

# Exploring the Application of Artificial Intelligence Technology in College English Teaching

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**Abstract:** There are many problems in English teaching in colleges and universities in China all the time, including lack of attention, old teaching methods, etc. These problems have brought many difficulties to the English teaching of colleges and universities. As the society of China puts forward higher requirements for college English teaching, the current college English teaching model can no longer meet the needs of the times. With the advent of the information age, it is necessary to apply information technology and artificial intelligence technology into English teaching in colleges and universities, so that artificial intelligence can bring benefits to the development of college English. There is a need to create a relevant English teaching platform to make artificial intelligence serve the English teaching, so that college education can better cultivate talents and contribute to the development of socialism.

## 1. The status quo of English teaching in colleges and universities

Since the reform and opening up, China has been carrying out increasingly frequent exchanges with the external world, and English has been used more widely in economic exchanges and political exchanges with other countries. In this context, the English teaching in colleges and universities has also received more attention and the education department of our country has invested more and more in English teaching, which has helped English teaching to achieve great development. However, with the great improvement of China's economic level and people's living standards since the beginning of the 21st century, the society has put forward higher requirements for the talents cultivated by higher education institutions. At the same time, the continuous development of Internet technology has brought new opportunities and challenges to the teaching work. Therefore, English teaching in colleges and universities needs to recognize the importance of artificial intelligence (AI) technology and apply it into English teaching.

With the reform requirements of the new curriculum standards for English teaching by the education departments of China, multimedia teaching and micro-lecture mode have been applied more in English teaching in colleges and universities. These measures have improved the effectiveness of English teaching and classroom efficiency to a certain extent. However, artificial intelligence technology has not been applied properly and enough in the English teaching in colleges and universities. In terms of the preparation for English teaching, teachers have to spend a lot of time on the courseware and lessons, which leads to the fact that they are not able to make full use of time to enhance their specialty accomplishment. At the same time, the use of courseware and multimedia technology in the classroom teaching also makes it difficult for students to fully record and understand the notes during the course of learning, and thus they have to spend more time completing the study after class. The enthusiasm of students cannot be stimulated under such a learning mode, which is extremely unfavorable for the performance of teaching work. Moreover, students often passively accept knowledge in the process of learning English. Because they cannot effectively understand and the knowledge taught by the teacher, it is hard for them to keep enough enthusiasm and passion for learning. Therefore, it is significant to introduce artificial intelligence technology into college English teaching, making artificial intelligence serve English teaching.

## **2. Problems in English teaching in China**

### **2.1 Relatively stereotyped teaching model**

In the English teaching in colleges and universities, the existing teaching mode still emphasizes that teachers complete their teaching work by explaining the content of teaching materials, with the purpose to let students understand the knowledge points and master related knowledge. And the students are required to carefully listen to the content taught by the teacher and then complete relevant exercises after class, so as to better deal with the English study. Under this mode of teaching, students' learning autonomy and enthusiasm are suppressed to a certain extent, resulting in the fact that they seldom study English autonomously after class. This is extremely unfavorable for the learning of cognitive and memory courses such as English. In addition, teachers generally bring their own understanding of English knowledge into the teaching, and thereby students will learn English in accordance with the teachers' ideas. This is extremely unfavorable for the cultivation of students' innovative thinking, because it will lead students to not fully develop their own thinking to complete the study of college courses.

### **2.2 Unclear teaching objectives**

English teaching in colleges and universities tends to focus on students' memory of English knowledge and the teaching of some fixed grammar. This makes it difficult to cultivate students' English communication skills in college English teaching, thereby making it difficult for them to use English knowledge to improve their work and business ability in real life. The current teaching objectives urge students to complete more repetitive memory work. Students can improve their performance through mechanical memory of English knowledge, but their practical application ability is very poor. At the same time, such teaching is also incompatible with the requirements of English teaching in the new era, which is not conducive for students to improving their English level and applying English knowledge more in real life.

### **2.3 Insufficient combination of information technology and college English teaching**

In the English teaching work in colleges and universities, teachers are more likely to complete English teaching through PPT and English learning platforms, which makes the teaching content relatively boring. The lack of a good combination with information technology, English teaching is unable to attract students' attention. At present, what is used most widely in English teaching is multimedia technology, not information technology. In addition, English teachers' quality in information is not enough to let students complete the study through the application of artificial intelligence technology, and thus information technology does not fully play its expected role.

### **2.4 Untargeted teaching**

The English teaching in colleges and universities is mainly stay at the elementary stage, which cannot meet the needs of students' deep learning nor meet the market demand for talents. Students trained under the existing English teaching mode have a weak English foundation. They may be good at answering questions, but lack English knowledge related to professional skills, which is extremely unfavorable for the employment competition after graduation. At the same time, because the English foundation of students in higher vocational colleges is weak, it is very difficult for some of them to follow the pace of English teaching, which is also a blow to their enthusiasm for learning.

## **3. Introduction to artificial intelligence**

Artificial intelligence technology has been widely used in recent years. As a product created based on the extension of human wisdom, it can be effectively applied in engineering process simulation, intelligent computing and other fields. Chinese scholar Zhang Jianping defines artificial intelligence as: It is a technology that uses computer and information technology to complete the computer's imitation of human intelligence; and it utilizes the fast computing of the computer to complete the reasoning and proof of different things, and can also complete the learning and understanding of new

things. In the past, human beings were one of the few groups in nature that have wisdom. But now with the development of science and technology, human beings can broaden and extend human intelligence through artificial intelligence. Although artificial intelligence has functions beyond humans in some respects, in the end, it is still controlled by humans. It is our tool to further explore nature and develop technology.

As a new product of the times, artificial intelligence is in the stage of vigorous development. It has not only brought great impacts on traditional life and production methods, but also brought changes to our education. Artificial intelligence can effectively improve the teaching level and teaching efficiency, making knowledge more acceptable to students. By constructing network teaching platforms and designing application software that are more suitable for teaching needs through artificial intelligence technology, students can better communicate with the computer during learning, thus improving the efficiency and level of learning.

#### **4. The status of applying artificial intelligence in college English teaching**

In terms of the English teaching in colleges and universities, many scholars at home and abroad have studied the connection between artificial intelligence and linguistic disciplines. By inputting English speech into artificial intelligence, American scientists help artificial intelligence translate English into Mandarin and then complete simultaneous interpretation. Moreover, in the process of learning English, artificial intelligence gradually perfects its own accent and intonation and makes the translated sentences more clear and accurate, which is a great inspiration for the teaching of English. In the book *Artificial Intelligence in Second Language Teaching*, the author combined the content of English teaching with information technology and takes the advantage of artificial intelligence to correct learners' pronunciation, grammar and understanding. The book also introduces some specific methods and cases that combine artificial intelligence and English teaching, which has a lot of inspiration for artificial intelligence application in college English teaching.

In China, there are also many scholars who have conducted in-depth research on the combination of English teaching and artificial intelligence, which laid a solid foundation for future development. Moreover, the research on artificial intelligence and English teaching mode has not only stayed at the theoretical stage, and some practical exploration and research have been done. For example, the artificial intelligence teaching system developed by Mr. Zhang Jingzhong, an academician of the Chinese Academy of Sciences, can not only use artificial intelligence to complete mathematics teaching for students, but also have the functions of answering exercises, deriving and mapping intelligently. Some scholars have studied the combination of English teaching and artificial intelligence and completed the construction of the "CSIEC" (Computer Simulation in Educational Communication) intelligent English learning system. It inputs language understanding, pronunciation, grammar and other functions of English into the computer system, and assists the implementation of English teaching through computers.

But so far, there are relatively few researches on the combination of English teaching and artificial intelligence technology, and the depth and scope of researches are not enough. This leads to the lack of specific artificial intelligence applications, which are issues that we need to solve later.

#### **5. Specific methods of applying artificial intelligence technology in college English teaching**

##### **5.1 Improving teachers' information literacy**

Although it has become the research content at present to use artificial intelligence technology to complete English teaching, it is needed to recognize that the classroom teaching is still the main body of the current English teaching. As an important participant in classroom teaching, teachers have very important influences on the application of artificial intelligence in English teaching.

AI assisting English teaching still needs English teachers to explain some key points and difficulties in students' English learning, so that they can learn better. This will be able to effectively improve the theoretical knowledge of students and lay a solid foundation for their English learning in

the future. Therefore, teachers must have sufficient information literacy, so that they can effectively combine the AI teaching system with classroom teaching to ensure that artificial intelligence can play its own role. To improve the information literacy of teachers, colleges and universities must attach greater importance and increase input to English teaching, so as to comprehensively improve the hardware level. It is also needed to train and educate teachers to better master the information technology. At the same time, English teachers should be regularly organized to conduct teaching discussions and communication to learn from each other, so that they can better use the artificial intelligence system to complete English teaching.

### **5.2. Changing English teaching concept**

In order to make artificial intelligence technology fully applied in college English teaching and play its own role, it is necessary to change the concept of students and teachers. Teachers need to change their teaching concept and allow students to participate in English teaching as the subject of learning. The teachers should play the role of answering questions and doubts for the students and help the students grasp the key points of learning, thus stimulating their sense of ownership and improving their autonomy of learning English. At the same time, students should change their own learning concept and recognize their own status as the subject, so that they can be responsible for themselves and be more proactive in learning English. They are expected to use the AI learning platform to complete the tasks of previewing, reviewing and practicing to ensure their progress and growth in learning. Only in this way can artificial intelligence play a more important role in the English teaching in colleges and universities, and thus improve the teaching effect of English teaching.

### **5.3. Strengthening the application of the Internet in the classroom**

Along with the continuous development of Internet technology and information technology, some AI teaching platforms have entered the English teaching in colleges and universities. However, these systems have various problems, such as insufficient understanding of students' subject status, neglecting students' self-learning ability, little targeted practice in spoken English, and so on. This will cause some questions of students in English learning like lack of enthusiasm for learning, poor speaking ability and poor comprehension, which is extremely unfavorable for their further English learning. Therefore, it is necessary to construct a reasonable and complete English learning system based on artificial intelligence. This learning system should be designed according to the actual needs of students to ensure that English teaching can improve students' application ability and be helpful for their future study and employment. At the same time, it must also ensure the interest of teaching to improve students' interest in learning. As the saying goes, interestingness is the best teacher. Fully motivating students' enthusiasm and interest can achieve twice the result with half the effort. At the same time, attention should be given to the combination of AI English teaching and traditional teaching mode, so that artificial intelligence can assist teachers to complete teaching work, realizing student-oriented teaching. Only in this way can we build a reasonable and complete AI English learning platform.

### **5.4. Changing the evaluation system for students**

In the past, the evaluation of students was often based on the students' classroom performance, homework completion and test scores. However, the evaluation of students' performance should be fairer and more objective after artificial intelligence is used in teach English. It is feasible to make full use of the characteristics of artificial intelligence to complete the reasonable evaluation of students, and then facilitate teachers to arrange the following teaching plan. Therefore, when bringing artificial intelligence into the evaluation of students, teachers not only need to taking into account the pre-study situation of students and their performance in the learning system, but should also test their English ability according to the system, so as to ensure that they can improve their ability of applying English in the process of learning. Only in this way, students can understand their own shortcomings, and then carry out targeted learning and training in following learning to improve their English.

## 6. Conclusion

With the continuous development of science and technology as well as the continuous advancement of human society, artificial intelligence technology plays a more important role in real life. At the same time, the development of society has put forward higher requirements for English teaching in colleges and universities. Therefore, it is necessary to apply artificial intelligence into English teaching in colleges and universities. There is need to let artificial intelligence serve the college English teaching by constructing a reasonable and complete AI learning system, changing the teaching concept and changing the evaluation system, and thereby improve the effect of college English teaching.

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