Application of Artificial Intelligence Technology in English Teaching of Drug Safety Specialty in Higher Vocational Colleges

Jin Wen[1(✉)] and Fengyang Fu[2]

[1] Chongqing Vocational instItute of Engineeing, Chongqing 402260, China
wanglei18291826361@126.com
[2] Chongqing Medical and Pharmaceutical College, Chongqing 401331, China

Abstract. Through the role of artificial intelligence technology in teaching, this paper analyzes the relationship between the technology and the teaching of drug safety English in higher vocational colleges, and makes a deep discussion on the significance of the application of artificial intelligence technology. At the same time, by listing the saiet technology, this paper makes a practical interpretation of the practical teaching application of artificial intelligence technology, and discusses the feasibility and key problems of the application of the hybrid teaching mode based on the characteristics of drug safety English.

Keywords: Artificial intelligence · Drug safety · Professional English · Blended teaching

1 Introduction

With the advent of information society and knowledge age, information is expanding at an unprecedented speed. Facing the vast amount of information resources, human natural intelligence is becoming more and more difficult to control. How to use artificial intelligence to imitate and expand the natural intelligence of human beings and realize the intelligent processing of information is a major issue faced by the information society. In order to make AI technology more suitable for practical teaching, relevant experts design products similar to expert system courses in AI tools, which is also in the process of continuous practice and innovation. It takes time to verify the importance of AI technology, and its ultimate goal is to improve teaching results and provide a more scientific teaching scheme for higher education.

The emergence of these products also marks that human language learning has entered the era of artificial intelligence. With the continuous maturity of artificial intelligence technology, more and more mobile applications have been derived, and these software are gradually connected and integrated with the field of language learning. For the language education industry, it is not only a challenge, but also an opportunity. For educators, it has a certain impact on their teaching methods and thinking, and puts forward higher requirements for teachers' own quality, On the other hand, it improves the

interest of the classroom, expands the access to knowledge, liberates part of the burden of teachers, reduces the pressure on teaching, and realizes the innovation of teaching [1].

2 Artificial Intelligence Technology

2.1 Concept of Artificial Intelligence

Artificial intelligence is also machine intelligence, its English expression is "artificial intelligence", referred to as AI. It is a comprehensive subject which is developed from computer science, cybernetics, information theory, neurophysiology, psychology, linguistics and other disciplines. The ability of computer application system to simulate human intelligent activities, in order to extend the science of human intelligence. From a disciplinary point of view, the current artificial intelligence is a branch of computer science. Generally speaking, artificial intelligence is a challenging science, which involves computer knowledge, psychology and philosophy; It is composed of different fields, such as machine learning, computer vision and so on. The purpose of artificial intelligence research is to make the machine competent for some complex work which usually needs human intelligence to complete.

2.2 Development of Artificial Intelligence

In the mid-20th century, scientists represented by British mathematician Turing provided theoretical basis and practical objects for the birth of artificial intelligence. The artificial intelligence discipline was formally born at the Dartmouth conference in 1956. Scientists led by von Neumann and Turing are trying to implement AI through symbolic programming. Since the 1960s, with the development of technology, artificial intelligence research has experienced twists and turns in bottleneck and breakthrough. At the end of the 20th century, artificial intelligence technology developed slowly due to the lack of hardware conditions and algorithms. But since the beginning of the 21st century, big data, cloud computing and other information technologies have injected new vitality into the development of artificial intelligence. Low cost parallel computing, big data, deep learning algorithm and brain chip, these four technologies promote the rapid development of artificial intelligence. This upward trend has appeared, and the development of artificial intelligence has also provided new impetus for the penetration and integration of new generation information technology and industry. In recent years, artificial intelligence technology and industry all over the world has entered a stage of rapid development, so there are many new artificial intelligence applications and companies. International IT giants are trying to seize the commanding height of the industry and occupy a dominant position by acquiring a large number of new start-ups, recruiting top talents and increasing investment. The latest progress of artificial intelligence segmentation, such as machine learning, natural language processing and computer vision, has made great progress, and many new applications and products have been announced.

3 Significance and Development Status of English Teaching for Drug Safety Specialty in Higher Vocational Colleges

3.1 Significance of Professional English for Drug Safety in Higher Vocational Colleges

In recent years, with the continuous development of economy, the number of private pharmaceutical factories is increasing. Although there are drug trade with foreign countries, the level of China's pharmaceutical industry is still not high compared with western countries in terms of pharmaceutical technology. At present, many intellectual property rights of new drugs and special drugs need to be introduced from abroad. In this situation, we should first of all, Efforts should be made to develop new drugs and gradually close the gap of independent intellectual property rights of new drugs; Secondly, we should continue to learn foreign advanced pharmaceutical technology to supplement nutrition for our new drug research and development; Secondly, the domestic and foreign markets should be gradually opened for the domestic and newly developed pharmaceutical products. For our colleges and universities, the setting of students' majors should be in line with the market demand, which is particularly prominent in the cultivation of higher vocational students. At present, the supply of talents in pharmacy is in short supply, especially in biopharmaceutical specialty. Pharmaceutical graduates with rich practical experience and strong communication skills are very popular, and more scarce jobs are still directed to English majors with the above qualities. In this situation, the setting of drug safety English major in higher vocational colleges is very important. For the school, grasping the construction of important majors will improve the development of talent training level. For students, to grasp a good major is to get a golden key to their future life. As mentioned above, Pharmaceutical English is produced to meet the needs of social development, and its necessity is obvious [2].

3.2 The Current Situation and Problems of Drug Safety English Teaching in Higher Vocational Colleges

There will be many different problems in English Teaching in higher vocational colleges. In view of the practical needs of the society and the continuous development of pharmacy, Pharmaceutical English emerges as the times require, and many colleges and universities with pharmaceutical specialty have opened this course. However, Pharmaceutical English is a very young subject, In addition, our understanding of its importance, objectives and characteristics may not be comprehensive enough, which leads to the fact that many professional English courses for pharmaceutical majors have become a cover to cater for the enrollment of students or the investigation of higher authorities, and have not been given due attention.

From the perspective of curriculum setting of drug safety English major in higher vocational colleges, it is not reasonable. Although there are skills training courses, they are not completely aimed at the job; The syllabus is not perfect; From the perspective of textbook compilation, it is not in place. There are plenty of pharmaceutical textbooks and specialized English textbooks, but there are few practical pharmaceutical safety English textbooks; From the perspective of the orientation of drug safety English major, it is lack

of innovation. At present, it seems that many colleges and universities set up this major to cater to the quality education advocated by the state. In fact, they still focus on "subject" and "reputation". In this case, pharmaceutical students still study only for credits, not for employment, How to talk about the "professionalism" of higher vocational education itself? In the long run, it is difficult for the relevant professional students trained in this state to meet the requirements of social development; In terms of teachers, there is a lack of "double qualified" teachers. At present, in terms of English, there are more pure language teachers and more Chinese language teachers with strong pharmaceutical professional knowledge. However, there are few compound teachers who are proficient in English and rich in pharmaceutical professional knowledge. Although some teachers have received different degrees of training and have double qualified certificates, most of them lack practical experience; From the perspective of pharmaceutical students, they don't pay enough attention to the English learning of drug safety major. Many higher vocational students still focus on the standard of English a or even public English Band 4, but lack of attention to this major. Taking our college as an example, most pharmaceutical students think that as long as they get the English level certificate, they should pay more attention to it, On the road of English learning, once and for all, it's over. We don't take a long-term view.

4   An Overview of Blended Teaching Mode

The development of society and information technology has changed our way of communication and learning, which will inevitably change our way of thinking. The form of communication and the management of information challenge our cognitive ability and traditional classroom teaching paradigm. The development of Internet promotes the popularity of distance education, and also brings a new form of learning online learning. People define online learning as a process in which learners use the Internet to obtain learning materials and interact with teachers and other learners. One of the most critical problems of online learning is whether students can get better learning effect compared with traditional classroom teaching. The increase in the number of students and the diversification of the population structure, as well as the development of lifelong education and information technology have brought opportunities to the emergence of new teaching mode. The president of Penn State University believes that blended learning is "the only recognized development trend in today's higher education". Blended learning combines the advantages of traditional teaching and network teaching, and can effectively make up for their shortcomings, so it has won the favor of society and education. Blended learning (BL) is a combination of traditional classroom face-to-face teaching and modern information technology, which is being more and more applied to teaching. Some scholars predict that blended learning will become the "conventional mode" in curriculum teaching [3].

The elements of blended learning can be represented by the hexagon formed by two triangles. As shown in Fig. 1, the six elements are equally important in blended learning. The six elements are divided into two systems, which support each other and integrate with each other, reflecting the characteristics of blended learning.
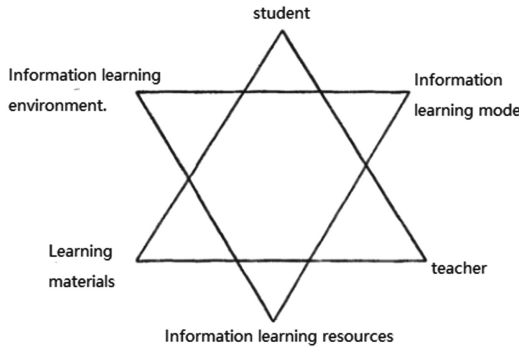
Fig. 1. Six elements of blended learning

5 Artificial Intelligence Technology and English Teaching of Drug Safety Specialty in Higher Vocational Colleges

5.1 Design of Saiets Teaching System

Artificial intelligence technology can take the professional academic perspective of modern educational technology as a foothold, under the correct guidance of information technology, complete the teaching module design with more significance of the times. As shown in the basic structure of saiets technology in Fig. 2, C/S terminal self-service system can be realized in both online and offline States, and B/s online system can also be realized in online state. The running mode of saiets includes offline mode and online mode [4]. Online connection can be realized through Internet mode. Offline mode is often called offline operation. In the process of using, users can download the system database in advance through the setting of the terminal server. Even in the offline state, they can also obtain intelligent services and knowledge provision through the artificial simulation system of the terminal server. The arrangement of the course is mainly in the form of courseware. The assistant teaching module takes the instructor as the important experiencer, while other learning modules are more oriented to English learners. Artificial intelligence technology can realize data and information mining through the courseware design of the instructor, and through the use of the instructor's teaching theory, it can give some reference and influence to the learning scheme of the students in another section. In the arrangement of the courseware, it involves the stage test and comprehensive ability evaluation of the students, Learners can choose their own courseware and video to solve the problems and realize self-learning and targeted exercise. Artificial intelligence technology divides learning content into several sections, which may include learning knowledge section, evaluation section, homework section or exercise section, so that learners can choose exercises more independently. After students complete the small section of learning, the system will automatically generate students' learning results and related maps, and give corresponding scientific guidance and suggestions, So that students can fully understand their own learning situation. And artificial intelligence technology can also be reflected in the aspect of online intelligent chat. Through the chat interface, learners can use voice to have a dialogue or ask questions directly. Artificial

intelligence technology can help students deal with problems quickly through solving questions, which is also an important application in the field of drug safety professional English education.
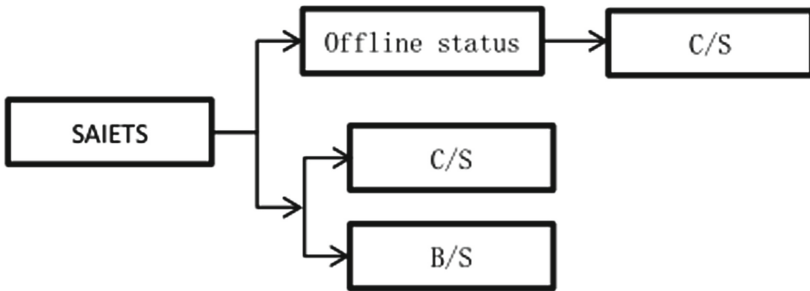

Fig. 2. The basic structure of saiets technology

5.2 Change the Traditional Teaching Quality of Colleges and Universities Through the Power of Science and Technology

Some colleges and universities are bound by traditional education mode, so it is difficult to improve the teaching quality or the innovation of teachers. Facing this dilemma, the business English Teaching in Colleges and universities needs to be separated from the old rigid by the power of modern science and technology, and artificial intelligence technology has become the best choice. It can improve the teaching effect of the teaching is not good, correct and complement the short board of the actual curriculum, so that the daily teaching is more suitable for the curriculum standard and the curriculum concept of the times. In the reform of science and technology education, AI technology can play its own unique advantages in language learning, and then make more perfect teaching plan for the teachers.

5.3 Change the Thinking Problems in Business English Teaching in Colleges and Universities

There are always problems in Chinese English teaching, which mainly shows that students have poor English thinking and lack of knowledge of history and culture in English subjects. Therefore, students can only exchange English through the complex mode transformation of "English translation and Chinese translation" and can not realize the form of "English + English", It also leads to some mistakes in English translation. The lack of oral communication ability is a typical characteristic of this problem. Artificial intelligence technology can construct a perfect English teaching system through computer language. In view of the phenomenon of lack of practical application communication ability, it can simulate the educational characteristics of human brain, which can enable students to cultivate the relative "English thinking" in daily dialogue and communication, And become the representative education achievement of modern information

technology. Through computer-aided teaching, it can improve the commanding point of the reform of education mode, and make English teaching classes at all stages be able to conduct full personalized guidance, thus improving the quality of the English classroom for drug safety specialty in Colleges and universities in China.

6 Conclusion

To sum up, artificial intelligence is not only the product of the development of science and technology, but also the best partner of teaching. The application of artificial intelligence technology in the teaching of drug safety English in higher vocational colleges, combined with the hybrid teaching mode, will not only help students to optimize the skills of drug safety English, but also free teachers and students from the heavy teaching tasks, Improve the efficiency and quality of the classroom, realize the innovation of teaching.

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