Research Article

Teaching Mode of English Language and Literature Based on Artificial Intelligence Technology in the Context of Big Data

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Widespread problems exist in English major education, which directly or indirectly restrict the development of English major education. The teaching mode of English language and literature is considered in the context of big data. This paper designs an online English learning system platform based on the BP neural network algorithm under the big data network and uses the BP neural network for learning to improve the learning level of the platform. This article adds a course of Chinese and Western cultural comparison in the process of education and teaching. Through Chinese literature and culture courses, it is conducive to learning and inheriting Chinese civilization, training students' ability to understand and communicate Chinese and Western civilizations, and also training students' thinking skills. The teaching plan introduces courses with Chinese elements such as the history of Chinese philosophy and the introduction of Chinese literary classics. Through the courses of Chinese literature and culture, students are guided to ask questions, apply theory to practice, conduct experiments, obtain data, and then analyze problems and draw conclusions according to certain research methods, which exercises students' thinking ability. This also improves students' language application ability through English writing courses. In addition, this paper designs an English language and literature teaching system. With the support and guidance of the English intelligent teaching system, it analyzes the learning level and weaknesses and puts forward teaching suggestions. Then, data mining technology is used to find the key information in the answers from the massive data and is applied to English teaching. In the English learning test, the average attitude of the experimental class was 1.3314 points. This research will effectively solve the problem of English major courses.

1. Introduction

My country's English major education has made great achievements and has cultivated a large number of English talents for my country's economy, politics, culture, technology, and other fields. But at the same time, the problems of English majors education in my country's colleges and universities are widespread and more and more prominent.

Achievements and challenges and problems in my country's English major education coexist. Therefore, in the teaching concept of this study, the teaching of English is used flexibly, and the curriculum of English majors is reformed. Improving students' English skills is the foundation,

enriching students' professional knowledge, improving their humanistic literacy—this is their profession—and ultimately training students' thinking ability.

Artificial intelligence is a new discipline. Leong and Ahmadi aims to establish the need to pay attention to the factors that affect the English speaking skills of language learners and the factors that affect spoken language performance. Based on literature review, they found that appropriate oral teaching is the primary task for learners [1]. Kazemian and Hashemi draw on Hallidayan's overall methodological framework of grammatical metaphor to try to propose a novel. To that end, and building on these frameworks, their research also critically dissects three political speeches delivered by Mr. Obama to reveal how orators

and the press manipulate language. They argue that, to date, no research has tended to apply these disciplines in a rigorous comprehensive analysis in a single paper [2]. Sunghyun pays close attention to Shelley's view of language in his plays. He believed that only the power of love, not hatred, could bring true revolution and end all tyranny once and for all. According to Shelley, reading poetry can strongly evoke feelings of love because it increases the ability to empathize with the imagination [3]. Yamori and Sakai believe that, in order to allow finer quantization control according to the attributes of the images within the macro block, the quantization parameter values are allowed to be changed in units equal to or smaller than the subblocks of the macro block in a manner similar to the motion compensation and orthogonal transformation processes. For example, if multiple images with different characteristics coexist in a macro block, finer quantization control is performed by selecting fine and rough quantization parameters, respectively, for the corresponding subblocks [4]. Razavipour and Yousefi argue that the organization seems to be primarily about individual learners or teachers. And they believe that their institutional environment is not favorable [5]. Ganapathy et al. see the birth of the Malaysian Higher Education Blueprint as cementing and make the learning experience more personalised. They collected data using a targeted sampling, in which 40 participants were selected to answer questionnaires and participate in interviews. The results of this research are informative. Their exploratory research is crucial to gaining insight instructors, perceptions of integrating these skills into the curriculum, and applied approaches to using ICTs to facilitate teaching and learning [6]. Popova et al. believe that these phenomena are then investigated using empirical sociological approaches [7]. Jeavons revealed some of the mysteries surrounding artificial intelligence technology and outlined its meaning from the perspective of an engineer. A less controversial term researched is Knowledge Based System (KBS). The knowledge system is an auxiliary means to solve the problem, which uses the internal encapsulation of the facts, rules, or methods related to the problem [8]. He researches around artificial intelligence, but has little relevance to English teaching.

The innovation of this paper is to design an online English intelligent learning system based on big data network. The system provides students with an online learning platform under the background of big data, which is very helpful for learning English. This article adds a course of Chinese and Western cultural comparison in the process of education and teaching. The teaching plan introduces courses with Chinese elements such as the history of Chinese philosophy and the introduction of Chinese literary classics. Through the courses of Chinese literature and culture, students are guided to ask questions, apply theory to practice, conduct experiments, obtain data, and then analyze problems and draw conclusions according to certain research methods, which exercises students' thinking ability. In this paper, the learning platform is based on the background of artificial intelligence, and a control experiment is carried out in the experimental part. The comparison experiment between the control group and the experimental group shows that the experimental group has significantly improved the academic performance of the control group.

2. Research Method

2.1. English Language and Literature. The major of English language and literature belongs to the category of humanities, so the talents cultivated should also be those who gradually acquire humanistic literacy under the immersion of professional courses designed according to the connotation of English majors, such as literature, linguistics, culture, and national studies. The major of English language and literature is referred to as the major of English. In recent years, my country's college English major education has made remarkable achievements. The construction of English majors has made great progress. The professional content is constantly enriched, the discipline system is constantly improved, the content of the discipline is constantly enriched, and the discipline team is constantly growing. While universities continue to increase their investment in teaching hardware and software, they have also greatly improved the quality of talent training. The fast-developing English major education has delivered a large number of English talents in various fields such as my country's reform and opening up, economic construction, cultural education, and scientific and technological progress and has made great contributions to the revival and rise of the Chinese nation.

The improvement of non-English majors and national English proficiency has brought external challenges to English majors. Non-English majors have made great progress in their English proficiency compared to before. Non-English majors with better English studies are not much inferior to English majors in terms of English skills. At the same time, English education is getting more and more attention. Whether it is for further studies, job title evaluation, study abroad, and job search, English exams are required. English has the same status as the mother tongue in the college entrance examination, which has promoted the national English level. Overall improvement: the improvement of non-English majors and national English proficiency has undoubtedly brought some external pressure to English majors, and some people even questioned the value of English majors.

The curriculum of English majors has long focused only on the training of students' single English skills, the teaching efficiency is low, the students' knowledge structure is not complete, and the social adaptability is not strong. Low-level repetitive training has led to an increase in quantity and a decrease in quality inversely, resulting in a prominent contradiction in the talent structure. How to carry out the next reform and the discipline is still a major issue facing the construction of the English major.

2.2. Artificial Intelligence Teaching. If we can combine the language of learning English with English majors in English literature, linguistics, culture, and other major courses in English, that is, by learning the content of these major courses expressed in English to improve students' English language ability, the efficiency will be greatly improved. According to the subject model of artificial intelligence, it can focus on reducing and reforming the pure skill courses

of English majors. The theme model is the most suitable artificial intelligence teaching model for the reform of English professional skills courses. In the classroom, the theme teaching model based on English professional knowledge can be used to reform the teaching model that focuses on training language skills. Putting language skills training in the process of learning professional knowledge can greatly reduce the learning hours of pure skills courses for English majors. In addition, under the teaching concept of artificial intelligence, the training of English skills should be placed in the learning process of English professional knowledge courses, and English language training can be continued through professional knowledge courses. Reducing the hours of skill courses can provide space for the study of professional knowledge. The learning of professional knowledge can be obtained not only through professional courses, but also through skill training classes based on professional knowledge topics. This will help students gain access to more professional knowledge. Therefore, if teachers infiltrate students with cultural knowledge for a long time in reading teaching, students will have richer cultural background knowledge and certain cultural recognition and appreciation capabilities, thereby reducing the difficulty of reading, improving reading speed and reading comprehension, and broadening its vision.

English writing can improve the accuracy of language use and is the most important standard to measure the degree of mastery of any kind of language. Students put forward questions, apply theory to practice, conduct experiments, and draw data and then analyze the problems according to certain research methods and draw conclusions. This series of processes in itself is the whole process of human thinking, and it is also the method of scientific research. With harmony, the ability of thinking continues to develop in this process.

This article adds a course on the comparison of Chinese and Western cultures in the process of education and teaching. The teaching plan introduces Chinese element courses, such as the history of Chinese philosophy and the introduction of Chinese literary classics. Through Chinese literature and culture courses, it is conducive to learning and inheriting Chinese civilization, training students' ability to understand and communicate Chinese and Western civilizations, and also training students' thinking skills [9].

2.3. English Language and Literature Teaching System. With the development of the Internet, the education industry has promoted distance education and realized remote video teaching and electronic document sharing through Internet virtual classrooms, so that teachers and students can form a kind of teaching and learning interaction on the Internet. The online English intelligent learning system is the way of online teaching and learning in a virtual classroom and classroom through the computer Internet, or through the wireless network of a mobile phone, has emerged with the development of the Internet [10, 11].

Efforts to innovate and try to develop a new web English intelligent teaching system can play a helpful role in students' weak knowledge links and vague knowledge points. For example, when students have misunderstandings or there are learning gaps in learning the specified content, they cannot get help. The new online English intelligent learning system can ensure that students can use the system to analyze the learning progress and the characteristics of the students' personality without a teacher. The system can put forward personalised learning suggestions according to the students' learning situation and weak links of knowledge points, further give exercises for fuzzy or weak links, and strengthen the memory of weak knowledge points in combination with the law of brain forgetting.

First, for students, without a teacher, under the support and guidance of the English intelligent teaching system, they can analyze their learning level and weaknesses and put forward teaching suggestions.

Second, for teachers, not only can they adjust teaching strategies and content according to the students' specific learning situation, but also through the English intelligent teaching system, it is convenient for teachers to check the students' learning progress and situation in the teaching and research room or at home.

Thirdly, as far as the academic staff is concerned, they can supervise the teaching situation of teachers and the learning situation of students in the office to evaluate the teaching of teachers and put forward reference opinions.

Online English learning system is as shown in Figure 1.

Because the SSH framework uses Struts2 in MVC mode, it can integrate the business logic layer, the presentation layer, and the data persistence layer. Overall structure English online learning system uses the Internet-assisted online teaching system and proposes different authority operations according to different user identities. The following is a brief introduction to the relevant users:

(1) The system administrator is a system administrator who regularly maintains the system. Its work is to modify, manage the student and teacher users, and modify, query, delete, and add the domain experts. The user information table is mainly used to store and record the user's basic information and knowledge points. At the same time, it is also one of the basic data points for intelligent knowledge display by the artificial intelligence module combined with the stored knowledge. User information is shown in Table 1. The user information form is shown in Table 2.

(2) Experts in the field of artificial intelligence refer to English with deep qualifications like the relevant certainty, degree, and knowledge points of the test papers in the English test question bank teacher composition.

(3) Students can log in to the system via a user password.

(4) Data mining module: the data mining technology is used to find the key information in a lot of objective question answers that the students answer after the exam from the massive data and apply it to English teaching.
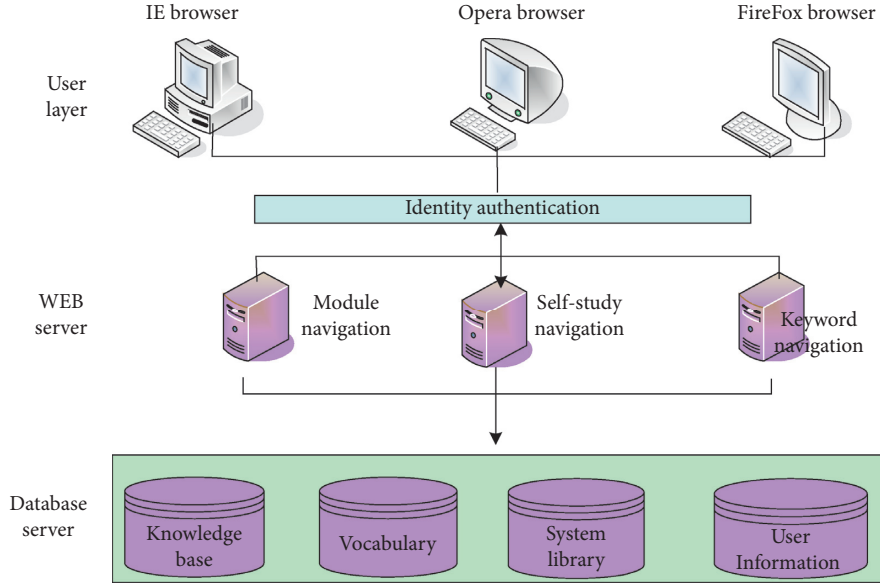
FIGURE 1: The overall framework of the online English learning system.

TABLE 1: User information.

Field name	Data type	Length	Allow to be empty	Description
ID	Int	10	No	Automatic numbering
Course ID	Int	10	No	Course number (primary key)
Course title	Var char	10	No	Course name
Course content	Var char	1500	Yes	Course content

TABLE 2: User information form.

Name	ID	Course ID	Course title	Course content
WW	1840809020239	200134	Data structure	Computer
GYF	1840809020241	200445	Software engineering	Computer
WSH	1840809020245	200416	C Language	Computer

2.4. System Topology. Figure 2 shows the network topology of English intelligent learning and server side, mainly including web server, firewall, database server, switch, and router.

The figure shows the network topology of the online English intelligent learning system.

The implementation steps of the BP algorithm are as follows: corresponding expected output is [12]

$$d(j) = (d_1(j), d_2(j), d_3(j), \ldots, d_n(j)). \tag{1}$$

The input of neuron characteristics to determine its correlation value is [13]

$$f(X) = \sum wo + \theta X. \tag{2}$$

Set the maximum number of learning times M and the calculation accuracy value ε. Error function formula [14] is

$$e = \frac{1}{2} \sum_{m}^{n} \varepsilon (d(m) - y(m))^2. \tag{3}$$

Calculate the hidden layer input $hi(j)$, output $ho(j)$, and output layer input $yi(j)$ [15]:

$$hi(j) = \sum_{i=1}^{n} w_{in} x_i(j) - b, \tag{4}$$
$$ho(j) = f(hi(j)).$$

Using actual output $yo(i)$, calculate the partial derivative of the error function to each neuron in the output layer [16]:

$$yi(j) = \sum_{i=1}^{n} w_{in} h_i(j) - b_i, i = 1, 2, \ldots, q, \tag{5}$$
$$\beta(j) = (d_o(j) - y(j))(1 - (j)).$$

The output of the hidden layer is $ho(j)$ [17, 18]:

$$\partial(j) = \left[\sum_{n=1}^{q} \delta(j) w_i \right] h(j)(1 - h(j)), \tag{6}$$

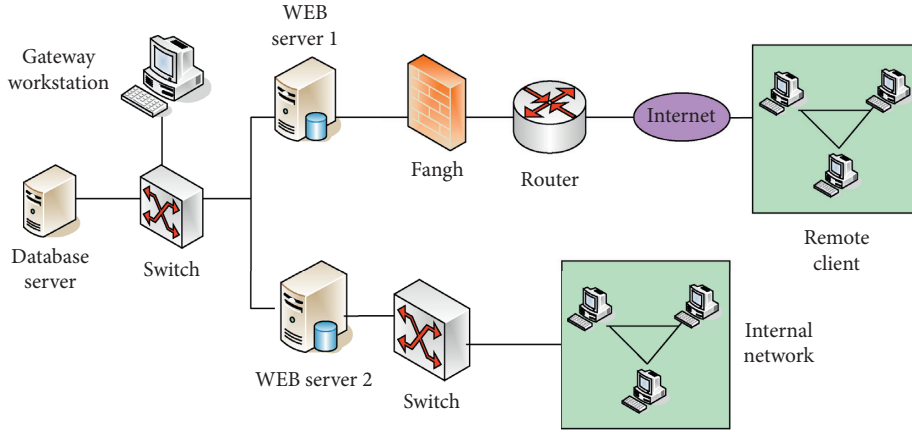where χ is the learning rate. Calculate the global error E [19]:

FIGURE 2: The network topology of English intelligent learning.

$$wo(j) = wo^n(j) + \chi\delta(j)ho(j),$$

$$b(j) = bo^n(j) + \chi\delta(j), \tag{7}$$

$$E = \frac{1}{2}\sum_{K=1}^{M}\sum_{o=1}^{q}(d(k) - y(k))^2.$$

The dominant players in the use of the system are domain experts and ordinary teachers, who, respectively, act as the builders of the English knowledge base and the users and questioners of the knowledge base. The domain expert's responsibility is to add and modify knowledge for the English knowledge base and formulate rules, such as the criterion for a certain knowledge point, the importance of the knowledge point, and the weight ratio in the entire test paper. The teacher's responsibility in the knowledge base module is to provide the data to be analyzed, which is the summary of the machine-readable answer sheet data in this system. The machine-readable answer sheet data is obtained from the student's exam [20]:

$$E = \frac{1}{2}\sum_{K=1}^{M}\sum_{o=1}^{q}(d(k) - y(k))^2. \tag{8}$$

Get the reasoning mode of this system [21]:

$$\mu \longrightarrow \mu_{CF} \longrightarrow \mu_Z. \tag{9}$$

Among them, μ represents the quantized vector of the conclusion y of forward reasoning [22]. Order is

$$\mu = \sum_{i=1}^{n} w\mu_i. \tag{10}$$

The numerical values of the reliability fuzzy quantifiers are shown in Table 3. The range of the fuzzy value is between 0 and 1.

The system saves the sorted data into the database, and after judging whether it is true or false, the answer is matched, and the y vector is quantized to obtain μ:

$$y = nx. \tag{11}$$

TABLE 3: The numerical values of the reliability fuzzy quantifiers.

Fuzzy quantifier	Numerical value
Absolutely credible	1.00
Very credible	0.9
Weak credibility	0.75
Average credibility	0.5

The knowledge representation considering weight is as follows:

$$A = A_1(w_1) \wedge A_2(w_2) \wedge A_3(w_3) \wedge \ldots \wedge A_n(w_n). \tag{12}$$

Among them, A_i is the subpremise. And, meet the normalization conditions:

$$\sum_{i=1}^{n} w_1 = 1. \tag{13}$$

Suppose the credibility of each subcondition 4 is C_A; then,

$$C_A = \sum_{i=1}^{n} w^* C_{Ai}. \tag{14}$$

This system mainly analyzes the answers to objective questions answered by students through data mining of the database. These answers are uploaded to the server by the teacher. Each objective multiple-choice question contains multiple knowledge points, so the first task of the English expert system is to analyze and diagnose the student's answering situation according to the rules of the expert knowledge base and professional knowledge, so as to make the teacher's teaching plan. Adjustment helps. If the normalization conditions are not met, C_A is calculated by the following formula:

$$C_{A1} = \frac{\sum_{i=1}^{n} w^* C_{Ai}}{\sum_{i=1}^{n} w_i}. \tag{15}$$

With gradual deepening data mining research, its research pillars have gradually become clear, namely, databases, artificial intelligence, and mathematical statistics. The hardware foundation of data mining is a database, and the

theoretical basis is mathematical statistics. The most important feature of data mining is the combination with artificial intelligence. The data existing in the objective world is formalized and organized by database technology, which greatly improves the starting point of knowledge acquisition. The research on deductive databases turns to the research on inductive databases. At present, there are many fields to study this problem, involving all levels of society, and it is the current hot spot of the application of computer technology in all walks of life. The credibility of C_B is

$$C_B = CF(B, A) \otimes CF(A). \tag{16}$$

3. Results

Before reading the text, the teacher issued a piece of English language and literature knowledge introduction to each student in the experimental class, including vocabulary, cultural background or cultural differences, and other related introductions. Ask students to do 10 minutes of fast reading. Then do related exercises after class. Finally, compare the data obtained from the results of each month's study. At the end of the semester, the reading comprehension test demonstrates a comprehensive demonstration at the end of the semester. The effect of the experimental class is better than that of the control class. Table 4 shows the comparison of the results of the English language and literature reading comprehension exercises between the experimental class and the control class.

According to the data in Table 4, the average score of the experimental group of 87 is higher than that of the control group of 78, and the pass rate is 93%, which is much higher than that of the control group [23].

Table 5 shows the final reading comprehension test score statistics of the experimental class and the control class. Attaching importance to and implementing cultural teaching in reading teaching can improve students' reading comprehension ability.

At the end of the term, unified examination of the whole city and the results of the examination are shown in Table 6. Average score is 7 points. This fully illustrates this experiment. The effect is more significant.

Through the statistics of the credits of different types of courses in the four different majors of M University in 2009, 2013, and 2017, we can directly analyze the course structure of the four majors in different years, as shown in Table 7. In terms of the overall major of each major, since the academic system of the clinical medicine major is 8 years, its total credits are significantly higher than other majors, and the total credits of the three years are slowly compressed, while the total credits of the other 3 majors are in 3 years all remaining at the same level. Thirdly, in terms of courses in various majors and different categories, the requirements for general education courses of all majors are completely unified. The credits of general courses and subject platform courses of Chinese language and literature majors are significantly lower than other majors; except for business management majors, other majors are all expressed as core

Table 4: The results of the English language and literature reading-comprehension exercises in the experimental class and the control class.

Month	November			December		
Grades	Excellent	Good	Poor	Excellent	Good	Poor
Experimental class	28	26	2	29	25	2
Control class	20	29	7	20	31	5

courses of majors that have the highest proportion of credits, and the open elective courses of business administration major have the highest credits, but the open elective courses include some professional elective courses. In addition, in terms of the changes in the academic weight of each major in different years, it is mainly reflected in the gradual increase in the academic weight of each professional subject platform and a slight decrease in the academic weight of professional core courses or open elective courses. But compared with other types of courses, the academic weight of subject platform courses is still low.

As an important way of students' language input, English language and literature is often ignored by students in this area. The loss rate of students' English language and literature scores in the total scores of English is second only to writing, which is the main factor affecting the overall English scores. Therefore, how to improve students' English language and literature scores, find out the reasons why students lose points in reading, and then explore an English teaching method suitable for students in the area is an important responsibility of teachers. Only 20% of the students are more interested in English language and literature, and 20% of the students are not directly interested. The rest want to improve their grades through reading, but their foundation is weak and dyslexia is large. The above phenomena reflect students have poor English language and literature ability due to the inadequate early education. The reason is that most of the high schools in M area are located at the county and state level, so more than 90% of the students are transferred from the backward countryside and small towns to the county and the city to study, and their English foundation is poor. In rural areas, the number of teachers is limited, and the level of social attention is low, so students pay less attention to English from the beginning of learning English, resulting in a weak foundation after entering the university. Many students are entangled in basic word grammar in English language and literature classes. Just because they do not understand the basic knowledge, they gradually lose confidence and become less and less interested in English language and literature modules that require strong comprehensive language skills. Therefore, students' attitudes towards English language and literature are changing. The student's attitude towards English learning is shown in Figure 3.

After the test, the reading test scores of the two classes are shown in Figure 4, which is related to the increase in the difficulty of English reading. The average English reading score has increased by 5.8055 points. Although the difficulty

TABLE 5: The final reading comprehension test score statistics of the experimental class and the control class.

Class	Number of people	Total score	Grade point average	Pass rate (%)	80 points or more (%)	Less than 39 points (%)
Experimental class	56	4872	87	93	79	0
Control class	56	4360	78	75	55	2

TABLE 6: Exam results.

Class	Number of people	Grade point average	Pass rate (%)	80 points or more (%)	Less than 39 points (%)
Experimental class	56	87	90	75	1
Control class	56	80	78	62	2

TABLE 7: Course structure of the four majors in different years.

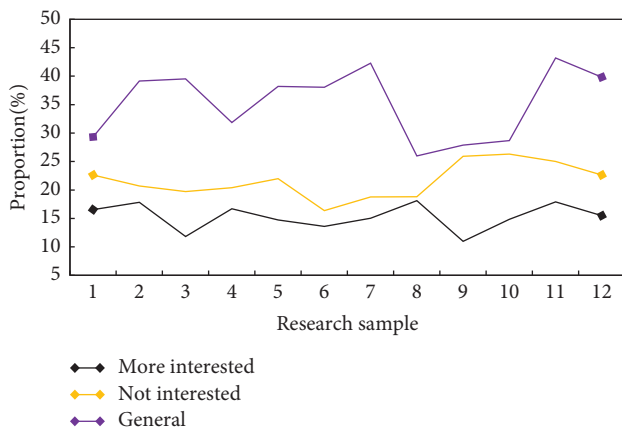| Professional	Year	School-wide basic courses		Open elective courses
		General course	General course	
English language and literature	2009			
	2013	≥14	33	46
	2017	≥14	33	34
Computer science	2009	≥14	33	36
	2013	≥14	45	33
	2017	≥14	50	39

FIGURE 3: Students' attitudes towards English learning.

of the test papers has increased, the reading scores of the students in the experimental class have not only maintained their original scores, but also been greatly improved.

The test results are shown in Figure 5. When performing a paired sample test, both the homogeneity (equal) and inhomogeneity (not equal) of the variances of each variable can be used. The independence and normality have been explained above. The paired sample statistics table of the two classes before and after the test is shown. The average scores were 35.5 and 34.6481, respectively.

The P value analysis before and after the experiment is shown in Figure 6. It can be seen that the $p = 0.710 > 0.05$ of the control class before and after the experiment. Pretest and posttest $p = 0.039 < 0.05$ in the experimental class. In other words, through the teaching practice of English language and literature teaching method, the English reading performance of experimental class students has been significantly improved.

Two classes of students' questionnaire conform to the normal distribution, and the frequency analysis method in SPSS was used to test the data. As shown in Figure 7, the attitude frequency histogram of the two pretest questionnaires shows that the curve drawn by the histogram is a normal distribution curve. The curve is shaped like a bell, with a peak in the middle, gradually descending from the peak to the sides, first bending inward and then outward.

After testing, the conditions of the attitude data, pretest questionnaires of the two classes, and the test results are shown in Figure 8. There are a total of ten questions in the questionnaire, so there are a total of 540 answers, and each answer is given a score according to the value of the question option in the questionnaire. Average score and standard deviation of the attitudes of the two classes are not much different, and attitudes are at the same level.

In the posttest attitude statistics, average attitude of the experimental class is 3.1481. The interest in learning has increased, and the autonomy has increased. The posttest attitude statistics are shown in Figure 9.

After the experiment, 58.3% of the students completely agreed that they took the initiative to find English materials after class and basically agreed that the percentage of those who practice English after class was 13%. The percentage of people who disagree or basically disagree is 19.4%. Although most people still do not take the initiative to find English materials to read after the experiment, some students have begun to pay attention to finding English materials after class. For reading English articles or books, 51% of students said they read English articles in their spare time after class, and more than half of the students indicated that students had the consciousness of reading independently outside of class. When encountering problems in English reading, I often find ways to solve them by myself. After a year of experimentation, they basically agree to solve them by
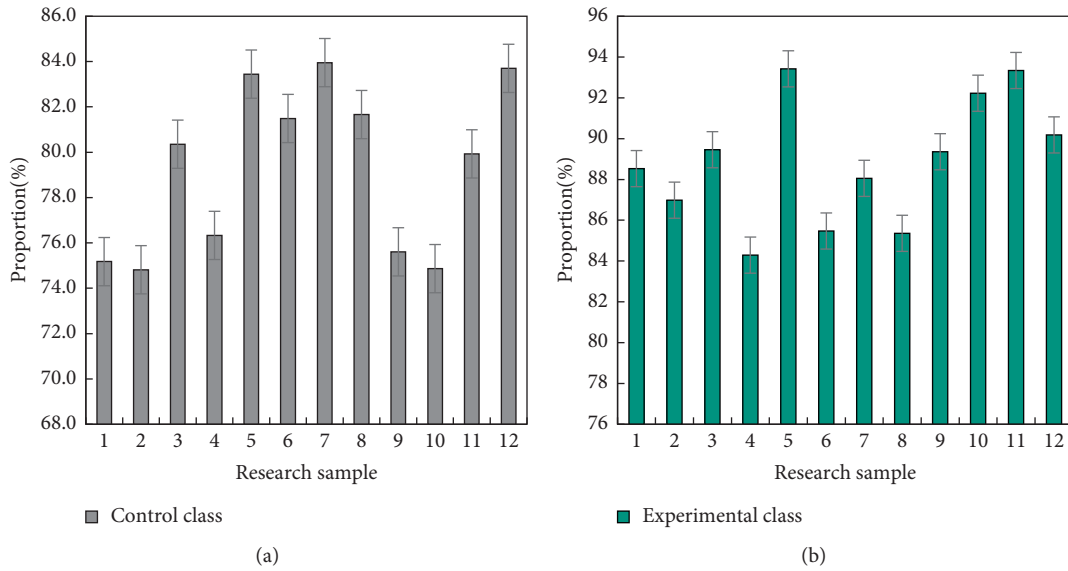
FIGURE 4: The reading test scores of the two classes after the learning test.
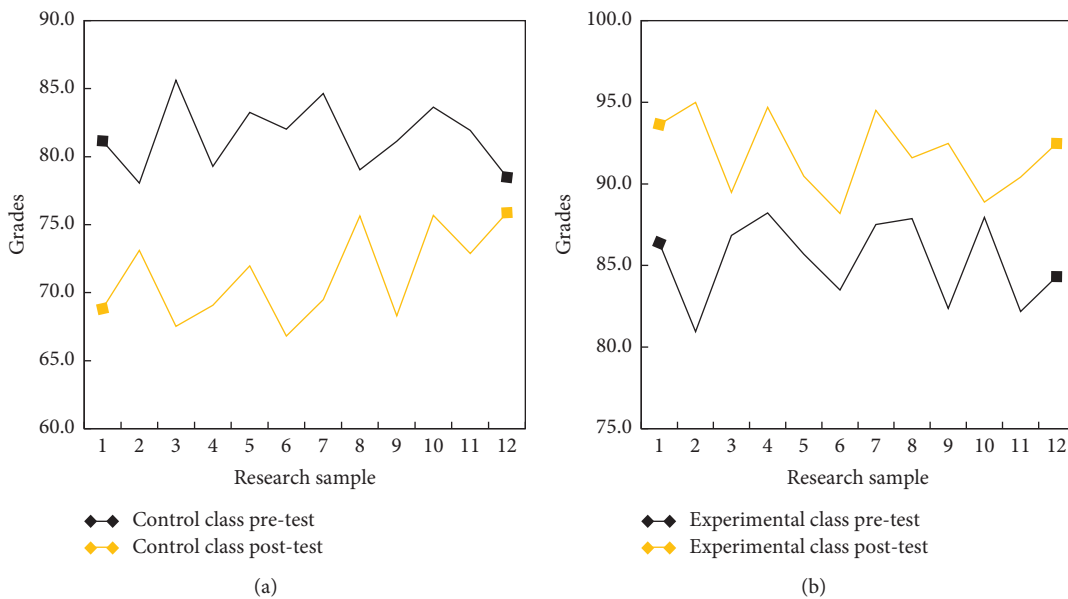

FIGURE 5: Paired-sample *t*-test results of two classes: pretest and posttest.

themselves, and the number of disagree or basically disagree students is 24.1%. Most students have the consciousness to solve problems on their own. For students who spend a certain amount of time on English extracurricular reading every day, 59.2% of the students who agree or basically agree to insist on reading every day. It shows that English language and literature has a certain effect in cultivating students' autonomous reading habits. After the experiment, the students' attitudes towards English language and literature are shown in Figure 10.

4. Discussion

The world has entered an unprecedented information age. Network technology provides new technical means for the development of education. Artificial intelligence technology in modern education combines information technology and education mode to achieve the purpose of lifelong and continuous learning.

This article advocates that English majors should first be based on the humanities attributes of the major, analyze its
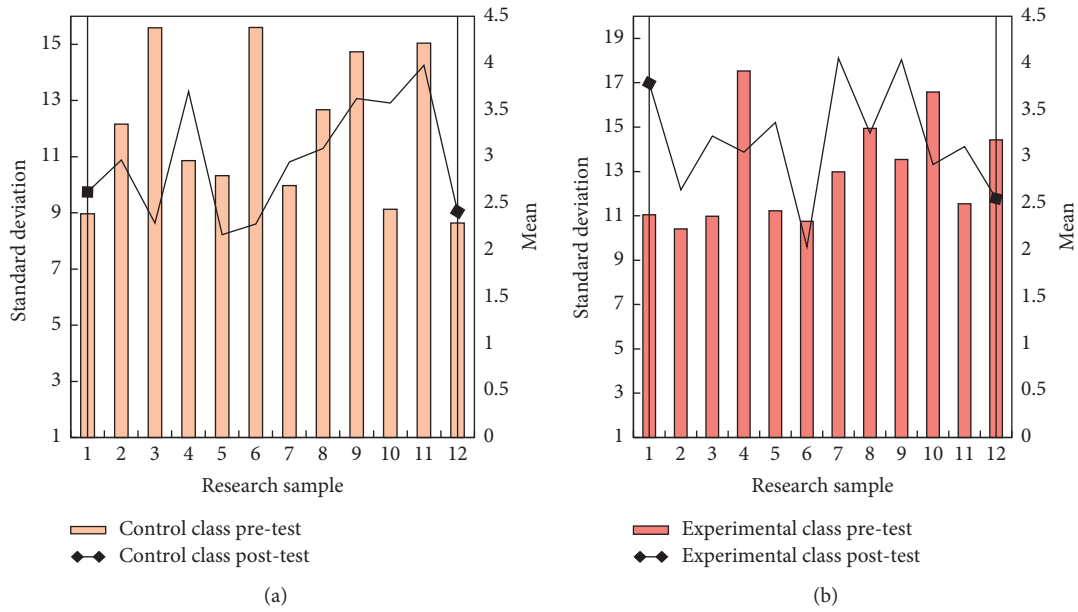
(a)

(b)

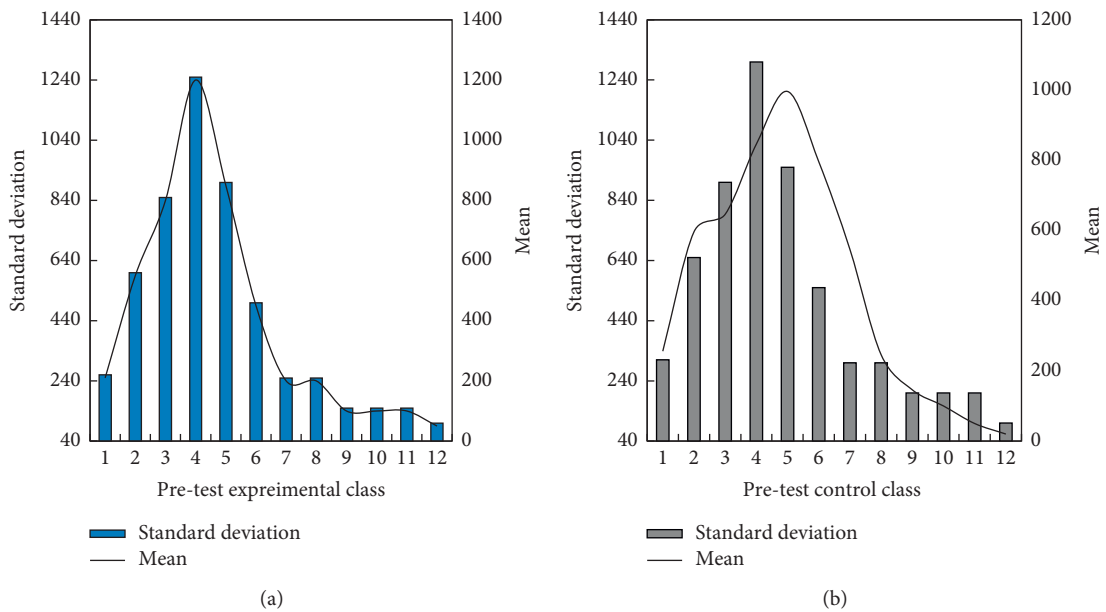Figure 6: P value analysis before and after the experiment.

(a)

(b)

Figure 7: Histogram of attitude frequency of the two pretest questionnaires.

significance and feasibility for the reform of the English majors, and ensure that English is not reduced or even improved. On the basis of professional skills, further highlight the subject connotation of the humanities, and achieve the unity of the instrumental and humanistic features of the English major. And under the premise of not increasing the burden of students' hours of study, the students' English skills, English professional knowledge and thinking can be mutually promoted at the same time, and the purpose of improving together, and finally reaching the goal of cultivating "people" in university education, so as to

fundamentally solve the problem of compound talents. Cultivation brings a series of problems such as a sense of difficulty in subject positioning.

What data mining needs to solve is how to extract the required information from a large amount of irregular, noisy data, and integrate it and then give a credible explanation to explain how the data is extracted from the massive information, and explain its rationality. Since data mining can intersect and interact with other disciplines, it can transform pure data in the database into knowledge and information of certain industries, saving a lot of manpower and material
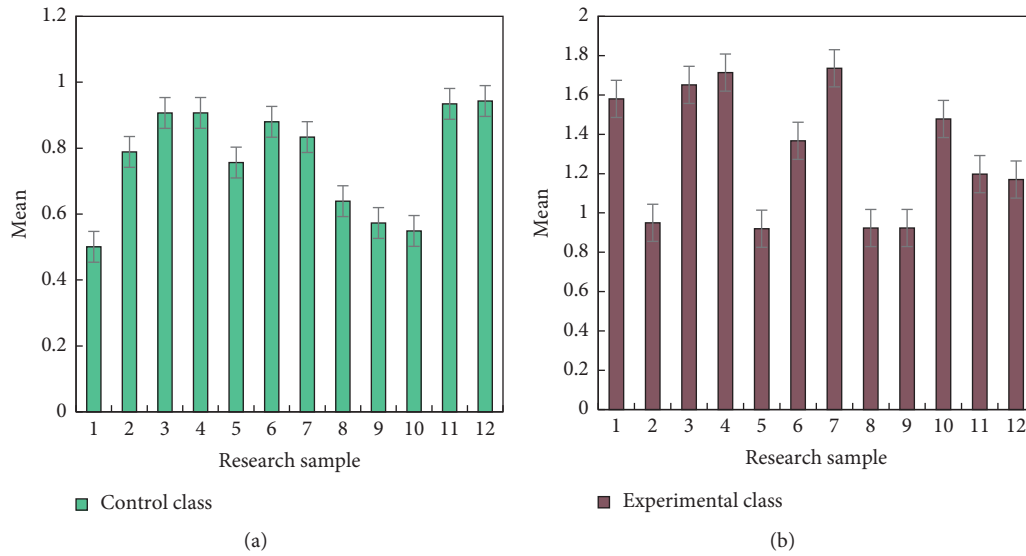
(a)

(b)

FIGURE 8: The data independent sample *t*-test of the attitude of the pretest questionnaire in the two classes.
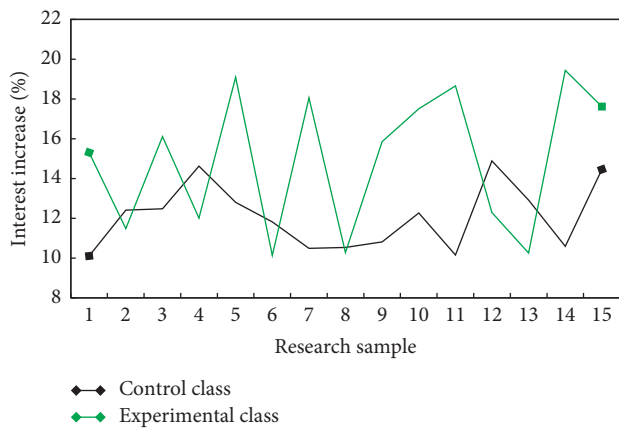

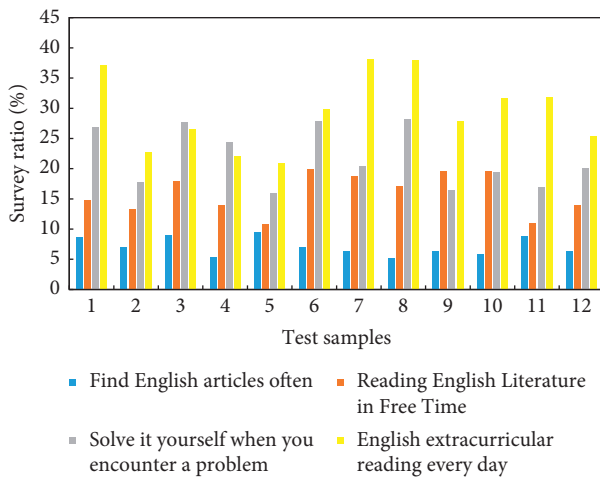FIGURE 9: Posttest attitude statistics.

FIGURE 10: Students' attitudes towards English language and literature after the experiment.

costs, so the current new technology of data mining has caused a lot of attention in all walks of life. Great concern: the knowledge and information obtained by data mining can be widely used in various systems, such as sales analysis and production control.

With the development of the times, various industries require higher English proficiency for college graduates. They must master for daily communication and other activities. The most significant change is the shift from mere grammatical assessment to the test of actual communicative competence. For this reason, grammar and vocabulary are no longer the focus of students' attention. However, the foundation for students to use English to communicate is a solid knowledge of grammar and vocabulary. Many students' lack of knowledge of grammar and vocabulary affects the acquisition of other aspects of knowledge, which also limits the further improvement of English proficiency. As the pace of university expansion is getting faster and faster, the improvement of teaching quality has become a difficult problem for colleges and universities, and English courses are a public compulsory course for college students. The current situation of few teachers and many students has brought adverse effects on teaching, and at the same time, the English teaching reform plan also pays less attention to the basic knowledge of English.

5. Conclusion

The implementation of the teaching method of English language and literature has significantly improved students' awareness of autonomous learning. They actively participate in various activities in the literary circle. Read English articles by yourself after class. In reading, students consciously collect various materials and master various reading skills. Students are no longer passively reading English; they have become active participants and leaders in learning. The

implementation of English language and literature teaching began to make students gradually form good reading habits, and students are willing to spend a certain amount of time every day to read English articles. In the future curriculum, in-depth linguistics courses can be added, such as applied linguistics, western rhetoric, sociolinguistics, and other courses. Secondly, rich and specific literature and cultural courses have been added, so that students can acquire systematic professional knowledge, and through the comparative study of Chinese and Western cultures, they can acquire the humanistic qualities and the ability of thinking that blend Chinese and Western cultures.

Data Availability

No data were used to support this study.

Conflicts of Interest

The authors declare no conflicts of interest.

Acknowledgments

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