

Reform Strategy of College English Teaching Based on Big Data

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Abstract: With the development of network information technology and related software technology, college English is also facing powerful teaching reforms. The English teaching model of traditional higher education can neither increase students' interest in learning nor improve teaching quality, which has a significant impact on English teaching. With the development of big data technology, a large number of multimedia devices have been introduced into college English teaching. Under the influence of network media, the teaching environment has undergone great changes, which have had a huge impact on English teaching. In order to meet the needs of the development of the times and cultivate a new generation of practical English talents, our country's higher English teaching must undergo a comprehensive reform. However, in the current network environment, there are still some problems in the reform of college English teaching in our country. Therefore, this article discusses these issues, and on this basis puts forward the benefits of network higher education English teaching reform and practice. Through the effective use of cellular networks and various information tools, the reform of higher education English teaching has created an effective teaching model, which has greatly improved students' learning enthusiasm, improved the quality of higher education English teaching, and met the teaching needs. Therefore, this article briefly introduces the importance of reforming higher English teaching from the perspective of cellular network for the first time, and then actively explores the strategy of reforming higher English teaching from the perspective of cellular network for reference.

1. Introduction

Through the reform and innovation of college English education and teaching methods, the effective use of mobile networks for students' education can effectively strengthen the connection between students and teachers, enrich classroom education resources, effectively convey English

knowledge and information, and effectively convey new styles College English promotes the effective implementation of education strategies for education [1]. In the context of high-quality education, universities have put forward higher requirements for the quality of English education. But in the age of network media, universities are facing new challenges in English education. Therefore, in order to reflect the college English education model, universities must use the advantages of network media. Reform to adapt to the current college English education environment, to achieve the improvement of teaching quality [2-3]. However, in practical applications, there are many problems in college English education, so it is very important to analyze college English education in online media. English education is a necessary educational content of the university education system. In order to adapt to the new situation of informatization, networking and digitalization of university education, higher education English courses must be based on university education. In the era of big data in education, the reform of higher education English teaching is constantly strengthening [4]. Micro courses, mooc, and big data replication classrooms have been widely used in English courses in many schools at home and abroad. Smart English courses have turned classrooms into smart universities and smart classrooms. The reform of English teaching based on big data is imperative.

China's education reform has been going on for more than 10 years. Now our country's education reform has entered an important period. As an important part of the higher education family, university education also needs to deepen reforms to adapt to the evolution of the times [5]. In university education, English is a basic compulsory course for all university non-professional students and has played an important role in university education reform. Therefore, we should attach importance to the healthy development of college English. But the current situation of college English is worrying. On the one hand, students are not interested in learning, lack of initiative in learning, low learning efficiency, improper learning methods, etc.; on the other hand, teachers' teaching methods are only outdated, teaching materials are not new, and the classroom atmosphere is lifeless, the teaching effect is not ideal, the teacher is tired of teaching, the students are struggling to learn, the leader and the employer are not satisfied, etc. [6]. In most colleges and universities, school leaders don't pay enough attention to English classes, thinking that English is dispensable, and the hours of English classes have been repeatedly cut. In order to create English in the current predicament, we must deepen the reform of college English education [7]. But practice without a theoretical approach is blind. The reform of English education in universities should be guided by mature theories to achieve greater development. In recent years, many educators in our country have used Western constructivist theories and humanitarian theories to drive education and educational reforms in our country [8]. Due to their maturity and improvement, constructivist theory and humanistic theory will play a guiding role in the reform of college English education.

Since the reform and opening up, English teaching has always been attached great importance to colleges and universities in our country, but college English teaching, whether it is the fourth or sixth English test or the English teaching evaluation methods of various schools, pays too much attention to written results and ignores students' actual use of English ability. Cultivation, this "examination-oriented education" model has brought great drawbacks to English teaching. It seems that English teaching is to deal with exams, get high scores, and obtain certain qualifications [9]. Students who score high on the test are considered foreign language talents, and teach them more test skills. Teachers with high test question prediction accuracy are considered good teachers. As for what effect such English teaching can produce in practical applications, there is less. Some people consider [10].

2. Method

2.1. English Classroom Teaching Information Processing

There are m English teaching information, n original data are supplied for each indicator, and these data are processed to obtain a standard matrix:

$$T = (r_{ij})_{m \times n} \quad (1)$$

In index m , index i is defined as:

$$E_i = -\frac{1}{\ln n} \sum_{j=1}^n l_{ij} \ln(l_{ij}) \quad , i = 1, 2, \dots, m. \quad (2)$$

Among them:

$$l_{ij} = \frac{r_{ij}}{\sum_{i=1}^n r_{ij}} \quad (3)$$

$$W_i = \frac{1-E_i}{m-\sum_{i=1}^m E_i} \quad , 0 \leq W_i \leq 1 \quad (4)$$

For the corresponding information processing indicators, the non-dimensional processing is performed by formula (1) to obtain the non-dimensional value x_i , Multiply the appropriate index and quantified value by the weighted number to get the weighted average:

$$\Delta = \sum_{i=1}^m W_i x_i \quad (5)$$

$$R(t) = P\{x(t) < [x]\} \quad u(t) \geq [u] \quad (6)$$

$$P_{FR}(t) = \frac{u(t)}{[t]} \quad P_{RSD}(t) = 1 - \frac{u(t)}{[u]} \quad (7)$$

$$t_r - t_1 = \frac{\frac{1}{2}(t_2 - t_1)^2}{(t_2 - t_1) - \frac{1}{2}(t_3 - t_1)} \quad (8)$$

2.2. Construction of online Student English Classroom Teaching

In our current education, we have to look at methods and approaches. In this era, colleges and universities need to establish and innovate English teaching methods to create a new situation in English teaching. Now is the era of rapid Internet development and big data, and China is also leading the Internet development train. The continuous development of various network platforms has become a very important part of social life. In the Internet age, we must firmly grasp the right to speak on the Internet, and students' English classroom courses have gradually changed from traditional education methods to online education. The network platform is moving forward. The impact of online platforms on students is particularly obvious, and the use of online platforms is more complicated than others. Therefore, our university's English classroom courses should follow the changing trends of the times. Through the combination of traditional educational methods and new technologies in the new era, we must continue to innovate educational methods, develop English education courses on the Internet, promote the diversification of educational methods, and improve the level of education. Bring new innovations to students' English education, provide a better educational environment for students' English education, and allow students to develop a healthy study and life.

2.3. Development of English Digital Teaching Resources

In universities, the development of digital English education resources should focus on the characteristics of students and choose appropriate content, including English culture, language, thinking, etc., and the format should include text, audio, video and other forms. Multiple teaching methods will help improve students' concern for learning and improve their English ability. First of all, before carrying out the reform of English education, teachers must first understand the various methods and technologies of English education in the era of big data, and use these technologies to create a suitable learning environment for students' interest in English learning, and actively increase them. Secondly, teachers use big data technology, cloud computing technology, and network technology to create a learning environment and life English that meets the actual situation of students, and have the ability to listen to and speak English. By learning literacy, you can improve students' working ability and comprehensive ability. Third, establish a digital English resource database according to the current situation of the school and the level of demand for digital English education. The digital resource library is rich in content and has a variety of applications. Update in real time, delete old knowledge, and add the latest resources. At the same time, the resource library must be connected to the campus network and school digital education equipment. Teachers and students can use the resources at any time, and at the same time upload materials through specific programs to enrich the English digital education resource library.

3. Experiment

3.1. Subject

As a language course, English is likely to become an important course in the education stage that requires long-term systematic learning and training. Students have a very rich foundation in English, teachers are always tired of traditional education models, and students are not optimistic about learning. The development of big data technology has opened a new chapter in English education, enriched the content of the classroom, raised the concern of the classroom, and broadened the students' horizons, but to a certain extent it had a negative impact on English. Therefore, the report uses network technology as the background to study the reform of English education strategy, grasp the opportunities that network technology brings to English education, and strive to effectively solve the problem in order to achieve better educational results.

3.2. Experimental Method

This research will explore the English teaching reform under the guidance of big data technology theory, and the method of combining theory with teaching practice under the guidance of advanced theory, mainly using the following research methods.

(1) Questionnaire survey method

By designing survey questions about Internet technology in English teaching reform, after surveying teachers and students, relevant data can be obtained through analysis. Analyze the situation of the Internet technology in the English teaching reform of students, and issue questionnaires to teachers and students and conduct interviews in person to fully understand the current situation of the reform of English teaching in the university area.

(2) Interview method

A large amount of direct information that is relatively true and reliable can be collected through

interviews. I conducted personal interviews with more than 12 teachers and more than 20 English teachers from other universities in the field of English education and research. I learned about the current situation of English in university and learned about the main problems of college English education.

(3) Document law

You can see a lot of research literature on the Internet, read carefully, use literature methods, fully and accurately understand and master the connotation of big data technology, and the theory and practice are more connected. It can be better studied.

4. Results

The second classroom teaching of English is a new type of teaching method developed under the background of Internet technology to reform and develop English teaching, and now every school's English teaching will use the second classroom to teach English subjects. With the introduction of classroom teaching, students can not only receive the teacher's face-to-face courses and teaching at school, but also use the second classroom for professional learning of English subjects after returning home, and they can learn English anytime, anywhere in the Internet. The second class of English and the first class of English are complementary and mutually reinforcing. Active English second class can create a strong learning atmosphere for students and stimulate students' interest and enthusiasm in learning English. Because students can apply and consolidate the knowledge they have learned in the English classroom in the second classroom, it is necessary to have an in-depth understanding of the English second classroom.

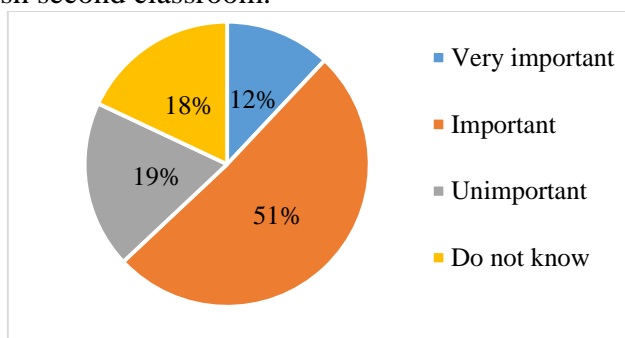


Figure 1. Attitudes toward the second classroom of English (do you think the second classroom of English is important?)

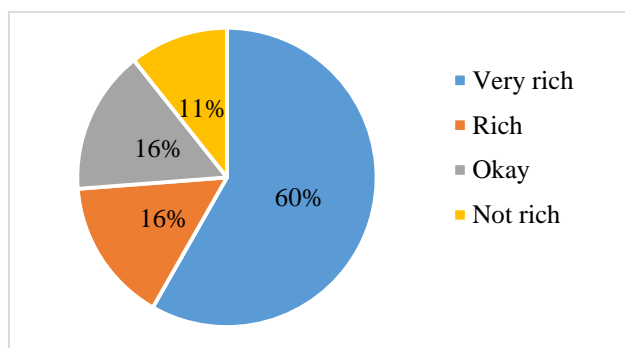


Figure 2. Survey on the status quo of English second classroom (survey on the status quo of English second classroom)

From the statistical data results in Figure 1 and Figure 2, we can see that 63% of students think the second classroom is important. 60% think English second class is rich. Through the analysis of survey data, there are still some students who are still in an unknown state of the teaching mode of the second classroom, and have not realized the connotation of the second classroom, and some students think that the content of the second classroom is relatively. There is not enough content and materials to bring a deeper understanding of English learning. This also provides a new direction for the development and reform of the second classroom in the future. Not only that, the results of this survey and other reforms brought by the direction makes big data technology bring excellent technical support in English reform.

Table 1. Are teachers and students satisfied with English teaching reform

Degree	Satisfaction	Good	General	Not satisfied
Student	45	32	18	5
Teacher	62	18	16	4

The questionnaire survey data in Table 1 shows that basically there is not much difference between teachers and students' satisfaction with English teacher reform. Teachers and students are basically satisfied and proficient in the reform of English education. Only a few students who participated in the questionnaire were not satisfied with the results of the English education reform. It can be seen from the experimental data that, with network technology as the background, university teachers and students are relatively satisfied with the reform and innovation of English education. Reforming traditional English education can solve and optimize some problems in daily education. If educational resources are allocated, teachers and students can get better educational services. It brings great convenience to English education every day.

5. Conclusion

The Internet age has provided help and support for college English teaching. English scholars actively explore web-based English learning models to promote students' comprehensive skills and overall healthy development. Higher education and universities aim to increase professionals who contribute to society. Under the current internationalized social environment, the improvement of students' ability is the main content. English teaching reform has achieved certain results in the Internet age, but it also brings some drawbacks. Aiming at the shortcomings of English teaching reform, this article proposes that the Internet can be used to create a good classroom atmosphere, change teaching concepts, and use the Internet normally to achieve the practical purpose of teaching reform. In general, in today's universities, English teaching reform still has a lot of room for development. It is hoped that the improvement of the above optimization measures can provide basic information for English teaching reform.

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Data Availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Conflict of Interest

The author states that this article has no conflict of interest.

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