

The Application of Artificial Intelligence in English Teaching

Guolan Yang

Chongqing Industry & Trade Polytechnic, Fuling, 408000, Chongqing, China
Corresponding author: 410082087@qq.com

ABSTRACT. *The birth and development of science and technology is to better serve mankind. The development of artificial intelligence technology is becoming more and more mature, especially in the application of English teaching, which promotes the reform, development and modernization of English teaching. This paper analyzes the connotation of AI technology and the application of artificial intelligence technology in English listening, writing, translation and oral teaching.*

KEYWORDS: *Artificial intelligence, English Teaching, Application*

1. Introduction

In the new era, artificial intelligence technology has made an important breakthrough in the field of education and teaching. At present, the accuracy of artificial intelligence speech recognition technology, which is in the leading position in the world, has reached a very high level. This speech recognition technology is widely used in all aspects of our life. In addition, language translation, speech synthesis, speech testing, speech conversion, voiceprint recognition and other artificial intelligence technologies are also closely related to language learning. In modern society, machines can not only understand people's words, but also give full feedback to people's words. Artificial intelligence has brought new ideas and breakthroughs to human learning methods, but also challenges and opportunities to all aspects of teaching [1].

2. Connotation of Artificial Intelligence Technology

AI technology is a kind of technology for human intelligence and behavior.

The technology of law research is based on the theory of artificial intelligence information processing. It takes the task of designing a computing system similar to human intelligent behavior. The main research of artificial intelligence technology is the intelligent imitation of computer system to human and the realization of intelligent machine operation. Artificial intelligence includes two aspects, one is theoretical research, and the other is engineering research. The theoretical research

of artificial intelligence is to lay a theoretical foundation for the understanding of engineering research, and to explore the machine artificial intelligence at the theoretical level. The engineering research of artificial intelligence mainly focuses on the product development and design of the system and equipment of artificial intelligence [2]. both theoretical research and engineering research are not independent, they are closely related, and they are committed to solving the following problems: (1) intelligent information storage and internal information processing ability; (2) intelligent symbol processing ability, realizing symbolic processing of information input and output, assignment comparison, etc.; and (3) intelligent problems The ability of cognition and processing endows artificial intelligence with the way of solving problems.

3. Artificial Intelligence Brings English Teaching Opportunities

The rapid development of artificial intelligence technology promotes the innovation of English learning and teaching methods. Teachers have been teaching with the help of multimedia for a long time. Although the classroom is vivid, this teaching method pays attention to courseware explanation and ignores the real-time interaction between teachers and students. Students still passively accept knowledge and have low enthusiasm for learning. The undifferentiated teaching under the unified teaching task cannot get the real-time feedback of students' knowledge mastery, students have little opportunity to learn to apply, and teaching and learning cannot form a good cycle. [3]. Using advanced artificial intelligence technology to make personalized and accurate education possible. Based on big data, artificial intelligence can track and record all kinds of data of learners, model, analyze and evaluate learners, effectively intervene learners, and provide data support for teachers to improve teaching methods and strategies, so as to truly meet the request of teaching.[4]. Artificial intelligence not only changes the way of students' language input and output, which enables students' language learning to penetrate into their daily life, but also plays a significant role in promoting the innovation and reform of English teaching mode. It is a great significance to improve the quality of education to use AI technology better in the complex language environment.

4. The Development of AI Technology in Language Learning

The development of AI technology in language learning is mainly reflected in speech recognition technology, language understanding technology, language translation machine, etc. In particular, the development of artificial intelligence speech recognition technology in China has led the world, the accuracy of speech recognition is over 97%, and the recognition speed is very fast. The application and development of artificial intelligence speech recognition technology make the machine have knowledge. The ability of other people's similar language, and can give quick feedback. With the development and upgrading of AI, the translation level of AI has changed from simple literal matching develops to deep level semantic understanding, which realizes human like thinking intelligent translation.

On the basis of AI language recognition and translation, various language translation software is rapid development; it has been brought to the majority of users great convenience. For example, in the 2018 Boao Forum for Asia Forum "future production" sub forum, Tencent biography achieved the bilingual translation at the scene; Sogou simultaneous interpreting was simultaneous interpreting for the participants at the 2018 AI summit. With the development of artificial intelligence, the era of language learning of artificial intelligence has come, and it is gradually changing the way of language education [5].

5. The Application of Artificial Intelligence Technology in English Teaching

In the field of language learning, artificial intelligence can play its unique advantages. It plays an important auxiliary role in students' learning and teachers' teaching. The application of artificial intelligence technology in English teaching can give full play to its advantages and make up for the shortcomings of traditional classroom teaching. This paper analyzes the application of artificial intelligence from four aspects of English listening, speaking, writing and translation, and discusses its role in promoting the reform of English teaching.

5.1 The Application of Artificial Intelligence Technology in English Listening Teaching

Listening teaching is the beginning of learning a language and occupies a basic position in English teaching. As an indispensable part of students' English learning process, listening training is of great significance to the cultivation of students' Basic English literacy. However, due to many reasons such as the boring content of listening materials, the difficulty of listening and the inflexibility of teaching methods, students have some fear and resistance to English listening courses. Corpus based English listening teaching can provide learners with a large amount of listening materials. Different difficulties and themes can meet the real needs of many students for English listening. The application of artificial intelligence technology to English Listening Teaching Based on corpus can help students to match learning resources automatically. Artificial intelligence technology can automatically match the listening materials suitable for the students from the corpus, improve the students' interest in learning, and reduce the burden of English listening by analyzing the factors such as students' age, English level and major. Second, students can choose the corresponding English learning materials according to their own interests and their own plans for the future career to conduct in-depth and comprehensive learning. Third, it can realize the interaction between learning and situation. For example, when students scan an object around them, artificial intelligence can automatically recognize and explain the object in English, which realizes the close connection between listening practice and life [6].

5.2 Application of artificial intelligence technology in English Writing

The application of artificial intelligence technology in English writing teaching is mainly reflected in the correction of English composition content [7]. Firstly, the teacher arranges the writing task in the composition system. The students can write in the composition system after receiving the homework. The artificial intelligence system can provide students with an idea and framework for learning and doing, provide corresponding vocabulary reference in the specific writing, and assist students to complete the task. After the completion of the system for review, students can know their level of learning and doing at the first time, and correct the problems in writing. Through this process, we can help students find out and fill in the gaps in time, and strengthen their writing ability. Such as: correction network. This kind of intelligent teaching platform can give timely and effective feedback to students' uploaded English compositions, and make objective evaluation on students' English compositions. The system can make a comprehensive analysis of the students' English composition, make a basic judgment on the structure of the students' articles, correct the spelling errors and many grammatical errors in the articles in time, and put forward the modification suggestions in time. Introduce an automatic online correction service tool into English writing teaching, give full play to its advantages of personalization, instant feedback, comment on sentences, online modification, etc., let students have fun in writing in the process of multi manuscript modification, realize self-exploration and self-innovation construction, enhance their sense of self-efficacy in writing ability, and improve their motivation and writing ability [8]. Teachers can use the system's automatic feedback mechanism to make manual secondary correction and make further teaching feedback. Teachers can also master students' learning situation and implement curriculum improvement at any time according to the formative assessment report given by the system, which is of great significance for improving teaching methods and realizing the upgrading of teaching system.

5.3 Application of artificial intelligence technology in English translation teaching

Artificial intelligence technology realizes the accuracy and real-time of translation, which is a huge test for students' translation ability. Using cloud platform to realize the translation teaching of artificial intelligence, the first embodiment is the translation process. The introduction of artificial intelligence into translation teaching can create translation situations for students and provide guidance and help for students' translation. In this process, students can solve a large part of the difficulties and doubts of translation through artificial intelligence, which to a certain extent will stimulate students to explore the fun of deep learning and enhance their enthusiasm for translation. The second is translation evaluation. Create translation tasks on the cloud platform. The artificial intelligence system can track each translation of students to form a dynamic evaluation. Teachers can supervise the whole translation process, timely and accurately understand each student's translation characteristics, quantify the translation results of students, and realize the

personalized guidance of students AI also has a breakthrough in the field of English translation

5.4 Application of artificial intelligence technology in college spoken English

The ultimate goal of oral English learning is to achieve fluent communication. The level of students' oral English expression can fully demonstrate their practical English application ability. Therefore, the introduction of artificial intelligence technology into English teaching has obvious advantages. First, it can realize the accompanying practice. Artificial intelligence robot can create English learning environment for students and communicate with students like partners [9]. Through human-computer conversation, not only can we avoid the embarrassment in practice, but also can improve our oral English level quickly. Second, teachers and students can practice in groups by remote way to achieve group learning in holidays. Intelligent robot can act as a teaching assistant, providing some sentence patterns and fixed collocations for practice activities, which is convenient for group members to practice. In this process, the tension between students and real people can be fully and effectively relieved to help students practice and improve their oral English fluency. In today's oral English teaching, we should promote the in-depth promotion of robot teaching and realize the full and effective development of oral English teaching. This has a great role in improving students' English ability [10].

6. Conclusions

In a word, the application of artificial intelligence in English teaching is still in the primary stage, but it has shown great potential. It has changed the way students learn English, improved the experience of English learning, changed the functions of teachers, improved the quality of English teaching, and promoted the reform of English teaching. The deep integration of artificial intelligence and English teaching will become the new normal of language teaching. With the development of science and technology, teachers should keep up with the trend of the times to achieve higher level of teaching reform and upgrading in the new era, free from the simple and high repetition rate of English teaching, so as to spend more time and energy in the teaching process, and make full use of artificial intelligence technology to strengthen for students English teaching in-depth and effective development.

Reference

- [1] Shen Yanfei. College English Teaching Reform under the guidance of output oriented approach in the era of big data [J]. Education Modernization, 2017,4 (21): 23-25 (in Chinese)
- [2] Ye Yangtian. An analysis of the application and market prospect of artificial intelligence in assisted English Learning [J]. China's Strategic Emerging Industry, 2017 (48): 119 (in Chinese)

- [3] Chen Jianlin. Restructuring the new paradigm of foreign language teaching in the era of big data [N]. Social Science Journal, October 12, 2017 (in Chinese)
- [4] Wang Shouren. Key points of College English teaching guide [J]. Foreign Language Circles, 2016 (3): 2-10 (in Chinese)
- [5] Hua Lulu, Chen Lin, Sun Mengmeng. Research on artificial intelligence promoting English Learning Reform [J]. Modern Distance Education, 2017 (06): 27-31 (in Chinese)
- [6] Sui Xiaobing. Research on the optimization of College English classroom teaching under the network environment-based on the empirical survey of Jiamusi University [D]. Shanghai Foreign Studies University. 2013:154 (in Chinese)
- [7] Wang Jia. Research on the application of artificial intelligence technology in College English Teaching [J]. Information recording materials, 2019, 2(20):124-125. (in Chinese)
- [8] Yang Xiaoqiong, Dai Yuncai. A practical study on the teaching mode of College English autonomous writing based on the assessment network [J]. Foreign Language Audio Visual Teaching, 2015,2 (126): 17-23 (in Chinese)
- [9] Intelligent Learning Institute of Beijing Normal University. 2016 white paper on global educational robot development [DB / OL], 2017-07-20 (in Chinese)
- [10] Chen Kaiquan, Sha Junhong, He Yao, Wang Xiaofang. The technological path and practical exploration of artificial intelligence 2.0 to reshape learning on the functional upgrading of intelligent teaching system [J]. Distance Education Journal, 2017, 35 (05): 40-53 (in Chinese)