

Research Article

Application of Hybrid Teaching Mode in College Students' English Reading Using Intelligent Wireless Communication Multimedia

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The development of multimedia technology and the rise of mixed teaching modes have introduced new forms of teaching organization to the field of education, the traditional teaching methods have been improved, and the advantages of the traditional teaching methods have been brought into play. At the same time, the development of online courses has also provided a new basis for teaching and improved the current teaching environment. The current rapid development of intelligent technology and wireless communication networks provides opportunities for the innovation of multimedia technology and also provides technical support for offline and online teaching in a hybrid teaching mode. What this article needs to discuss is the application of hybrid teaching mode in the English reading teaching of college students under the background of intelligent wireless communication network multimedia technology and explore whether the combination of hybrid teaching mode and intelligent technology can improve the teaching level of college students' English reading, etc. This paper shows through experimental research that under the teaching organization form of the mixed teaching mode under the background of intelligent wireless communication multimedia, college students' interest in the course of English reading has increased significantly, and their English reading scores will increase by at least 93%, which can improve students' autonomous learning ability for college English reading courses.

1. Introduction

The development of intelligent technology and wireless communication network has made multimedia technology unprecedented development, and it has been widely used in various fields. Especially the application in the field of education has promoted the informatization of education and has also promoted the birth of online courses, providing an opportunity for the innovation of traditional classroom teaching models. The combination of online teaching and traditional teaching has given birth to a hybrid teaching model. The hybrid teaching model combines online teaching and traditional teaching together, which greatly promotes the quality and level of teaching. Moreover, the rise of the mixed teaching model is highly respected by people from all walks of life in the education field. It is hoped that this teaching mode will change the teaching mode of the

teacher-led college English reading course, improve the students' main position in the English reading class, and stimulate the students' initiative in the college English reading course.

The hybrid teaching mode combined with the application of intelligent technology and multimedia technology in the teaching field can improve teachers' teaching methods, update teachers' teaching concepts, enable college students to gradually realize the goals of resource sharing, timely communication, and personalized learning in English teaching, make students' English learning develop towards individualization and independent learning, and improve students' enthusiasm for English learning. Combining wireless communication network and multimedia technology, improve the teaching organization method of the mixed teaching mode and have a positive impact on improving the reading ability of students through the mixed teaching

mode. And on this basis, stimulate students' interest in learning English reading, improve students' self-learning ability in English reading and change students' learning concept of English reading; the blended teaching model breaks through the limitations of learning time and learning space; among them, the online course platform in the hybrid teaching mode realizes the whole process of evaluating students' English reading learning, so that teachers can intelligently manage the students' English reading learning, promote the reform of English reading teaching, and realize a student-centered teaching model.

In order to promote the organizational innovation of college English teaching, change teachers' teaching concepts, enhance students' dominant position in the classroom, and stimulate students' autonomous learning and innovation capabilities, and many scholars are interested in improving the teaching methods of English reading and how to improve students. A lot of research has been carried out on the enthusiasm and initiative of English reading and learning. Among them, Zhang studied the application of the flipped classroom in college English learning based on the mastery of learning theory and cooperative learning theory, using computer network language teaching auxiliary technology, and experiments show that the computer network flipped classroom teaching is beneficial to improve the teaching and learning of college English [1]. Sun proposed that the blended teaching mode has the advantages of combining traditional teaching methods with online teaching, explored cloud-based college English teaching based on the blended teaching mode, and found that this teaching mode enables students to participate more in classroom activities and gradually realizes autonomous learning [2]. Ma proposed that there is a certain relationship between English reading and schema theory. Teachers should make full use of schema theory to improve teaching strategies and focus on cultivating students' schemata, thereby improving students' English reading ability and information processing ability [3]. Ge and Zhang analyzed the application of EAP mode in college English teaching in China and believed that EAP can simulate the actual situation of English academic communication and stimulate students' initiative and creativity in professional English learning [4]. Yeon explored the direct and indirect contributions of college students' English acceptance and productive vocabulary knowledge to second language reading and explored the impact of vocabulary knowledge on English reading, revealing the relationship between second language receptive vocabulary and productive vocabulary knowledge and second language reading ability [5]. Jung explored the feasibility of extensive courses at the university level and explored an effective teaching model to motivate students. The research results show that cooperative English reading courses can help improve students' English reading ability and stimulate students' English reading motivation [6]. However, none of these studies mentioned that teachers should change the dominant position of teachers in the English teaching classroom and give full play to the main role of students in the teaching of English reading; in addition, it did not discuss how to update teachers' teaching concepts and students'

learning ideas and failed to fundamentally change the defects in traditional teaching. There is no detailed elaboration on how to improve students' autonomous learning ability in English reading, ignoring the shortcomings of traditional teaching.

The research of this article has the following innovations: (1) this article combines wireless communication network on the basis of analyzing the influence of multimedia technology on college students' English reading teaching. Making the online course platform intelligent, which can intelligently record students' learning, intelligently assess students' English reading ability and intelligently test the improvement of students' English reading ability online, (2) this article combines multimedia technology and intelligent technology and applies it to examples of college students' English reading resources and mixed teaching mode and further analysis and improvement in actual teaching practice, in order to improve the positive influence of the mixed teaching mode in college students' English reading teaching; (3) realizing the sharing of English reading resources through intelligent wireless communication network and multimedia, so that students can take classes in multimedia classrooms, adopt a hybrid teaching mode, and use multimedia equipment to learn and teach independently in the classroom, and (4) students can use multimedia equipment to search for materials and discuss on the Internet in real time in the classroom, give full play to their main role, let teachers play the role of guidance, and allow traditional teaching methods to maximize their strengths and avoid weaknesses.

2. The Teaching Method of College Students' English Reading Supported by Modern Technology

2.1. Intelligent Wireless Communication and Multimedia Technology

2.1.1. Smart Wireless Communication. Wireless communication network refers to a network that can realize the interconnection of various communication devices without wiring. It breaks the limitations of time, space, and objects, enables humans to communicate with people anytime and anywhere, and greatly improves the quality and level of human life, work, and learning [7]. In the field of education, the openness of intelligent wireless communication networks, and the rich resources stored in science and technology such as big data, enable students to obtain them through wireless networks, allowing students to share learning resources. The wireless network is shown in Figure 1.

The intelligent wireless communication network is to optimize the network infrastructure on the basis of the wireless communication network and effectively add storage and voice technology to the wireless network terminal. Based on the wireless communication network, our teaching equipment needs to be intelligent. That is, the multimedia technology we use for teaching needs to be intelligent. The realization of the intelligent wireless communication network requires corresponding programs to be set between

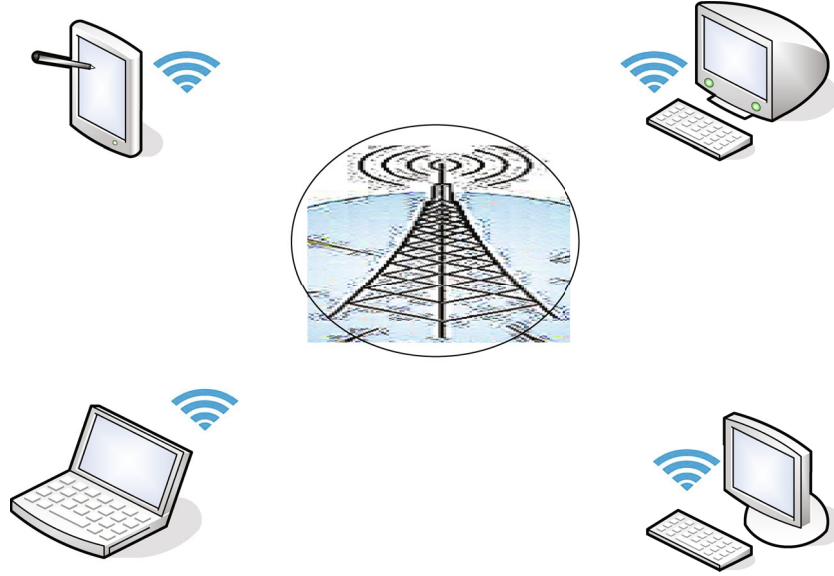


FIGURE 1: Wireless network.

the devices to realize remote control. For example, we need to use network equipment before the college English reading class. If the equipment fails, the technician can repair it remotely. The control principle is as follows:

A remote control system is set up between two devices. One is the server, and the other is the control. The principle of this system is as follows:

$$A \xrightarrow{\exp \left\{ \prod_s^t \pi^2 \right\} * \varphi} B. \quad (1)$$

Among them, t is the network speed of the wireless communication network, s is the recording time of the remote control repair, A is the server, B is the client, and φ is a correlation coefficient matrix:

$$\varphi = \left\{ \begin{array}{ccc} (A_1, B_1) & \cdots & (A_1, B_N) \\ (A_2, B_1) & \cdots & (A_2, B_N) \end{array} \right\}. \quad (2)$$

Through remote control and wireless communication network, the equipment can be repaired through remote control, saving a lot of time, avoiding problems with multimedia equipment, and ensuring the progress and efficiency of the classroom [8]. With the development of wireless communication technology and the popularization of mobile phones and computers, the mobile computers we use daily have basically realized wireless communication, and the emergence of video conversation and live broadcast functions that can realize long-distance communication also represents the continuous deepening of the intelligent trend of wireless network communication technology [9]. The intelligent wireless network is shown in Figure 2.

The smart device and wireless network shown in Figure 2 constitute a smart wireless network. The so-called smart wireless communication network means that smart devices can connect and communicate through the wireless

network. Just like the 5G network, we are currently developing, it is becoming smarter and smarter.

2.1.2. Intelligent Multimedia Technology. Multimedia technology has been in the field of teaching for many years. Early multimedia devices need to be wired through the network to be able to use. However, with the development of wireless networks, such as the development of 5G networks, multimedia devices can be used through wireless networking, and there is no need to worry about short-term network physical lines, which also brings convenience to teaching. Multimedia is composed of media. These information media include the following: text, sound, graphics, images, animation, and video. Intelligent multimedia is centered on the central control host, and the wireless touch screen is the control terminal, using big data, sensors, and other technologies to intelligitize the media, such as the application of our intelligent video in multimedia technology. Multimedia technology has the characteristics of multidimensionality, integration, interactivity, and digitization.

The characteristic of multimedia multidimensionality means that multimedia technology can extend data information spatially and transform, classify, and integrate the information in multimedia memory [10]. The principle of its internal drive information conversion is as follows:

$$A = \frac{x f_i^2}{\sum_t^x G_i^2 - G * f_i}, \quad (3)$$

$$A = \frac{2 f^2}{\sum_x G_i^2} * f_i * \omega = B. \quad (4)$$

Among them, x is the amount of information that needs to be transformed, t is the length of time required for intelligent calculation of the transformation, f is the weight of the internal information transformation of the multimedia

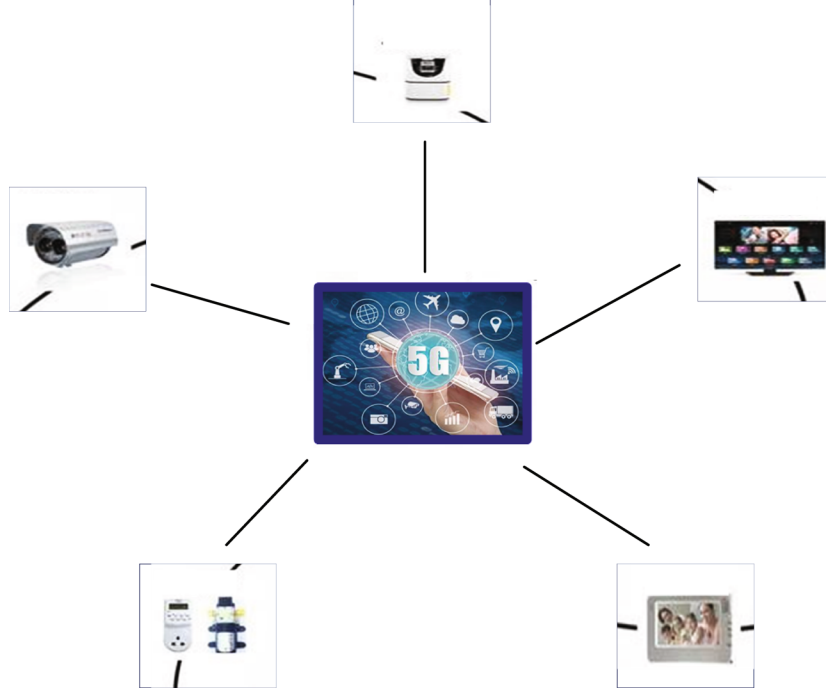


FIGURE 2: Smart wireless network.

technology, G is the number of information streams in the multimedia memory, i is the smart label in each information stream, and ϖ is a parallel matrix that can only be generated to ensure the balance of the amount of information during data information conversion:

$$\varpi = \begin{bmatrix} t & A & i \\ G & f & x \\ g & B & s \end{bmatrix}. \quad (5)$$

This matrix is a homogeneous coordinate. The homogeneous coordinate is convenient for the conversion operation of image information. When the image is converted into ratio, rotation, symmetry, and crosscutting, the multimedia technology will intelligently select the matrix part:

$$T_1 = \begin{bmatrix} t & A \\ G & f \end{bmatrix}. \quad (6)$$

If the image information is translated, the multimedia technology will intelligently select the following parts:

$$T_2 = [gB]. \quad (7)$$

If it is to project the data information, the multimedia technology will intelligently convert according to the command instructions, and the selected matrix form is as follows:

$$T_3 = \begin{bmatrix} i \\ x \end{bmatrix}. \quad (8)$$

If it wants to make a total ratio transformation of data information, multimedia technology will intelligently select the following matrix parts:

$$T_4 = [s]. \quad (9)$$

The characteristic of multimedia integration refers to the ability to obtain, store, organize, and synthesize information in a multichannel unified manner [11]. Multichannel acquisition means that the information needs to be obtained uniformly through multiple roads through the wireless network. If there are multiple channels, the principle of multichannel unification of information is

$$W_1 = \sum_{s_1}^{t_1} \frac{x_1}{D_1} * \sigma, \quad (10)$$

$$W_2 = \sum_{s_2}^{t_2} \frac{x_2}{D_2} * f * \sigma, \quad (11)$$

$$W_n = \sum_{s_n}^{t_n} \frac{x_n}{D_n} * f^{(n-1)} * \sigma. \quad (12)$$

The principles of information organization and synthesis are as follows:

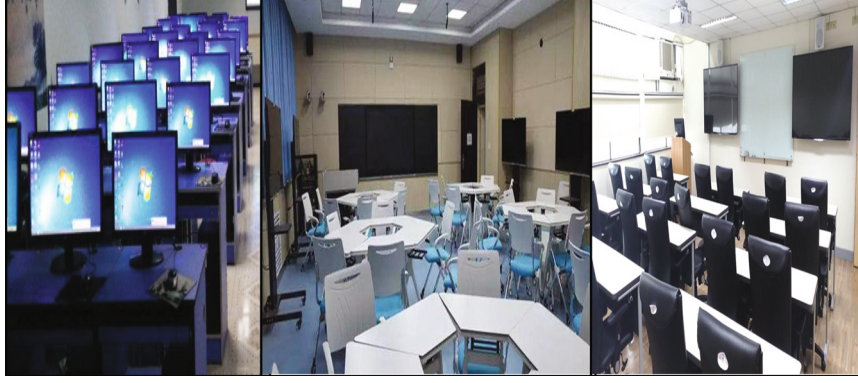


FIGURE 3: Smart multimedia classroom.

$$W_1 + W_2 + \dots + W_n = \frac{1}{n} * \sigma * \left(\sum_{s_1}^{t_1} \frac{x_1}{D_1} + \sum_{s_2}^{t_2} \frac{x_2}{D_2} * f + \dots + \sum_{s_n}^{t_n} \frac{x_n}{D_n} * f^{(n-1)} \right). \quad (13)$$

Among them, t represents the time for the information to be unified from multiple channels, s is the network speed of the wireless communication network, f is the threshold of the multimedia system generated during information integration, σ is a matrix, and its form is as follows:

$$\sigma = \begin{Bmatrix} W_1 & \dots & W_n \\ t_1 & \dots & t_n \\ s_1 & \dots & s_n \end{Bmatrix}. \quad (14)$$

The interactive feature of multimedia refers to that multimedia technology allows people to independently select the information they need and control the use of multimedia equipment [12]. The principle is as follows:

$$P_{\text{demand}} \longrightarrow \prod_s^t * \sum_i^f \frac{f}{x} * \omega \longrightarrow M. \quad (15)$$

Among them, P is the command issued by the person, ω is the matrix mentioned above, and M is the information generated by the multimedia receiving the command instruction, so that people can actively select and control the information.

The characteristic of multimedia digitization refers to the existence of media in digital form. Digitization refers to that in a multimedia computer system, and various media information is stored in a computer in digital form and processed. The principle is as follows:

$$R_{(\text{digital})} = E * \left[\sum_s^t f * W_n * i \right]. \quad (16)$$

The use of multimedia technology in the teaching field can help teachers change the teaching style. The use of intelligent multimedia can use big data, cloud computing, and other technologies to simplify the difficult-to-understand

teaching materials, and convert the materials into the forms we need to make students understandable. It can make teachers' teaching resources more vivid and interesting, can also make students feel the happiness brought by different teaching methods, and stimulate students' interest in learning [13]. The intelligent multimedia classroom is shown in Figure 3.

As shown in Figure 3, a smart multimedia classroom uses smart wireless communication networks and multimedia technologies. The smart multimedia classroom implements five functions: centralized control and hierarchical management, educational resource management cloud platform, classroom interaction, real-time attendance and feedback, and big data platform analysis [14], enabling students in the classroom to use multimedia equipment to find the learning resources they need on the Internet in real time.

2.2. College English Reading Teaching with Blended Teaching Mode. The blended teaching mode is a mode that combines the advantages of online teaching and traditional teaching. Through the organic combination of the two forms of teaching organization, learners' learning can be guided from shallow to deep to deep learning [15]. The current mixed teaching mode is shown in Figure 4.

The blended teaching model described in Figure 4 combines traditional teaching methods with online courses. Traditional teaching methods are used in class, and online teaching methods are used after class. In college English reading teaching, a hybrid teaching mode combining online and offline can be realized, but it is impossible to conduct both online and offline at the same time. Because our current teaching equipment is still unable to realize online learning in the classroom, we can only carry out independent online learning after class, but there is no guarantee that every student will independently participate in the course learning on the online platform after class [16]. Although the current mixed teaching model reflects the student's dominant position to a greater extent, the teacher's dominant position is still stronger. Although the resources are wired in the classroom, due to the lack of multimedia equipment, only the teacher uses the multimedia equipment to display. The students just sit in the classroom and stare at the teacher and teach according to the multimedia display screen. The students only read and learn based on the online English

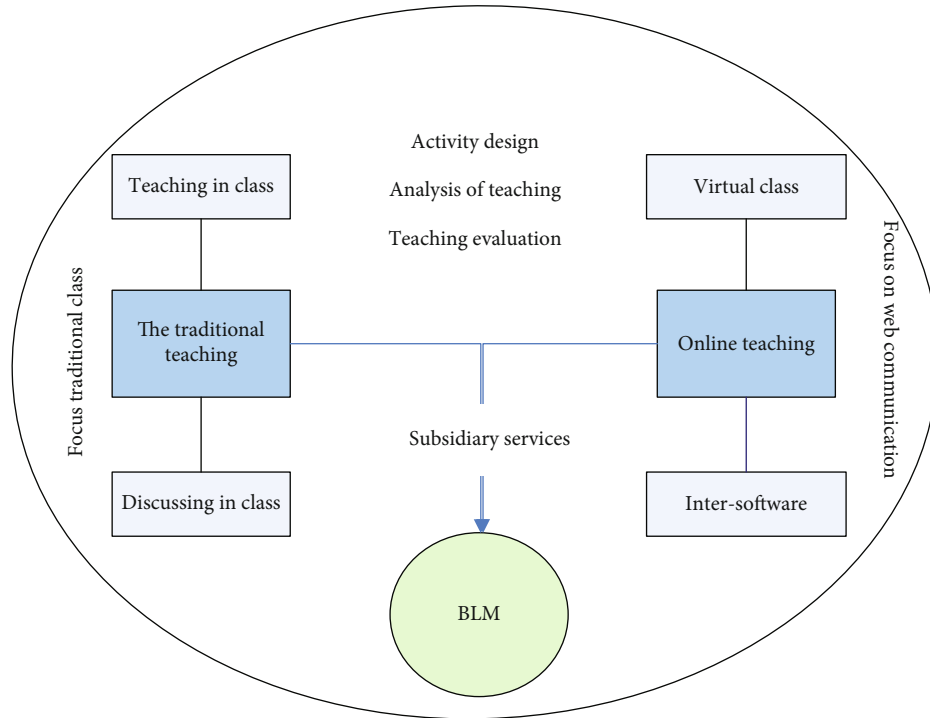


FIGURE 4: Mixed teaching mode.

reading resources provided by the classroom. It is difficult to get the students' own ideas from it.

In addition, if online teaching is conducted, the learning atmosphere is also insufficient, which will directly affect students' learning enthusiasm. Although online teaching can communicate with teachers online, it cannot guarantee constant interaction between teachers and students, which will lead to insignificant learning effects. Therefore, we need to make the online and offline classrooms of the hybrid teaching mode proceed on time at the same time to ensure that students interact with the classroom at all times, but also allow students to communicate more in offline classrooms. In fact, the so-called mixed teaching model is mostly students sitting in offline classrooms, but watching a teacher's live broadcast or recording on the computer. When there is a problem, there is an on-site teaching assistant to tutor the students. Although this method is similar to the blended teaching model, it is actually a dual-teacher teaching.

At present, teachers always believe that traditional teaching methods should be used in college English reading courses, but the main obstacle to students' English reading is not the difficulty of words, and the difficulty of reading materials is not just English words and grammar [17]. In order to overcome the shortcomings of the traditional English teaching model, we can use a blended teaching model to innovate in English reading teaching. Before the class, the teacher can provide a video about reading the text. Then students submit their confused questions or content to the class for discussion with the teacher. The extracurricular reading content can be uploaded to the online classroom in the form of text or video, through online discussion and solution of typical problems, and the discussion can be completed in the classroom [18]. Teachers post videos and addi-

tional learning resources, such as listening materials or readings of new words and phrases, to public online platforms, which can be used by all students to realize resource sharing. In this way, students not only keep their English reading learning on the surface but also enable students to achieve deep learning in their college English reading learning. The process of the mixed teaching mode is shown in Figure 5.

As shown in Figure 5, the blended teaching model is that teachers allow students to study, discuss, and communicate online before and after class and then use traditional teaching methods in the classroom. Online and offline courses cannot be paralleled at the same time.

2.3. Hybrid Teaching Mode Based on Intelligent Wireless Communication Multimedia. Online teaching needs to use the multimedia technology we mentioned above; so, the intelligent multimedia classroom provides equipment support for the hybrid teaching mode. In the smart multimedia classroom, students can equip a multimedia device in the classroom to collect information about the content of the classroom teacher's explanation online. Then, the students integrate and understand by themselves, and then the teacher can let the students share the information they collect with the classmates, so that the dominance of the students in the classroom can be realized, and the students can also participate in the entire classroom independently. The process of mixed teaching mode under intelligent multimedia is shown in Figure 6.

As shown in Figure 6, in the hybrid teaching mode of the intelligent multimedia classroom, teachers only need to run out the topic of this English reading course before class. Then, students can use the multimedia equipment in the

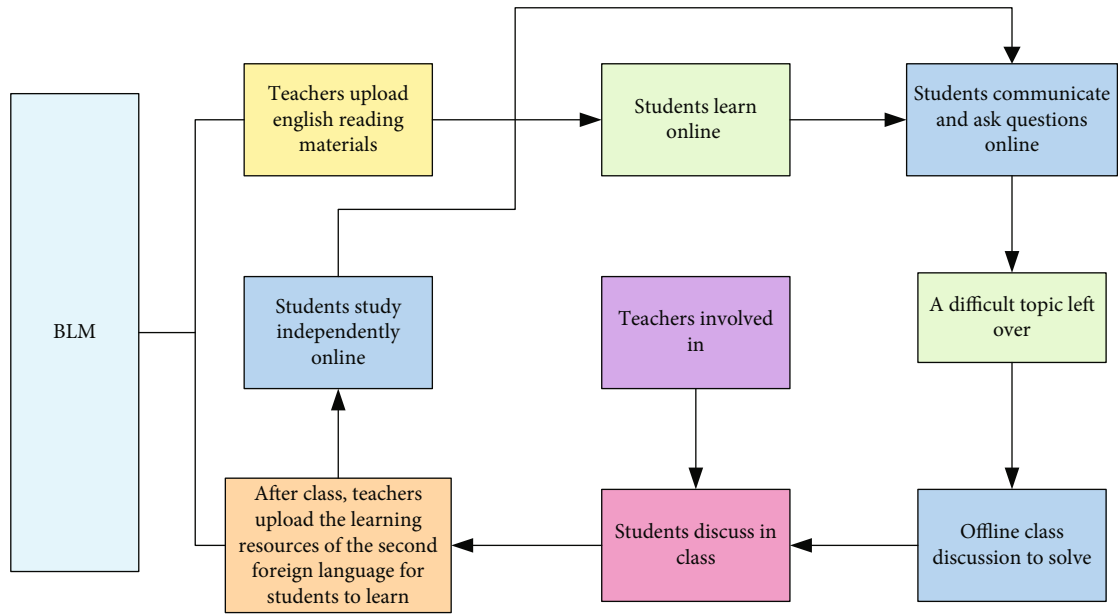


FIGURE 5: Mixed teaching mode process.

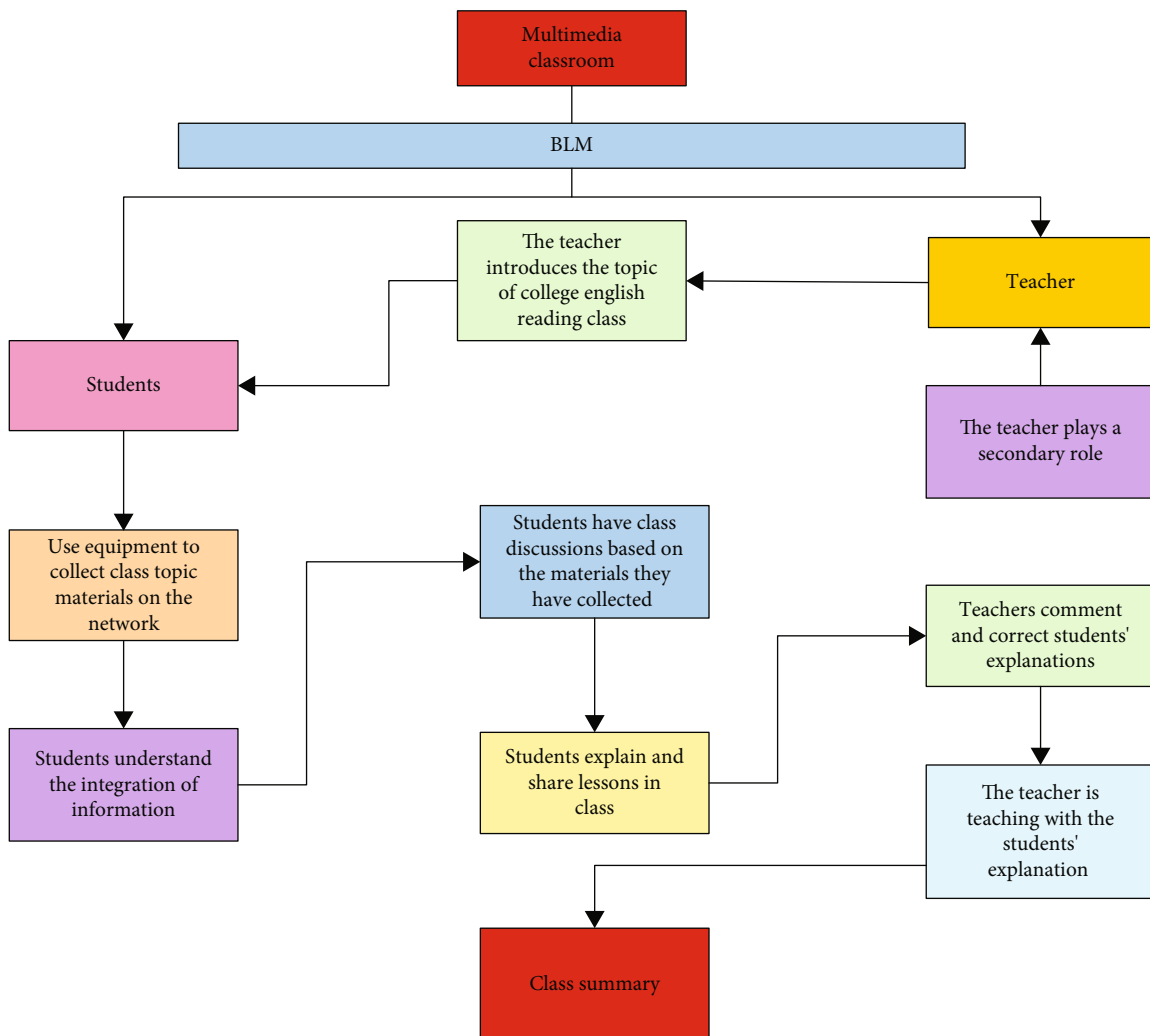


FIGURE 6: The process of mixed teaching mode under intelligent multimedia.

classroom to search for relevant materials through the wireless network according to the theme. Because college students are individuals who already have independent consciousness, their own understanding of the curriculum is also different. After the students find and discuss the materials in the classroom, they will explain the content by themselves on the podium. The teacher only needs to listen carefully to the students' explanation and then comment on the students' performance and correct the inappropriate places that the students have said. In this way, students can play their main role in the classroom and exercise their innovative consciousness and independent learning ability [19]. Then, the teacher can further deepen the class based on the students' understanding and the teaching content prepared by himself and finally make the same summary. This teaching mode can promote students' learning from shallow to deep and realize students' deep learning of English reading courses.

In addition, the blended teaching model not only realizes the blending of online and offline courses of college English reading courses but it can also realize the blending of teaching resources and the blending of evaluation methods [20]. The hybrid teaching mode can integrate various learning resources. As shown in Figure 6, students can freely use multimedia and wireless networks to find learning resources for English reading courses, enhance the interoperability of resources on the same platform and different platforms, and improve the utilization rate of English reading learning resources. The evaluation method of blended teaching is different from that of traditional teaching. Blended teaching can evaluate the results of students' learning, as well as the process of students' learning, so that it will be more fair and just [21–23].

With the development of wireless networks, many online courses for college English reading are also appearing one after another. It can learn only with electronic devices. Therefore, teachers use multimedia classrooms in the classroom, and after class, they can also arrange some content for students to learn online and ask questions and exchange learning experiences on the online platform. In addition, in order to ensure students' extracurricular learning of English reading courses, the students' academic performance recorded on the online background can also be included in the final assessment, and the students' assessment results can be evaluated in an all-round way. For example, our MOOC platform will record students' study time in the background, launch intelligent online tests to consolidate students' knowledge points, and make intelligent assessments of students' learning situation every time they study. Based on multiple forms of objective, fair, comprehensive, and systematic mixed assessments, the online platform can feed back the learning results to students in a timely manner, so that students can understand their deficiencies in English reading and learning, and they can also clarify their own advantages in this course. Therefore, they can improve their own shortcomings in a targeted manner and clarify their strengths in the English reading course. Combining the two, learners can choose a learning method that is more suitable for them, so as to enhance their motivation and confi-

dence in learning, and improve their enthusiasm and initiative in learning.

Therefore, modern education must make full use of wireless networks and multimedia equipment, broaden students' horizons, change the traditional teaching mode, and let students have a sense of participation in the classroom, so as to stimulate their enthusiasm for learning English reading courses. Especially for college English reading courses, the teachers' teaching concepts and the leading role in the classroom are changed, and the students' main role in the classroom is fully stimulated, so that students have a sense of classroom participation, so as to stimulate their enthusiasm for English reading and learning. In this way, the education quality and level of college English reading courses can be comprehensively improved.

3. Experiment and Analysis of Intelligent Multimedia and Hybrid Teaching Mode on College Students' English Reading Teaching

3.1. Experimental Design. In this experiment, three classes with the same number of students and majors will be selected in a college. These three classes are the first, second, and third classes of English translation for juniors, and these three classes are all taught by the same teacher, with a total of 20 students in each class. In this experiment, the teacher explained the reading article First Inaugural Address by John F. Kennedy in the Advanced English textbook. Teachers will use different teaching methods to teach, one class uses a combination of intelligent multimedia and hybrid teaching methods, the second class uses a mixed teaching method, and the third class uses a traditional teaching method.

This experiment will compare three classes of students' mastery of the knowledge points of this English reading article and changes in students' learning abilities, students' participation in class, and the participation of each class in group cooperative learning. Of course, in order to better compare the changes in the teaching situation of these three classes before and after the implementation of different teaching modes, before the experiment, we learned about the teaching situation of the three classes, as shown in Table 1.

From Table 1, the teaching levels of the three classes are relatively close, the teaching effectiveness of the teachers is not very high, the outstanding rate of the students in the class is relatively low, and the students' classroom participation and enthusiasm for learning are relatively low.

3.2. Experiment and Analysis

3.2.1. The Mastery of the Knowledge Points of the Students in the Three Classes. Dividing the three classes into four groups with five people in each group, after the teaching is over, the students will be tested uniformly and then compare the average scores of the five students in each group to compare the three classes' mastery of the knowledge points of this text. Then, the average score of each group in the three classes is shown in Table 2.

TABLE 1: Teaching situation.

Class	Proportion of excellent grades	Proportion of students with good grades	Student participation in class	Students' learning enthusiasm	Teacher's teaching effectiveness
First	25%	86.6%	40%	45.75%	47.45%
Second	30%	85.7%	35%	42.3%	46.43%
Third	25%	86.6%	45%	43.45%	48.12%

TABLE 2: Average results of the group.

Class	Study groups	The average scores
First	1	87.6
	2	88.4
	3	82.4
	4	79.8
Second	1	82.5
	2	77.6
	3	76.5
	4	68.9
Third	1	77.5
	2	72.6
	3	71.4
	4	66.5

It can be seen from Table 2 that the average score of each group in a class is higher than that of his two classes. Among them, the average scores of three groups reached excellent, while only one group of the second class reached excellent, and the average scores of the third group were basically at a good stage. Therefore, it can be seen that the teaching method of a class using intelligent multimedia combined with a hybrid teaching mode can enable students to master the knowledge points of this article. The test results are stronger and better than the other two classes. However, the test scores of the students in the third class using the traditional teaching method are obviously inferior to those of the students in the first and second classes. It can be seen that the knowledge points are not very solid, and the ideal teaching effect has not been achieved.

3.2.2. Comparison of the Influence of Different Teaching Modes. In the classroom, we observed the students' participation in the classroom learning of this text and deeply understood the sense of classroom participation of the students in the three classes. The results are shown in Figure 7.

Judging from Figure 7, the overall sense of class participation in class one is relatively good, reaching 93%, while class two is slightly inferior. The proportion of class participation in class reaches 79.42%, only 67.7% of the students in the third class participated in the class. From the perspective of the group situation, the group of class one is the most active to participate in class discussion, the group of class two is slightly inferior, and the group of class three is not very active in participating in class discussion.

In addition, we also conducted in-depth exchanges with students in three classes. The students in class one said that

the use of a hybrid teaching model in intelligent multimedia teachers gave us more sense of participation. They can collect a lot of information about this article from the Internet, discuss it, and share it on stage, making the study of this article more in-depth. The students who adopt the blended teaching model said that they will study online before class, but the effect of online learning is not very good. Because in the offline class, teachers still lecture on the podium. They just take the stage to teach what they learn online step by step, and there is not much discussion among students. The students in class 3 said that they only need to listen to the teacher's lecture on stage, copy notes, and review the notes when they have time after class. They do not feel that they are in class at all, and they just passively receive knowledge. The comparison of all aspects of the three classes and the comparison before and after the implementation of the intelligent multimedia classroom combined with the hybrid teaching mode in the first class are shown in Figure 8.

The comparison before and after the implementation of the mixed teaching mode in the second class and the comparison of the autonomous learning ability of the students in the three classes are shown in Figure 9.

It can be seen from Figure 8(a) that the teaching situation of class one is better than the other two classes. Although the proportion of students in class three with good grades is higher than that in class two, class two is in excellent grade. The proportion of students in the school has increased significantly compared with the original, and it is also 25% higher than the excellent rate of the third class. Looking at the comparison of a class before and after the implementation of the new teaching model in Figure 8(b), it can be clearly seen that after the implementation of the new teaching model, all aspects have improved, especially in the excellent rate, which has increased by 45%, classroom teaching efficiency has also increased by about 50%, and students' sense of participation is stronger than before. Looking at the comparison of the changes before and after the implementation of the mixed teaching model in the second class from Figure 9(a), it can be found that the excellent rate of the second class students has increased. However, the ratio of the good stage has dropped, but the overall teaching effect has risen, and all other aspects have risen. From Figure 9(b), the learning ability of the students in the first class is greatly improved, and the learning ability of the students in the second class is slightly inferior to that of the first class, but the learning ability of the students in the third class is not significantly improved.

3.3. Experiment Summary. A series of experiments show that the combination of intelligent multimedia and hybrid

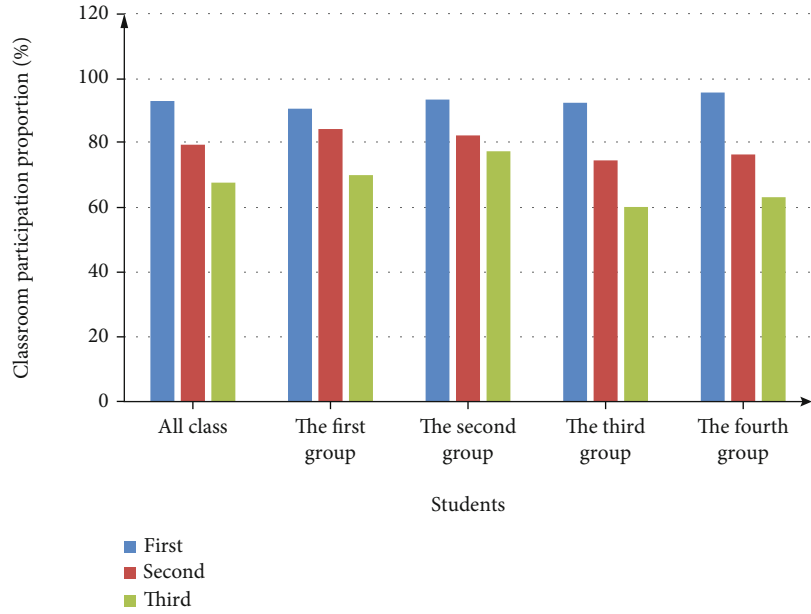
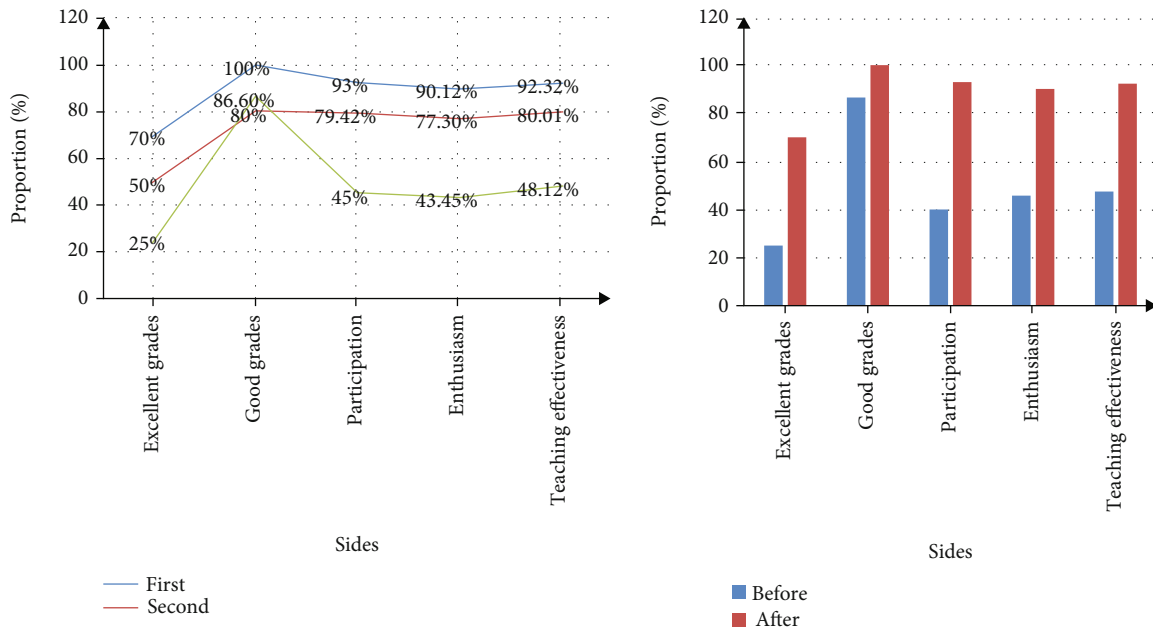


FIGURE 7: Student participation in class.



(a) Comparison of all aspects of the three classes

(b) Before and after comparison of each class in the first class

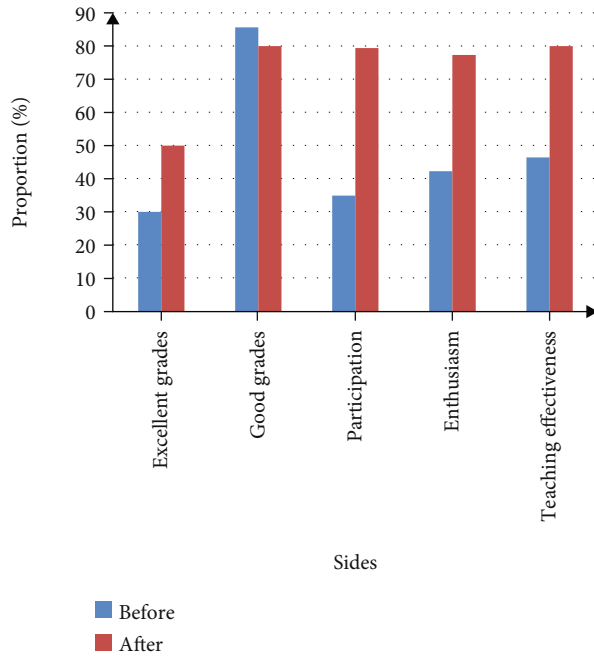
FIGURE 8: Comparison of all aspects.

teaching mode has great effects on students' teaching and can improve the teaching efficiency and teaching level of college students' English reading courses. From the perspective of the performance, teaching effectiveness, and improvement of students' learning ability in the three classes in the experiment, the improvement of the class that implements the intelligent multimedia combined with hybrid teaching mode is the most obvious. Therefore, it can be found that the combination of intelligent multimedia and hybrid teaching mode is beneficial to improve college students' interest in college English reading courses and promote students' par-

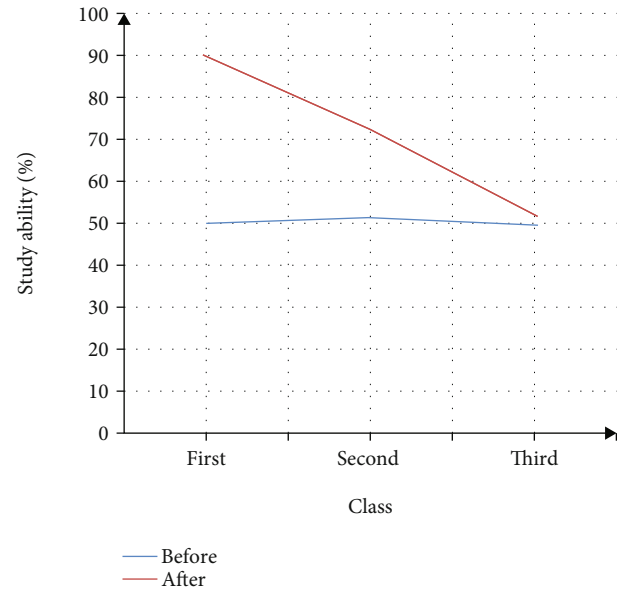
ticipation and sense of participation in English reading classes. It can also improve students' teaching ability and self-learning enthusiasm and let students learn how to use wireless networks to improve college English reading courses.

4. Discussion

This article first discusses the intelligent wireless network and multimedia technology, fully discusses the application of wireless network and multimedia in the field of education, and then proposes to combine the two to propose an



(a) Comparison before and after the second class



(b) Changes before and after the learning ability of students in each class

FIGURE 9: Before and after comparison of all aspects.

intelligent multimedia classroom. Compared with traditional classrooms, intelligent multimedia classrooms have more modern equipments. These equipments can search for learning resources in the classroom through wireless networks, so as to fully provide students with learning resources on various network platforms. After that, this article discusses the promotion and implementation of the mixed room teaching model in the education field, which improves the enthusiasm of students and the teaching level of teachers. This article describes the mixed teaching mode, which provides a theoretical basis for the following teaching methods that combine intelligent multimedia and mixed teaching mode.

The proposal of implementing a hybrid teaching model in intelligent multimedia classrooms proposed in this paper can give full play to students' subjective initiative in college English reading courses and at the same time can fully stimulate students' interest in English reading courses. Students can give full play to the main role of students in the classroom, allowing them to integrate their own resources in the classroom and then teach themselves at the podium. Teachers can comment and correct the content of the students' lectures and play an auxiliary role. Under this new teaching model, students can find various college English reading materials on the Internet in the classroom and discuss and share them in the classroom, allowing teachers to comment and correct in time, effectively improve teaching effectiveness, and introduce students to deep learning in college English courses.

The experiments in this article show that this new teaching model not only combines the advantages of modern science and technology but also fully combines the advantages of traditional teaching methods. This new teaching model

has more advantages than the traditional blended teaching model. In addition to online learning outside of class, students can also perform in-depth learning in the classroom, which can fully stimulate students' enthusiasm for learning and improve students' performance and independent learning ability. In addition, teachers' teaching concepts can be changed. Teachers and teachers fully consider the main role of students in the classroom, so that teachers are more inclined to adopt mixed teaching methods with the help of multimedia classrooms.

5. Conclusions

This article discusses the application of the hybrid teaching mode in the English reading teaching of college students under the background of intelligent wireless communication multimedia. First, the intelligent wireless communication network and multimedia technology are combined. Next, intelligent multimedia is proposed, which allows college English reading courses to implement a hybrid teaching mode in intelligent multimedia classrooms. Experiments show that this new teaching model is more suitable for college English reading courses, can fully stimulate students' interest and enthusiasm for college English reading courses, improve the teaching efficiency and teaching level of college English reading courses, and change teachers' traditional teaching concepts and the traditional teaching methods of teachers. Therefore, the implementation of the hybrid teaching mode under the background of intelligent multimedia has great practical significance for the teaching of college English reading courses. However, what this article is studying is a blended teaching model in college English reading courses. It is hoped that the teaching of more subjects can

be involved in future research, and the teaching level and quality of the entire education sector can be improved.

Data Availability

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

Conflicts of Interest

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

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