

Exploration of English Translation Teaching Reform Based on Artificial Intelligence Technology

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Abstract: With the advancement of technology, artificial intelligence technology is becoming increasingly mature. The application of artificial intelligence technology in English translation teaching has completely changed the traditional translation mode, further stimulating discussions in the education sector on whether machine translation can replace human translation and whether artificial intelligence technology can be used as a mature translation teaching tool. Therefore, this article first explores the problems of artificial intelligence technology in English translation teaching, emphasizes the importance of translation teaching based on artificial intelligence technology, and further pointing out feasible strategies for implementing English translation teaching reform based on artificial intelligence technology.

Keywords: artificial intelligence technology, English translation, teaching reform

Introduction

The English subject not only requires students' flexible application skills, but also their excellent English communication and translation skills, so as to provide a solid foundation for students to enter the workplace in the future. In the current context of artificial intelligence technology, teachers are expected to explore innovative teaching concepts to optimize translation teaching, achieve appropriate use of artificial intelligence technology in subsequent English translation education, thus stimulating students' learning enthusiasm, and guiding them to engage in innovative thinking.

1. The difficulties encountered in current English translation teaching in universities

Firstly, English education in colleges and universities is continuously improving and gradually emphasizing the enhancement of students' abilities and cultivation in the comprehensive application of English, which includes multiple skills such as listening, speaking, reading, writing, and translation. Among them, translation ability is a prerequisite guarantee for students' development. In recent years, the College English Test-4 and College English Test-6 have paid more attention to the setting of translation question types, but there are still some issues that need to be improved. For example, in English education in colleges and universities, there is no specialized course designed for translation, nor is there a compilation of translation textbooks, which has a negative impact on the improvement of students' translation ability, leading to irregular teaching by teachers, which is not conducive to the further improvement of students' translation ability^[1].

Secondly, when writing textbooks for college English, excessive emphasis is placed on students' basic knowledge, while neglecting their own thinking freedom, such as the lack of targeted translation content and the failure to design content based on the professional characteristics of students. At present, although some translation content has been added

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to the arrangement of college English textbooks, these contents are more focused on basic teaching and lack the cultivation of students' translation ability. So, the cultivation of students' English translation ability is still insufficient.

Thirdly, in the actual practice of English translation education in universities, teachers should deepen their teaching concepts and roles. We need to start from the traditional perspective of exam oriented education to help teachers break free from constraints. Because some teachers still use traditional teaching rhythms and provide limited opportunities for students to showcase their translation skills, this not only weakens their learning enthusiasm but also hinders the improvement of their English translation abilities. For the classroom subject, teachers should become guides for students, providing them with advice and support at critical moments, while avoiding excessive intervention in their performance during the translation process.

Fourthly, the content and methods of current English translation education textbooks should be adjusted and innovated. In the current translation teaching process, the aging of teaching content has become a significant problem. Most teachers focus too much on teaching translation skills and other theoretical aspects, but lack the latest current affairs policies closely related to real-life situations. It leads to students often facing the problem of disconnection between translation work and daily life when conducting real translation.

2. The practical significance of implementing English translation teaching reform based on artificial intelligence technology

Artificial intelligence technology can provide diverse educational resources for translation teaching. In the context of artificial intelligence, conducting translation education practice can obtain more educational materials, thereby providing students with a more professional and favorable learning environment. In the past, English translation teaching often focused on textbook content, and few teachers added additional teaching materials outside of the curriculum. But by utilizing the various functions of artificial intelligence technology, rich online resources can be integrated into English translation teaching. This not only allows students to experience more diverse and interesting translation content, but also enhances the immediacy of translation learning. Students can master current popular translation content, then use artificial intelligence to search for English materials of interest, and undergo practical translation training.

The adoption of artificial intelligence technology helps teachers to have in-depth communication with students, as in the context of adopting artificial intelligence technology, teachers can avoid time and space constraints and arrange various translation tasks and practical training for students. In traditional educational practices, it is often not possible to ensure that students efficiently complete their homework. But with the help of artificial intelligence, it is possible to evaluate the completion status of student assignments in real time and provide timely feedback. By utilizing artificial intelligence technology, online guidance is provided for students' translation work, which further reflects the positive role of artificial intelligence technology in English translation teaching in universities. In addition, the adoption of artificial intelligence technology helps to break the monotony of current translation teaching models, promote the transformation of teacher roles, and make students the focus of teaching.

3. Feasibility strategies for English translation teaching reform based on artificial intelligence technology

The reform of English translation teaching based on artificial intelligence technology requires teachers not only to deeply understand the various advantages of artificial intelligence technology and its close integration with actual teaching of English translation in universities, but also to thoroughly analyze various problems in English translation teaching in colleges and universities, find effective solutions, and fully reflect the multiple advantages and values of artificial intelligence technology, making English translation teaching in universities more professional, and promoting the progress of practical teaching of English translation, so that students can receive rewards in the process of participating in practice and achieve continuous improvement of translation ability.

3.1 Implementing a networked teaching mechanism for innovative English translation in universities

According to the analysis of the current English translation teaching system in universities, translation teaching is usually led by teachers, which leads to students being unable to maintain enthusiasm in the learning process, further affecting the overall teaching effectiveness and quality. In the context of artificial intelligence, the speed of information dissemination is gradually accelerating. In order to enable students to obtain the latest and comprehensive knowledge, English translation teaching in universities needs to be updated in sync with the times. Based on this background, teachers need to leverage advanced artificial intelligence technology to build a comprehensive online education system, thus enriching educational content and stimulate students' learning enthusiasm^[2].

Therefore, in order to reform translation teaching in practical teaching, teachers need to select appropriate teaching materials based on the learning characteristics of students, and ensure that students use learning methods that are suitable for themselves. Given the significant differences in translation and personal learning abilities among students, teachers must continuously integrate traditional and modern teaching strategies to ensure effective integration of classroom and extracurricular education content. However, it cannot be denied that some teachers focus too much on improving students' professional abilities and independent learning skills, while neglecting curriculum planning and design. This approach fails to truly reflect students' learning needs and fails to select the translation and learning methods that best suit their actual situation. Therefore, in teaching practice, teachers should consider the real learning situation of students more deeply and actively promote a comprehensive and multi-dimensional teaching mode. In the process of designing English translation teaching, it is not only necessary to continuously cultivate students' innovation and autonomy, but also to selectively strengthen professional skills. It should be noted that in this stage of design and innovation, enhancing students' creative abilities is crucial, as only in this way can more comprehensive and in-depth professional knowledge and skill training be provided to students, expanding their cognitive scope^[3].

3.2 Implementing the construction of modern teaching forms based on artificial intelligence

Teachers should achieve the construction of modern teaching forms based on artificial intelligence. In the process of English translation teaching, students should not only have a complete understanding of basic English concepts, but also make clever applications and transformations of the content they have learned. Therefore, when carrying out practical translation teaching reform, teachers should enrich students' extracurricular knowledge reserves through various strategies. Given the vast amount of online information resources, students often do not have enough time to filter and identify these contents. And teachers need to leverage their guiding advantages. They need to use their professional knowledge and skills to help students discover information that matches their learning content, promote a deep understanding of the differences between Chinese and Western cultures, and further enhancing students' self-learning ability, improve learning enthusiasm, and broaden their knowledge base. Teachers need to flexibly utilize online resources to carry out teaching, helping students purposefully access and utilize online information to innovate teaching. University leaders should also encourage teachers to strive to integrate traditional teaching methods with online education, so as to fully tap into online resources.

3.3 Utilizing the advantages of artificial intelligence to achieve flexible teaching

The reform of English translation teaching based on artificial intelligence technology is not achieved overnight, but a gradual process. Teachers should be good at leveraging the advantages of artificial intelligence technology, flexibly teaching, and enable students to learn more efficiently and improve their learning efficiency with the support of artificial intelligence technology. Under the framework of artificial intelligence, translation teachers can break through the barriers of traditional teaching and achieve more diverse and innovative educational methods. Among them, the common teaching methods based on artificial intelligence technology currently include the following^[4]:

Firstly, a teaching model based on actual situations. Teacher can make full use of media tools such as video, voice, and text, to create a "realistic" environment for students, allowing them to engage in translation practice in this context,

thereby promoting the improvement of their practical abilities. Secondly, under the task-based teaching approach, teachers should guide students to perform translation tasks and showcase translation results with a “task” as the core. This approach is an educational approach that emphasizes the development of abilities and output as the core goals. Thirdly, the phenomenon analysis teaching model has strong comprehensiveness. When facing this mode, students need to analyze the underlying factors that lead to this phenomenon, explore solutions, and reach a regular teaching conclusion according to the phenomenon presented by the teacher. At the same time, students also need to cultivate their ability to deeply explore the phenomenon^[5].

In the practical teaching of English translation in universities, the use of artificial intelligence for teaching innovation and improvement can not only enrich the content of activity courses, but also flexibly adjust translation materials according to the actual learning of students, allowing them to gain richer translation experience in practice. In most cases, artificial intelligence technology mainly covers computer vision science, knowledge computing methods, speech recognition technology, and natural language processing techniques. This puts forward new requirements for teachers. Firstly, teachers need to master artificial intelligence technology in a timely manner in order to better apply it and guide students on how to complete designated learning activities by correctly manipulating artificial intelligence devices. With the help of artificial intelligence, students can improve their absorption and understanding of English translation materials. In the field of speech recognition technology, students’ descriptions in Chinese or English can be directly translated into the corresponding target language through computer tools, which can be used to verify the accuracy of their own translation. For example, in practical teaching work, when teachers provide students with the translation task of “She looked at me in an absent way.” Some students generally feel that the word “absent” represents different meanings such as missing or lacking, but have less understanding of the use of adjectives such as confusion and restlessness. Faced with the problem of students, teachers can first translate for them, and then use real-time translation tools to directly obtain the translation through oral means. Then, through comparison, they can gain a deeper understanding of the translated content of the vocabulary. Here, students can also observe other situations through an example, especially for memorizing low-frequency vocabulary such as “absent friend” and “absent treatment”. So that students can quickly understand the meaning of the sentence based on their experience when encountering these specific vocabulary in future English translation practice.

In addition, with the application of natural language processing techniques as the background, when teachers organize “English grammar topic translation activities”, they can flexibly use artificial intelligence systems to help students solve grammar problems that may be encountered in English translation courses, so that students can gain more profound learning experience in innovative English translation teaching strategies. Generally speaking, students have a stronger sense of participation in novelty, and their memory is usually more profound. Therefore, teachers should improve students’ English translation skills through new activity modes. For example, in the English sentence “I have been coming to Beijing for thirteen”, students often mistakenly translate it as “I have been in Beijing for 13 years.” However, from a grammatical perspective, this sentence is actually “present perfect tense” and also has a meaning of continuous state. With the help of artificial intelligence technology, students are able to understand accurate translation methods and translate them as “I often came to Beijing in the past 13 years.” Therefore, the adoption of artificial intelligence technology has a promoting effect on English translation teaching. Teachers should make the reform of English translation teaching based on artificial intelligence technology a top priority^[6].

4. Conclusion

Taking into account the above factors, it can be observed that with the deepening of current education reform, although society has invested many means and models to improve the quality of English translation education in Chinese universities, the past teaching methods no longer meet the development requirements of modern society, leading to a decline in student interest in learning. In view of this, the reform of English translation teaching in universities has become an urgent task. Teachers should actively use artificial intelligence in subsequent teaching to enrich translation teaching content, continuously improve the English translation teaching system in universities, ensure that students can actively

participate in learning, improve teaching standards, and cultivate more high-quality translation talents for society.

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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