Exploration of Translation Technology Teaching in Colleges and Universities in the Era of Artificial Intelligence

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Abstract: In the era of artificial intelligence, new technologies such as translation software, translator and speech recognition have injected vitality into English translation teaching in colleges and universities, which is conducive to innovating English translation teaching methods, stimulating students' interest in learning, helping them to master English-Chinese translation skills, and improving their English translation ability. This paper analyzes the importance of artificial intelligence technology enabling English translation teaching in colleges and universities, analyzes the inherent attributes of artificial intelligence in college English translation teaching, and puts forward some strategies to use translation software to carry out teaching, create English-Chinese translation teaching situations, carry out mixed teaching and integrate diversified translation teaching materials to further improve the quality of English translation teaching in colleges and universities.

Keywords: Artificial intelligence; College English; Translation teaching; Importance; Teaching strategies

1. Introduction

With the rapid development of artificial intelligence, big data, cloud computing, speech recognition and other technologies, the traditional manual translation mode has gradually transformed to collaborative computer-aided translation and neural network machine translation, which has improved the level of English translation, but has caused a certain impact on the employment of English majors in colleges and universities. Therefore, college English teachers should treat artificial intelligence technology dialectically, apply translation software and speech recognition software reasonably to carry out translation teaching, guide students to understand the use of English vocabulary and sentence patterns in different contexts, enrich their English knowledge reserve, and thus improve their English translation ability.

2. The importance of artificial intelligence to enable English translation teaching

2.1. It is conducive to improving the quality of English translation teaching

Artificial intelligence technology can create realistic English dialogue scenes, guide students to learn vocabulary, grammar and other knowledge in different contexts, and deepen their understanding of the cultural differences between English and Chinese, thus improving the accuracy of their English translation and improving the quality of English translation teaching. At the same time, artificial intelligence is conducive to innovating English translation teaching methods in colleges and universities, helping teachers to carry out mixed online and offline teaching, monitoring students' online learning status in real-time, using big data to carry out E-C translation online tests, accurately analyzing students' problems in English translation, facilitating teachers to carry out targeted teaching, and thus improving the effectiveness of English translation teaching [1].

2.2. It is conducive to improving students' English translation ability

Artificial intelligence technology can provide personalized guidance for students, facilitate them to use professional English translation software and speech recognition technology for independent learning after class, help them master more authentic English expressions, enrich their English knowledge, meet their personalized learning needs, and help improve students' English translation level [2]. In addition, artificial intelligence technology provides students with online learning space, which is convenient for them to use mobile phones and tablets to learn English translation knowledge so that they can carry out online English translation and simultaneous interpretation training, to effectively improve their English translation level.

2.3. It is conducive to improving students' cross-cultural understanding ability

Influenced by Chinese thinking, many college students translate English materials stiffly and seldom combine English context and American culture, which reflects a lack of cross-cultural understanding ability. The integration of artificial intelligence into translation teaching is conducive to the creation of cross-cultural context, which makes it convenient for English teachers to retrieve British and American cultural materials related to translation materials, and push these materials to students so that they can translate concerning British and American cultural background materials, and improve their cross-cultural understanding ability [3,4]. At the same time, artificial intelligence technology can help students translate materials in combination with British and American culture and context, so that their English translation is more accurate and their expression is more authentic, with the quality of English translation teaching improved.

3. The inherent attributes of artificial intelligence in college English translation teaching

3.1. Inducement

Artificial intelligence technology has certain inducements to English translation, which are mainly reflected in the following two aspects. First, college English teachers can use English translation software and short English videos to create context, guide students to translate materials in situations, improve their sense of English, guide them to use artificial intelligence technology to search the knowledge points they are interested in and help them master English translation skills [5]. Secondly, English teachers can collect students' translation results through English translation software and blended teaching platforms, evaluate the accuracy and artificiality of their English translation, point out the problems in their translation, push personalized translation learning materials for them, stimulate students'

enthusiasm in English translation learning, and thus improve their English translation ability.

3.2. Scientific research

In the era of "Internet plus," artificial intelligence has broad development prospects in English translation teaching, and it is imperative to integrate it into college English translation teaching. It can not only reduce the difficulty of English translation teaching, but also improve the training quality of translation talents, promote the development of English scientific research, and highlight the scientific research attribute of artificial intelligence technology in college English translation teaching. The integration of artificial intelligence technology into college English translation teaching is still in its development stage and has high scientific research value. Therefore, English teachers in colleges and universities should make reasonable use of artificial intelligence technology to carry out translation teaching, import original English novels, English news and other translation materials, guide students to combine the British and American culture and theme context to translate, improve their English translation ability and cross-cultural understanding ability, enable translation teaching by artificial intelligence, and improve the level[6] of English teaching and research.

3.3. Theoretical

English translation teaching has a strong theoretical nature, which requires students not only to master the theoretical knowledge of translation, but also to understand the cultural differences between Chinese and English to improve their humanistic quality and English translation ability. Teachers can use artificial intelligence to collect original English materials on different topics, infiltrate English culture education, guide students to explore the differences between English and Chinese languages and cultures, and guide them to translate according to language culture and context to make their English translation more accurate and authentic [7].

4. Teaching strategies of college English translation technology in the era of artificial intelligence

4.1. Using translation software to carry out teaching and innovate translation teaching methods

In the era of artificial intelligence, translation software has injected vitality into the reform of English translation teaching in colleges and universities, provided English teachers with high-quality teaching resources, facilitated students to practice English-Chinese translation independently, and effectively improved the quality of English translation teaching. First of all, teachers can collect teaching materials according to the translation teaching content, integrate the knowledge points related to the translation software into the teaching, expand the knowledge points of the textbooks, enrich the students' English knowledge reserve, and thus improve their English translation ability. Students can combine the knowledge points of textbooks and the knowledge points pushed by the translation software to translate, and compare their translation results with those of the Youdao Dictionary, to better master English translation skills and improve their English translation skills [8]. For example, teachers can use Youdao Dictionary to translate "She looked at me in an absent way," guide students to analyze the meaning of "absent" in the context from various angles, and guide them to distinguish the usage of adjectives such as absent, and perplexed. In addition, Youdao Dictionary can be used to search phrases related to "absent," and explain special collocations of "absent friends" such as the "absent friend" digging for turtles, and "absent treatment", to help students master the translation skills of "absent." Secondly, teachers can guide students

to scan the text with Youdao Dictionary, use intelligent scanning technology to convert pictures into English, and perform intelligent translation of English, so that students can experience the convenience of intelligent translation software [9].

4.2. Creating English-Chinese translation teaching situation to improve students' translation ability

College English teachers should actively carry out English-Chinese translation teaching, use artificial intelligence technology to create English-Chinese translation situations and guide students to analyze the use of vocabulary and grammar in the situation, to improve the accuracy of their English-Chinese translation. First, English teachers can use artificial intelligence technology to carry out human-machine dialogue translation training, simulate different translation contexts, and use speech recognition technology to carry out human-machine dialogue translation training, so that students can master more English translation knowledge through dialogue [10]. For example, teachers can select different dialogue scenes in the English translation software, let students have a human-machine dialogue with the translation software, and let them translate the dialogue content, and use this novel translation teaching method to stimulate students' interest in learning. Through man-machine dialogue, students can practice their oral English and listening, quickly record the key information in the dialogue, give correct English and Chinese translation, experience the process of English-Chinese bilingual translation, master the basic skills of simultaneous translation, and improve their English translation level. In addition, teachers can also encourage students to carry out online English translation, push English translation texts of different topics, require students to do a good job of translation within the specified time, use artificial intelligence technology to quickly analyze the translation results of students, point out the problems in students' translation, and carry out precision teaching to solve these problems, to improve the quality of English translation teaching.

Second, teachers can use natural language processing technology to carry out English grammar-translation teaching. They can guide students to analyze the example sentence "I have been coming to Beijing for thirteen", ask them to write down their translation, then use the translator to translate, and compare the translation between students and the translator. Guide students to analyze the reasons for errors in the translation [11]. By contrast, teachers can guide students to translate from the perspective of grammar. The example sentence belongs to the present perfect tense with continuous meaning, and the translator's translation is "In the past 13 years, I have come to Beijing often." This version is more accurate and helps students master the present perfect translation skills.

4.3. Carrying out mixed online and offline teaching to build a smart classroom

English teachers should actively carry out mixed online and offline teaching, linking the three aspects before, during, and after class, to improve the quality of translation teaching. In online teaching, teachers can guide students to analyze the content of micro-lessons, encourage them to share the preview results online, motivate them to speak online and interact with each other, and identify the online teaching atmosphere. For example, teachers can guide students to translate "Theory must not be divorced from practice" online, guide them to master the passive sentence style translation skills and let them first transform the passive sentence into an active sentence, clear the subject and the passive body, to improve the fluency of the English translation [12,13].

4.4. Integrating diversified translation materials to cultivate students' cross-cultural understanding ability

English teachers can make use of artificial intelligence and big data to develop high-quality Internet teaching

materials and establish a digital translation teaching resource library, which can be divided into business English, American and American literature, current political news, and other modules, to meet students' personalized learning needs, deepen their understanding of English and Chinese language and culture, and improve their cross-cultural understanding ability. First of all, teachers can collect Tang and Song poems translated by Mr. Xu Yuanchong, a famous Chinese translator, and carry out appreciation teaching of ancient poetry translation, so that students can feel the concise and implicit beauty of the Chinese language, guide them to analyze Mr. Xu Yuanchong's beautiful and concise translations, enhance their cultural confidence and improve their cross-cultural understanding ability [14]. In addition, teachers can ask students to translate ancient poetry by using translation software, let them input the ancient poetry to be translated in the translation software, let them compare the difference between machine translation and manual translation, enrich their professional knowledge reserve, and improve their translation ability between English and Chinese.

Secondly, teachers can collect popular English international news clips from platforms such as Bilibili and Douyin, integrate current political news into translation teaching, promote ideological and political construction of the curriculum, enhance students' social responsibility, correct their attitude toward Chinese and Western culture, and improve their moral quality [15]. For example, teachers can import the BBC news report about the Forbidden City in Beijing, encourage students to translate the news independently and encourage them to analyze and discuss the translation, promote effective interaction among students, and further enhance their translation ability and cross-cultural awareness.

5. Conclusion

In short, artificial intelligence has promoted the reform of English translation teaching in colleges and universities, provided students with a large number of English translation learning resources, guided them to explore American and American culture, and effectively improved the quality of translation teaching and students' English translation ability. College English teachers should use translation software to carry out teaching, innovate translation teaching methods, and intelligently test the accuracy of students' English translations. Using artificial intelligence to carry out online teaching and build smart classrooms. Create English-Chinese translation teaching situations to improve students' translation ability. Introduce British and American news, English classics and film and TV series and other teaching resources to cultivate students' cross-cultural understanding ability to improve the quality of English translation teaching.

Disclosure statement

The author declares no conflict of interest.

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