one stone, and not only the teaching effect has been improved. new achievements in teaching and research and scientific research can emerge as the times require.

### 4.3 The "Visualization" Design of Classics Literature History Related Course Assignments

The above two points mainly focus on the discussion of classroom teaching from point to surface, from micro to macro. No matter how thoughtful the design is, another auxiliary work is needed as the final teaching guarantee. This is the problem of designing homework after class. As a continuation of classroom learning, course assignments can not only review and consolidate the teaching content of teachers in previous classes, but also achieve a guiding improvement in students' learning abilities.

With the huge and convenient database resources, the corresponding operation design can be further promoted to the direction of research. As for Du Fu as the learning object, for students majoring in Chinese language and teaching Chinese as a foreign language, different research-oriented assignments can be designed according to their different professional directions. For students majoring in Chinese language and literature, you can assign assignments such as "understanding the 'history of poetry' nature of Du Fu's poems through the data analysis of Du Fu's deeds and creation during the An Lushan Rebellion". During this process, Professor Wang Zhaopeng and Soyun Shici jointly created the "Tang and Song Literature Chronology Department Information Platform", which can provide students with very rich literature materials for their research. Therefore, through the "combination of time and space", we can see at a glance which poem or poetry works Du Fu created at what time. Then realize the "visualization" of the homework design of the history of classical literature.<sup>[7]</sup>

This kind of visualization work with data and materials is a very rewarding process of exploration, and students will explore with lasting interest. At this point, the problems in the traditional teaching mode, such as the uniformity of assignment items and the low recognition of students' homework, will be solved. Whether students understand and master the relevant knowledge points will be clearly reflected in the homework, which is also of great benefit to the classification of teachers' evaluation levels of homework.

### 5. Comparison of data before and after educational reform

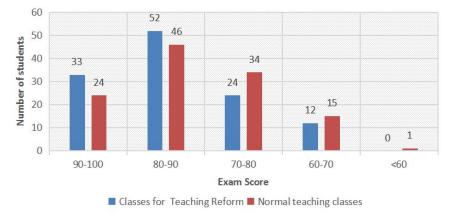


Fig. 1 The number of students in each score range

The application prospect of digital humanities technology in the field of ancient literature is broad, and it can bring a new situation to the teaching of ancient literature. In order to verify the effect of teaching reform, the author applied the teaching method combined with "digital humanities" to the Tang poetry and Song poetry of ancient literature of students of grade 2021, and selected three classes (121 students) who participated in the pilot project of teaching reform as the

experimental objects, and selected another three ordinary classes as the reference objects (120 students). Through comparative analysis, it is found that the teaching method combined with "digital humanities" is more acceptable to students, and the classroom teaching effect is obviously improved. The state of students' attending class has been greatly improved, and the participation in class has been greatly improved. The number of students who can actively answer teachers' questions has increased from 23% to 51%. Students' classroom satisfaction has greatly increased by 20%, from 75% to 95%. Students' grades have improved significantly, with the average score increased from 80.2 to 85. The number of students in each score range is shown in Figure 1.

#### 6. Conclusion

The combination of digital humanities technology and the curriculum reform of Ancient literature can not only encourage students to abandon the stereotype that the classical literature curriculum is just a pile of old papers for a long time, but also enable teachers to follow the academic frontier of digital humanities, reasonably use relevant digital humanities resources, further explore the operation path of the teaching reform of classical literature curriculum from the perspective of visualization, and truly return the classroom to students, Let the teaching of classical literature return to the literary standard, with literary works as the foundation. This kind of teaching reform can not only make students gain vivid knowledge of literary history, but also establish the ability to appreciate and analyze works, and the comprehensive quality is greatly improved. It is believed that with the development of digital humanities technology, more and more achievements will be applied to the research and teaching of ancient literature, traditional cultural education will gradually move towards visualization and intelligence, and the great rejuvenation of the Chinese nation will therefore take a solid step forward.

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