



Application of Artificial Intelligence Technology in English Translation Skills Training

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Abstract. In the era of big data, artificial intelligence has been widely used in higher education, providing technical support for college teaching. In modern education, teachers are no longer just providers of knowledge, but become mentors and promoters of learning. Students need to process, analyze and use existing information to complete various activities and tasks. Taking China's training programs as an empirical study, this paper uses action research, quantitative and qualitative scientific research methods, based on modern translation teaching theory and artificial intelligence technology, takes translation training as an example, obtains research data on the evaluation of "dynamic" translation classroom effect, and innovatively puts forward the concept of constructing a "dynamic" model of translation teaching, aiming at improving the quality of English translation teaching in Chinese universities, cultivating compound foreign language translators, and further enhancing China's cultural soft power and international image from a national strategic perspective.

Keywords: artificial intelligence · English translation · Skills training

1 Introduction

With the wide application of information and communication technology in the world, higher education is applying artificial intelligence technology to traditional course teaching to meet the current needs of education and teaching. The emergence of artificial intelligence technology has greatly changed the learning environment of students and the teaching mode of teachers imparting knowledge [1, 2]. It is a new discipline, involving not only computer science, but also the mutual penetration of neurophysiology, psychology, linguistics and other disciplines. As a new intelligent technology, artificial intelligence has developed very rapidly. Artificial intelligence can simulate people's working and living environment and be programmed by computer system in order to complete intelligent, automatic and systematic operation [3]. This requires translators to have strong translation level, good professional quality and hard skills, which are more serious and political than other translation industries. Through research and analysis, the following model and basic process of "dynamic" teaching mode of English translation, taking artificial intelligence technology training as an example, are summarized

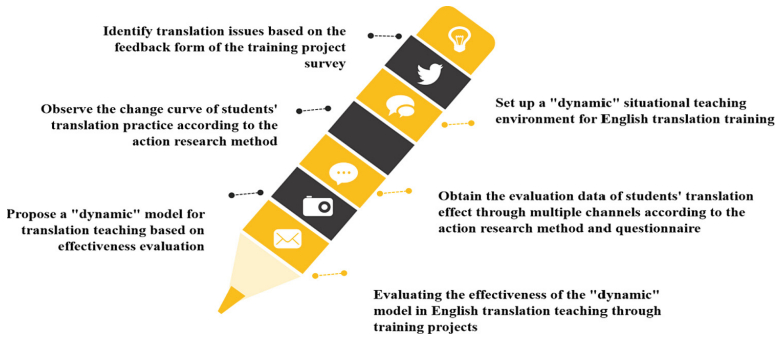


Fig. 1. The construction process of the “Dynamic” teaching mode of English translation

(see Fig. 1) [4]. In English translation skills training, the application of artificial intelligence technology can help learners more effectively master translation skills. Speech recognition technology can convert spoken language into text and use it as a material for translation learning, helping learners improve their listening and speaking abilities. Machine translation technology can automatically convert one language into another, providing learners with real-time translation and text translation tools to help them better understand and master English. Natural language processing technology can analyze and understand human language, can be used to help learners analyze and process grammar and vocabulary in English language, and provide correct translation. Intelligent assisted learning systems can provide personalized learning advice and guidance by analyzing learners’ learning behavior and data, helping them improve their English translation skills faster. Virtual speech assistant can interact with learners through speech recognition and natural language processing technology, answer learners’ questions, provide guidance on vocabulary and grammar, and help learners better understand and master English.

Blended learning has attracted more and more attention. The linkage of blended learning brings about the diversification of teaching methods, and teachers transfer knowledge and content through some technical platforms. Neumeier defines blended learning as the integration of face-to-face and computer-aided learning in teaching and learning environment. Sharma believes that blended learning is a system connecting face-to-face classes, and technology is properly used for teaching [5].

2 Application of Artificial Intelligence Technology in College English Teaching

2.1 Problems in Traditional College English Teaching

The poor improvement effect is reflected in listening training. Teachers often play the established learning materials repeatedly by using recording equipment to improve students’ listening level. There are two problems in this listening training mode: first, the training mode is too simple to arouse students’ interest; Secondly, it is possible to test

whether students understand the listening material only by a few questions, and the students may only rely on a few words in the listening material to answer the questions, but they don't really understand what that passage really means. An obvious problem in traditional English teaching is the lack of English pronunciation training, and standardized English pronunciation is actually the key to English learning. Listening, reading and writing without speaking is tantamount to learning dumb English, which is extremely unfavorable to the improvement of students' comprehensive English ability.

2.2 Artificial Intelligence Technology Applied to College English Teaching Mode

In order to solve the problem of poor improvement of traditional English teaching listening training, firstly, artificial intelligence will create differentiated individual learning plans according to different students' listening level and hobbies. Pushing different listening materials according to individual differences and individualized learning are undoubtedly of great significance for improving students' learning quality. Secondly, through the application of AR and VR technology, we can create an immersive listening environment, create a good learning atmosphere and enhance students' attention. As soon as possible, the application of intelligent auxiliary tools will help solve the problem of students' inattention. Thirdly, through the application of intelligent technology, the single and boring mode of traditional training can be changed [6]. Diversified listening resources in the language library can enhance the interest of training and improve students' interest in learning. Through the individual accurate evaluation brought by the application of intelligent technology, teachers can effectively grasp students' learning status, so as to provide personalized learning guidance in time [7].

3 Training Translation Effect Investigation

3.1 Investigation on the Overall Translation Effect of Training

By means of combining quantitative and qualitative methods, this paper investigates the translation effects of four groups of people who are mainly involved in the project from different recipient countries: trainees, translators, volunteers of English majors and volunteers of non-English majors, mainly from the following four aspects: Feedback from trainees on the translation level of translators in our province, overall evaluation and suggestions on foreign aid projects in our province, and suggestions for translators, volunteers of English majors and volunteers of non-English majors [8]. Self-evaluation of translators in the process of project implementation, and specific opinions and suggestions on translation industry education and translation talent training. Opinions and suggestions on the project itself, objective evaluation and suggestions on the overall translation work, training opinions and suggestions to improve the translation level of project managers. Evaluation of self-volunteer translation by English major volunteers and non-English major volunteers, and suggestions on English translation education in colleges and universities [9].

Table 1. Evaluation results of the transformation effect of a foreign aid training program in a province from 2020 to 2021

Evaluation content	5 = very good/very suitable/very satisfied 4 = good/suitable/satisfied 1 = Not good/not suitable/not satisfied					
	5	4	3	2	1	Overall evaluation
Is the system complete	100					5
keynote speaker	93.1	6.9				4.93
The English level of the speaker or the level of the translator	80.3	12.7	7			4.8
Teaching materials	89.7	10.3				4.9
Difficulty of the course (5 = easy 4 = too difficult)	91.6	8.4				4.92

3.2 Analysis of Survey Results

Based on the analysis of the research results of the training projects in the four years from 2020 to 2021 by combining quantitative research with qualitative research, as shown in Table 1, it is found that the trainees' satisfaction with the training translators is 80.3%, and it is considered that the English level of the student volunteers in the organizer is not ideal. The trainees' satisfaction with the management personnel and the overall training effect is between 85% and 95%, which gives high evaluation and affirmation to the organization and careful care of the organizer; The evaluation value of English major student volunteers for themselves is not high, ranging from 50% to 70%, which proves that students can correctly and objectively understand the gap and deficiency of personal English level, and have higher requirements for individuals, which shows that there is still a strong room for development.

3.3 Training Translation Effect Survey

The action research method of time-sharing classification is adopted, and the participants in the training translation work are investigated, which are divided into four categories: English major interpretation students, English major non-interpretation students, sports major students and non-sports English major students, with 60 respondents; The first process is to investigate the translation teaching situation of the four types of students and the purpose and expectation of participating in the extracurricular practice of this training; The second process is the evaluation of the translation effect of foreign trainees on student translation volunteers during the 184-day training (Table 2) [10].

Through the analysis of the data obtained by the action research method in translation practice, it is found that the satisfaction of the clients with the evaluation of student translation volunteers has increased month by month in the six-month translation practice

Table 2. Results of the progressive evaluation of the student volunteers' training as a "dynamic" teaching classroom

Volunteer type	The first Practice month	The second practice month	The third practice month	The fourth practice month	The fifth practice month
English interpretation major	70%	70%	85%	91%	93%
English non-interpreter major	69%	71%	87%	91%	92%
Professional Sports	61%	65%	70%	78%	83%
Other majors	62%	64%	69%	77%	84%

of the four categories of respondents, namely, English interpretation majors, English non-interpretation majors, physical education majors and other majors. However, the evaluation level in the first two months was generally not high, and it gradually improved after a certain period of adaptation and training; The evaluation satisfaction of English interpretation student volunteers is higher than that of other majors, which is normal distribution.

4 Conclusion

The empirical research on national training shows that combining national training with translation teaching mode and innovatively constructing a "dynamic" mode of translation teaching will play a decisive role in improving the quality of translation teaching in Chinese universities, cultivating comprehensive and high-level compound translation talents and enhancing China's soft power. Artificial intelligence technology has great potential in spreading knowledge, assisting teaching and providing effective educational services. People have a strong belief in the support of technology. Applying artificial intelligence technology to college teaching is one of the most effective ways to improve the quality of mixed college English teaching in the future.

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