A Study on the Transformation of College English Teaching Promoted by Artificial Intelligence Technology

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Abstract: College English teaching requires the use of technology to improve teaching efficiency. At present, artificial intelligence technology has more comprehensive functions and can better meet the needs of college English teaching. This paper analyzes the existing problems in the traditional college English teaching mode, and then analyzes how to use artificial intelligence technology to optimize the teaching mode, and discusses how to establish artificial intelligence system according to the needs of universities to improve the level of college English teaching. Through research, it helps universities to carry out English teaching more effectively, make full use of artificial intelligence system to solve the shortcomings of college English teaching in the past, and realize the reform of college English teaching.

Keywords: Artificial intelligence technology; College English teaching; Change; Reform

With the rapid development of artificial intelligence technology, the use of artificial intelligence technology in the field of education has become an important way to improve the level of education, especially the rapid development of speech recognition accuracy, translation level, speech synthesis effect and other aspects of artificial intelligence technology, which makes the use of artificial intelligence technology to carry out language teaching has great prospects. As for college English education, artificial intelligence technology can be used to achieve the reform of college English education, so universities should make full use of artificial intelligence technology to optimize the teaching methods and solve the shortcomings in the past teaching.

1. Problems in traditional college English teaching

1.1 Poor effect of listening training

Due to the limitation of classroom time and resources in college English teaching, students' listening training is not enough, which leads to the unsatisfactory development level of students' listening. In many teaching jobs, the listening training mode is relatively simple. Teachers only use textbooks to develop students' listening ability, lacking effective listening teaching strategies, and unable to flexibly cope with different types of listening tasks, such as identifying key information and predicting content[1]. Some students choose the unsuitable listening practice content, resulting in excessively difficult words in the listening materials, or the materials speak fast, which will increase the difficulty of students' understanding and it is difficult to ensure the training effect of listening.

1.2 Lack of pronunciation training

English pronunciation training is often neglected in traditional college English teaching, so students have a low pronunciation level and will have a strong accent. In the absence of standardized pronunciation practice, the development of students' oral English level will be limited, which is not conducive to the improvement of their comprehensive ability. At present, most college English teaching processes can not provide students with enough pronunciation guidance and practice opportunities, and teachers can only correct a small number of students in pronunciation, which is not conducive to the improvement of students' level. At the same time, students pay less attention to pronunciation. Since there are no pronunciation related requirements in CET-4 (College English Test Level 4) and CET-6 (College English Test Level 6) and postgraduate entrance exams, students generally practice around reading and writing, and their input in pronunciation practice is very low.

1.3 Issues on homework correcting

In traditional college English teaching, homework correction requires teachers to invest a lot of practice and energy, which is

not conducive to teachers' time allocation, and may occupy teachers' too much time for preparing courses and teaching research. At the same time, due to the time consuming of teachers' correction, students may have to wait for a long time to receive feedback on homework correction, and they cannot timely understand their own mistakes and improvement direction. Meanwhile, teachers, limited by energy, can only grade according to a unified mode, and cannot provide personalized guidance and suggestions to students, which is not conducive to the improvement of students' level [2].

2. College English teaching model in the context of artificial intelligence

2.1 Artificial Intelligence for college English listening teaching

Many English listening materials are boring or difficult, which do not meet students' learning needs. Artificial intelligence system can collect and analyze corpus, generate rich speech materials, and conduct personalized listening training according to students' level and needs, so as to meet students' listening training needs. In the process of students' practice, the system can automatically analyze students' listening performance and judge students' listening level, help students identify problems, and formulate improvement strategies. According to the preferences and characteristics of students, artificial intelligence technology can also recommend listening materials, so that students have a high enthusiasm for learning and ensure the learning effect.

2.2 Artificial intelligence supporting college oral English teaching

At present, the artificial intelligence systems for English speaking practice, such as Timtalk, Camly, etc., have a high accuracy in speech recognition, and through speech recognition and natural language processing technology, it can facilitate students to conduct oral practice independently. The artificial intelligence system can automatically evaluate students' oral expression accuracy and pronunciation standards, point out students' mistakes, and provide suggestions for improvement[3]. Combined with the needs of dialogue, the artificial intelligence system can also simulate real dialogue scenes and carry out dialogue exercises with students to meet the needs of diversified oral training, so that students can get oral training in the interaction and improve their oral ability in the real context.

2.3 Correcting college English homework based on artificial intelligence

Artificial intelligence technology can complete homework grading work, quickly complete large-scale homework grading on behalf of teachers, and deliver the grading results to teachers, reduce teachers' homework grading pressure, and facilitate teachers to quickly obtain students' learning situation[4]. At present, using natural language processing and machine learning technology, artificial intelligence systems have been able to identify students' grammar, spelling and semantic errors, but also to analyze English essays, determine the basic structure of the article, and give corresponding grades and comments, and provide students with suggestions for revision. Teachers can make use of the system's modification results for secondary correction, further improve the feedback of homework correction, and provide personalized suggestions and improvement strategies for students according to the suggestions of the artificial intelligence system, so as to quickly improve their English ability. Compared with the traditional grading mode, the artificial intelligence system has higher grading efficiency and can facilitate students to get feedback quickly.

2.4 Translation teaching based on cloud services and artificial intelligence

At present, artificial intelligence has made obvious breakthroughs in the field of translation, with good translation effect. Universities can combine artificial intelligence translation technology to provide translation results and reference translations for students, so as to facilitate students to identify their own mistakes in translation and quickly solve translation problems. Using cloud service technology, more effective data analysis can be carried out. By analyzing the translation process and results of students, the system can identify the difficulties faced by students in the translation process, and provide guidance on grammar, diction and context to help students improve the quality and efficiency of translation.

3. Design of college English teaching system based on artificial intelligence

3.1 Online teaching module

Combined with artificial intelligence technology, online college English teaching can be further improved and the overall effect of online teaching can be improved. To this end, teachers can design online courses in the template, display teaching resources such as pictures, texts and videos, and provide texts, translations, vocabulary, etc., to ensure the richness and interest of the content[5]. The intelligent system can select the learning content according to the students' learning situation, which is convenient for students to learn according to their needs. At the same time, it can automatically combine the key knowledge points to generate the explanation process, so that students can get guidance. At the same time, teachers can also provide examination skills for students in accordance with the needs of CET-4 and CET-6, postgraduate entrance examination, etc., to improve students' problem-solving efficiency.

3.2 Homework practice module

The homework management module can provide more abundant homework plans to strengthen students' English practice. For example, students can complete oral practice, text study and exercise exercises in templates, and watch high-quality teaching videos. By providing different question types such as listening, reading and writing, students can get sufficient practice. At the same time, the intelligent system can also complete the homework correction work by itself, determine the main problems existing in the learning of students according to the mistakes of students, dynamically add other training content to students, so that students can improve quickly.

3.3 Intelligent teaching management

When building the intelligent management module, university teachers should be the main body. After personalized setting, all courses and contents can be displayed in the form of charts, which is convenient for students to understand the course structure, conducive to teachers' explanation, and improve work efficiency[6]. In the module, class announcements, learning tasks, classroom interaction and other functions can be added, and students' homework progress can be displayed, so that teachers have a full understanding of students' learning situation and facilitate the guidance of students. Combined with the analysis of the overall situation of students, we can also determine the difficult content of the course, and focus on the low target.

Discussion and conclusion

In the new era of developing information technology, artificial intelligence technology has brought new changes and opportunities to traditional college English teaching. It has different impacts on teaching methods, teaching effects and students' learning experience. However, there are still some problems in the current college English teaching methods, which can not meet the special needs of students, and there are problems in teaching efficiency. Generally, the use of intelligent technology can improve the English teaching effect and meet the special requirements of students. To this end, it is necessary to establish a more intelligent teaching system, optimize online education, homework exercises and other modules, strengthen the teaching of oral English, listening, composition and other aspects, improve students' English learning efficiency and enthusiasm, and meet the current English requirements for college students. Although artificial intelligence technology can partially replace teachers in mechanical and repetitive work and assist students in learning, it is not a panacea. But in the long run, the combination of artificial intelligence technology and college English teaching will become closer and closer. This field will show an increasingly positive development trend.

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