Autonomous Learning And Evaluation of College English In the Context of Artificial Intelligence

Ping Shen[*]

Zhejiang Yuexiu University, Zhejiang Shaoxing 312000

Abstract: In recent years, the impact of AI technology on society has become more and more extensive and far-reaching. The rapid development of AI technology has affected the college English education industry. Computational technology improves teaching quality. The cultivation of college English autonomous learning ability is a process from the change of learning concepts, the training of autonomous learning habits to the formation of habits. Due to the serious impact of traditional teaching concepts and test-oriented teaching, Chinese college English teaching is teacher-centered, teaching language knowledge and skills only, neglecting the cultivation of students' language use ability and autonomous learning ability, Therefore, through the reform and development of artificial intelligence, promoting students' concept of autonomous learning of college English, cultivating students' awareness of autonomous learning, Mastering autonomous learning strategies and effective evaluation methods for college English is worth exploring in this study.

Keywords: AI technology; Automation system; Artificial intelligence; English

1.Current Situation of College English Education in the Context of AI

In the past 20 years, the teaching method based on intelligent guidance has made great progress in this field, and has carried out in-depth discussion on it (Sussex, 1992). For the education and learning of English, Sha (2009) pointed out that the use of AI technology can effectively improve students' language acceptance, listening and reading abilities. In addition, Poitras (2016) and others believe that the intelligent guidance system can analyze students' behavior, diagnose their defects, and provide personalized teaching to them. Luckin (2016) also proposed that intelligent tutoring system can provide intelligent personal guidance for each learner by imitating one-on-one human tutors, which is regarded as the most efficient way of learning and education. The system can lay a foundation for the development of collaborative teaching , and for the development and practice of collaborative teaching. The research of Bailey (2019) also provides evidence for the conclusions of the above researchers. He explained the application of artificial intelligence in the class through examples, which can measure and determine the students' mastery of the learning content, which shows that an ITS learning management system can provide individual education for each learner. In addition, Bailey (2019) pointed out that relevant scholars have not only conducted in-depth research on the teaching of ITS, but also conducted in-depth analysis on the emotional situation in the teaching process of ITS, so that they can make corresponding adjustments to it, so as to maximize the teaching effect. From this, we can see that some features of using AI in language learning at present are as follows: using big data support can provide personalized learning, simulated teacher guidance and immersive/virtual reality experience.

Figure 1 AI English language skills learning

2. The Connotation of Autonomous Learning

Autonomous learning is a new concept of learning mode, and also a challenge to traditional teaching concepts. Henry Holec first introduced the concept of autonomy into foreign language teaching. In his book "Autonomy and Foreign Language Learning", he proposed that autonomy is "an ability to be responsible for their own learning". Learners have the ability of autonomous learning, which means that learners can determine their own learning objectives, content, materials and methods, determine the time, place and progress of learning, and evaluate learning. Little believes that learner autonomy is "an independent, critical thinking, decision-making and independent behavior ability", and is "the psychological connection between learner learning process and learning content". Other foreign scholars, such as Dickinson, Nunan, Little ood, have also defined autonomous learning from different perspectives. Based on the definitions of autonomous learning given by different scholars, it is not difficult to find that researchers either emphasize autonomous learning as an ability or consider autonomous learning as a behavior, but all researchers emphasize learners' own learning responsibilities. Combined with the characteristics of English teaching in China, we believe that under the English teaching environment in China, college students' autonomous English learning means that students can establish their own learning objectives and make learning plans, effectively use learning strategies, monitor the use of learning strategies, and monitor and evaluate the process of English learning on the basis of understanding the teachers' teaching objectives and requirements.

3.Application of AI Technology in English Autonomous Learning
3.1 Using Artificial Intelligence Technology to Conduct Speech Autonomy Training

In English class, it is difficult for students in one class to have enough time for oral practice. It is very unrealistic to ask the teacher to correct their pronunciation for each student in order to make every student open his mouth to speak English in the classroom. In the process of English teaching, the use of AI technology in oral teaching can effectively improve students' language expression ability. "Cloud School Home", "Smart Learning Network" and other network platforms provide teachers with a large number of learning resources and convenient and fast learning methods. The teacher can arrange oral assignments according to their learning progress, read words, sentences and texts aloud, and evaluate students' pronunciation through the system. In terms of fluency, accuracy and completeness, the teacher can give students corresponding marks, so that they can understand their own problems in voice reading and what needs special attention on these problems. At the same time, words like, Your English is great! Which are encouraging words. Students can test their ability at any time. If they are not satisfied with their ability, they can test again and again until they reach their ability. Such one-to-one training, evaluation and guidance cannot be completed by any teacher. In addition, there are many software that use AI technology to help students learn and improve their English level, such as English Fluency, English Humor Dubbing, Box Fish, etc. These softwares provide them with a lot of learning resources. They can select for training according to their own teaching materials, You can also learn according to the topics you are interested in. The learning content is systematic and targeted. Using this AI program to learn English, students can learn and exercise by themselves, and their self-learning ability has been improved to the maximum extent, and the effect is also very good. These language training software are all evaluated by AI to evaluate each child's English pronunciation, including the accuracy of pronunciation, repeated repetition, pause, hesitation, which are very useful and can help children improve their voice and intonation.

3.2 The Assistance of AI to Autonomous Listening Training

With the support of AI technology, autonomous listening training can be more convenient and efficient in many online learning platforms and software. In daily teaching, teachers only spend very little classroom time to guide students in listening skills and strategies, and listening training is mainly arranged for students to carry out independently. In the general class listening training process, multimedia equipment is used to play audio files, students listen to the recording and complete the exercise, check the answers independently, and then check the raw materials to correct mistakes. Such learning process is not conducive to the improvement of listening ability of students with weak foundation.

4. In Addition, Chat Robots Have also been Used in Oral Training

Chat robot is the embodiment of a conversation agent. It is also called chat robot, robot or virtual human. It is "a computer program that attempts to simulate human conversation in the form of words, or both". At present, some have been widely used for commercial use, while others are mainly used for oral education (Sha, 2009). However, the effectiveness of using "small talk" in English teaching needs further experiments to verify. As for China's AI technology, both in English education and academia, many scholars have discussed this issue. In the plan of China's Education Modernization 2035, it is clearly proposed that intellectualization are the development trend"

(National Development and Reform Commission, 2019). In addition, China has also developed a series of AI-based English teaching networks or applications, such as: correction network, English fluency, IELTS intelligence, iSpeek, EAPTalk, etc. Some Chinese scholars also believe that in English individualized education, AI technology can be used to improve the ability of English students in their spare time and promote the innovation of English education students' autonomous learning.

5. The Development of English Teaching in China from the Perspective of Language AI

As we know, we have entered a period of "AI", which can neither be evaded nor ignored. With the application of language intelligence technology in all aspects, its emergence has not only caused major changes in people's work and life, but also provided a rare opportunity for our English teaching, has a great impact on our English teaching. In this era context, we should only accept this intelligence. We can carry out our work by adjusting the training program of foreign language majors, building a smart foreign language education system, and establishing a comprehensive team of teachers for language intelligence. Through practical measures, we can promote the organic combination of foreign language education and the development of language intelligence and match it. Only in this way can our language teaching work keep pace with the times and achieve sustainable development.

5. 1 Adjusting the Training Program for College English Majors

The training program involves training objectives, training methods and curriculum system. As mentioned earlier, China's foreign language education has always targeted the training of foreign language majors at general and compound foreign language professionals, requiring foreign language graduates to have solid basic foreign language skills and foreign language and cultural knowledge, master foreign language and literature or master a professional knowledge and skills. The curriculum system mainly consists of foreign language and literature knowledge and ability courses or relevant professional knowledge and skills courses. The implementation of these training programs has well matched the needs of social development for general and compound English professionals, but there is still a certain distance from the needs of language intelligence development. To this end, we should make appropriate adjustments to the existing training programs for foreign language majors in terms of training objectives, training methods and curriculum system.

5.2 Training Objectives of Foreign Language Majors should be Adjusted

On the basis of the original training objectives of foreign language majors, the new goal of training foreign language professionals oriented by language intelligence has been added. According to this training goal, foreign language graduates should master professional knowledge and skills related to language intelligence, such as voice processing and processing knowledge and skills, corpus and database construction and application knowledge and skills, computational linguistics knowledge and skills and machine translation quality evaluation knowledge and skills, on the basis of having solid basic foreign language skills and foreign language cultural knowledge. Improve the awareness of autonomous learning of college English through the guidance of realizing strategic objectives based on intelligence.

5.3 Helping Students Find Internal Motivation Through AI

From "I want to learn" , the AI system traces back to the source to solve the problem of knowledge gap, stimulate children's learning motivation, help students find internal motivation, gain a sense of achievement, have interest in learning, and achieve autonomous learning. It is to train students to systematically analyze problems and solve problems to guide students to solidify good Study habits help students learn to study. These two changes are to solve the problems at the bottom motivation level and ability level. After these two steps are completed, the learning of subject knowledge will be natural. Norm Chomsky, a social and political ethicist at MIT, once said, "The purpose of education is to help people learn by their own power." Learning is the process of finding and solving problems. Evaluation returns to the essence of education, respects the underlying logic of education, uses artificial intelligence, adaptive, big data and other technologies to stimulate students' interest in learning, guide students to solve problems independently, and help students learn to think, Let students become masters of learning.

5.4 The Training Objective of Using Intelligent Tools to Cultivate College English Autonomous Learning Consciousness

Foreign language majors oriented to language intelligence offer courses in language intelligence and related fields, such as language intelligence foundation, natural language processing, speech recognition and speech synthesis, intelligent evaluation, corpus foundation and construction and application of bilingual corpus, so that students can master the basic principles of language intelligence, grasp the

development trend of language intelligence, and help students master the basic methods and paths of corpus and database construction and application, Organize students to directly participate in the development of corpus and database. We should also offer courses such as basic machine translation, pre-editing and post-editing to help students master the principles and requirements of machine translation, pre-editing and post-editing, and organize students to directly participate in the research and development of machine translation systems. In addition, we can also offer general courses related to language intelligence for foreign language majors in other directions, so that students can understand the development history, research fields and application value of language intelligence, and cultivate their language intelligence literacy. Let students have more access to education and participate actively in learning through the network at any time and anywhere.

5.5 Constructing a College Intelligent English Education System to Improve the Evaluation Effect

Smart education refers to the deep integration of artificial intelligence technology (including language intelligence technology) and education (Xu Ye and Huang Yao, 2019), rather than traditional computer-assisted teaching or network teaching. Generally speaking, the application of AI technology in education is mainly manifested as subjectivity and assistance. The former refers to the relevant educational work or system with artificial intelligence as the main body, such as intelligent teaching system, intelligent question answering system and intelligent evaluation system. The latter means that AI is embedded in other teaching, learning and management systems with corresponding functional modules or partial structures, such as adaptive learning systems and intelligent education decision support systems.

5.6 The Organic Integration of Artificial Intelligence Technology and Foreign Language Education Promotes the Development of Autonomous Learning and Evaluation of College English

Smart foreign language education refers to the organic integration of artificial intelligence technology including language intelligence technology and foreign language education.Smart foreign language education focuses on the application of information technology and artificial intelligence technology, and its main features are as follows:

(1) Openness means the co-construction and sharing of educational resources;

(2) Intelligence, that is, taking intelligent teaching as the main content to realize personalized teaching and personalized learning;

(3) Integration refers to the integration of teaching, management and evaluation;

(4) Diversification is the diversification of evaluation.

Compared with traditional foreign language education, smart foreign language education has achieved four major changes, namely, from knowledge teaching to problem learning, from teaching first to learning based teaching, from individual learning to cooperative learning, and from single evaluation to multiple evaluation. Promoting the development of autonomous learning and evaluation of college English and implementing smart foreign language education can promote the transformation of contemporary foreign language education and greatly improve the quality of foreign language education. A large number of intelligent practices have proved that strategy training plays a positive role in stimulating students' learning motivation, improving students' cognitive and metacognitive level, optimizing learning methods, enhancing students' self-control ability, and improving students' academic performance.

5.7.Intelligent optimization of learning plan

Intelligent optimization of learning plan is another application of AI technology in college English independent learning. By analyzing factors such as learners' learning progress, grades and preferences, the intelligent optimization learning plan can make personalized learning plans and goals for learners. This optimization not only improves learners' learning efficiency, but also reduces the difficulty and challenges in the learning process.

6.Intelligent Q&A and Counseling

In the independent learning of college English, learners may encounter various problems. The intelligent Q&A and tutoring system can automatically answer and guide learners' questions through natural language processing technology. If they encounter problems that cannot be solved, the system can also promptly transfer them to human customer service or professional teachers for answers. This intelligent Q&A and counseling can greatly improve the learning efficiency and effectiveness of learners.

7. intelligent management and supervision

Intelligent management and supervision system can comprehensively track and manage learners' learning behavior and progress. By analyzing the learner's learning data, the system can discover the learner's learning problems in time and provide corresponding learning suggestions. At the same time, the system can also evaluate learners' learning performance and progress, providing teachers and learners with more accurate learning feedback and guidance.

8..Intelligent Data Mining and Analysis

In the context of artificial intelligence for independent learning and evaluation of university English, intelligent data mining and analysis is one of the key technologies for realizing personalized learning. By analyzing learners' historical learning data and behaviors, we can gain a deeper understanding of learners' learning interests, habits and achievement trends. Based on these data, we can provide learners with more accurate and personalized learning resources and suggestions. At the same time, intelligent data mining and analysis can also provide teachers with more comprehensive and accurate teaching feedback and guidance to help improve the quality and effectiveness of teaching.

In conclusion, the application of artificial intelligence technology in college English independent learning and evaluation provides learners with more personalized and accurate learning resources and suggestions. At the same time, it also provides teachers with more comprehensive and accurate teaching feedback and guidance to help improve teaching quality and effectiveness. However, we also need to see that there are still some problems and challenges in the application of AI technology in the field of education, such as data security, privacy protection and educational equity, which need to be further explored and studied.

9. Conclusion

To sum up, we should promote the organic integration between college English education and language intelligence, cultivate foreign language professionals with knowledge and skills related to language intelligence to meet the needs of college intelligence development, and strive to build a smart English education system. To this end, with the important goal of docking the development of college English intelligence, we will establish an interdisciplinary research team, set up a language data science and application discipline, build a college English digital humanities and language intelligence laboratory, develop an intelligent multilingual teaching and research platform, and actively explore a new path for the autonomous learning and evaluation development of college English education from the perspective of intelligence. By giving full play to the unique advantages of college English, we should integrate artificial intelligence into professional teaching, cultivate students' autonomous learning ability and develop better.

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